



Our Reference: 5842509

5 February 2020

Jennie Mongan
Beveridge Williams
1-11 Glenferrie Road
Malvern VIC 3144

Dear Jennie

PA 2018/6004 Botania Estate Stage 2A – Engineering Plans Conditional Approval

The above mentioned plans, received by Council on 29 January 2020, are conditionally approved. Please find attached the approved stamped road & drainage plans.

The conditions are as follows and *must* be met prior to the Statement of Compliance being issued:

Vehicle access to/from the Stage 2A from Taylors Road must be provided to the satisfaction of the Responsible Authority

Council believes the list below represents the latest amended engineering plan submission:

Project Reference: 1700987

Drawing No.	Revision
001 to 002	P2
010	P3
011	P4
100 to 104	P2
200 to 204	P3
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350 to 351	P2
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403	P4

The approval is subject to compliance of all statutory and legal obligations and granted with the understanding that the engineering consultant, developer and land owner take full responsibility for the design contained in the conditionally approved engineering plans.

Please note the following:

- The approval of these plans is valid for one year. Where construction does not commence within that time, the plans must be resubmitted to Council for assessment using applicable engineering standards at the time of resubmission. New plan checking fees will also be applicable.

- No construction works can commence outside the development's property boundaries unless or until consent is provided by the adjoining land owner.
- A 'Consent to Work Within a Road Reserve' must be applied for where works will be done on an existing road. The form is available on Melton Council's website link <https://www.melton.vic.gov.au/Services/Building-Planning-Transport/Engineering/Engineering-applications>
- A Traffic Management Plan must be submitted where works will occur on existing roads, and where the works are traffic impact works, it must be approved by Council's Traffic team before works commence. The form is available on Melton Council's website link <https://www.melton.vic.gov.au/Services/Building-Planning-Transport/Engineering/Engineering-applications>
- Construction works must not commence on site until all relevant planning permit conditions have been satisfied. Email queries to planningsupport@melton.vic.gov.au
T: 9747 7200.
- All Service Authority plans must be approved by the responsible authorities prior to the subbase of the road pavement being constructed. Included plans are:
 - Water main reticulation plans including the location and capacity (pressure and flow) of fire hydrants and hydrant mains;
 - Sewer main reticulation plans;
 - Recycled water reticulation plans (where applicable);
 - Public Lighting plans, utilising Public Lighting Guidelines and form on www.melton.vic.gov.au/Infrastructure-Planning; and
 - Other relevant service plans, as applicable.

The above plans must be submitted in PDF format (one email per type of plan) to serviceauthority@melton.vic.gov.au

- If required as part of the planning permit conditions for the above mentioned project, Construction Environmental Management plans (CEMP) must be submitted to Council *prior* to requesting a Civil Works pre-commencement meeting. Please note that plans should:
 - Include Planning Permit Application and Planning Permit Condition # - PA2018/6004
 - Adhere to requirements of endorsed planning permit conditions.
 - Be simply presented and easy to understand.
 - Include an overall site context plan which shows where the site is located
E.g. roads labelled
 - Address all relevant environmental risks of the works.
 - Include haulage route.
 - **Include statements:**
 - A water truck will be available for dust suppression on site *at all times* and at the direction of the Council Construction Supervisor.
 - Working hours will be 7.00am or sunrise, whichever is the latter to 5.00pm week days.
 - Exclude any reference to use of straw bales, as not best practice.
 - Be In PDF format (to appropriate scale) from original document.
Note: do not scan document into PDF, as can be illegible.

Please submit CEMP with relevant information to Email: emp@melton.vic.gov.au

- A Pre-commencement Meeting Application must be emailed to Council to request approval to start work via Email: construction@melton.vic.gov.au
- As Constructed (As Con) plans must be received by Council prior to requesting a Practical Completion (PC) Inspection. To proceed, submit a PC Application form to Email: construction@melton.vic.gov.au
- Where required by planning permit conditions, A-SPEC digital data should be submitted and *verified* as correct by Council's Asset Management/GIS team prior to the Statement of Compliance (SOC) being issued. Submit A-Spec data to Email: assetspecs@melton.vic.gov.au

All correspondence submitted to Council must include a covering letter detailing:

- ✓ Full business name, address, contact name, email and telephone number for responses;
- ✓ Planning Application Number (PA2018/6004);
- ✓ Estate name and Stage # or Project Name and address;
- ✓ Description of submission (E.g. Construction Environmental Management Plan) and any changes/ response to prior Council correspondence;

Submissions should follow processes outlined above and utilise forms on website www.melton.vic.gov.au/Infrastructure-Planning unless another web link is listed.

Should you have any queries, please contact me at Email: nihalj@melton.vic.gov.au or
T: 9747 7101

Regards,

A handwritten signature in blue ink, appearing to read 'Nihal Jayasekara', with a horizontal line underneath.

Nihal Jayasekara
DEVELOPMENT ENGINEER

BOTANIA ESTATE - STAGE 2A

GROWLAND

MELTON COUNCIL

DETAIL DESIGN PLANS



APPROVED
DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

CONSTRUCTION NOTES

SITE MANAGEMENT

- A1. Prior to commencement of works on site, the contractor must ensure that all matters relating to the Occupational Health & Safety Act 2004, including all relevant regulations, have been addressed. In particular, the required notifications must be conveyed to the Victorian Workcover Authority - Health & Safety division with respect to trenching operations. Details of the contractors occupational health & safety procedures must be lodged with the superintendent prior to commencement of works.
- A2. All native trees & shrubs to be retained unless road construction necessitates their removal or removal is directed by the engineer. A town planning permit is required for the removal of native trees & / or vegetation. The removal or retention of any existing trees must be in accordance with the approved landscape plan, or else approval will be required from the Melton City Council landscape approvals officer.
- A3. Existing dam or watercourses to be excavated to a firm base & backfilled as specified. Consulting engineer to be notified when the dam or watercourses are excavated to a firm base. No filling is to be placed prior to dams being inspected & levels taken. Backfilling is to be carried out to the satisfaction of the Council supervising engineer.
- A4. Prior to commencement of works, the contractor must submit a Site Management Plan (SMP) to the consultant for approval. The contractor must comply with the recommendations of the Environment Protection Authority publication No 275 "Construction techniques for sediment pollution control". Appropriate siltation control is to be maintained throughout the construction & maintenance period of the works.
- A5. Provide temporary safety barrier fence (Farm Fence as per MW Std Dwg 7251/4/203) along extent of outfall drain where the drain is greater than 1.5m in depth & side slopes are steeper than 1 in 3. Safety fence to remain until permanent underground drainage is installed.
- A6. Contractor to remove existing irrigation & drainage pipes & pits encountered on site. Trenches to be backfilled in accordance with notes C2 & C3.

GENERAL

- B1. All works to be carried out in accordance with AS2124-1992 general conditions of contract & the Melton City Council current specification & standard drawings & to the satisfaction of the Melton City Council works supervisor.
- B2. Council to be notified two (2) clear days prior to commencement of works.
- B3. Before commencement of works on trenches in excess of 1.5m deep, the civil contractors construction supervisor must give notice in writing of such proposals to Worksafe Victoria in accordance with Part 5.1, Division 4 of the Occupational Health & Safety regulations (2007) & undertake safety precautions in trenching operations in accordance with Workcover's code of practice (1988).
- B4. Lots to be graded (1 in 150 min slope) & left clean to the satisfaction of the engineer. Finished levels to be compatible with lots adjoining this stage.
- B5. On completion the contractor is responsible for the removal of all rubbish & spoil from site. No surplus trees, vegetation or other material is to be burnt on site.
- B6. Reserves to be free draining & to be left in a condition satisfactory to the Melton City Council works supervisor.
- B7. Where works are in the vicinity of existing services these services are to be located & the various authorities notified prior to the commencement of works.
- B8. All TBM's & control points are to be maintained & protected at all times during construction. Should any marks be disturbed, the contractor will immediately notify the consultant to arrange re-instatement at the contractors expense.
- B9. Provide painted paling fence along any boundary common to lots & municipal reserves as per Council Std. Dwg. S-706. Paling to be on the reserve side.

ROADWORKS

- C1. 100e agricultural pipe drains (MPA standard drawing EDCM 202) to be placed behind all kerb & channel & buffer pitches & where directed by the engineer.
- C2. Filling in all properties & road reserves is to be carried out using approved clay fill. Top soil & all vegetable matter to be stripped from site prior to filling. All filling to be carried out in accordance with AS3798-2007 and the geotechnical report. Level 1 inspection and testing to be carried out in accordance with AS3798-2007 Section 8.2. A fill report must be submitted to the Consultant, showing from a NATA registered soil testing laboratory.
- C3. Importing Fill:- All imported fill must be tested by a NATA approved laboratory to ensure it is suitable for use on site, & any contaminants are within accepted levels. Under no circumstances should fill material enter or leave the site without the permission of the supervising engineer & Council works supervisor, prior to it being appropriately tested. All vehicles transporting fill material to & from the site must have appropriate measures in place to ensure that material does not get onto roads & into stormwater systems & natural waterways.
- C4. Batters to be 1 in 5 for fill & 1 in 3 for cut unless noted otherwise.
- C5. Cut batters are to be grassed & mulched with a mixture of chopped grass, straw & bitumen emulsion.
- C6. Where cut batters exceed 700mm an additional 300mm berm shall be formed behind footpath.
- C7. Access ramps are to be constructed where cut batters exceed 1.0m. They are to be graded 1 in 10 for the first 2.5m from the back of path & then at a maximum of 1 in 4 to natural surface.
- C8. The water conduit offset from the lot boundary is given on the water reticulation plan. The contractor must construct conduits to accord with the given offset & ensure that the concreter marks the kerb & footpath exactly above the conduit.
- C9. All footpaths are to be 125mm thick 25MPa concrete with SL72 mesh centrally located in accordance with the MPA standard drawing EDCM 401.

- C10. NBN Co to be notified seven (7) days prior to concrete works being placed.
- C11. Electrical distribution pits within footpaths are to be a minimum of 300mm within the edge of the path. Concrete is to be placed around distribution pits to a minimum depth of 200mm.
- C12. All street signs to be constructed & erected to current Melton City Council standards including logo. Court street names are to show court name only.
- C13. Traffic control signs, markings & delineators to be installed in accordance with AS1742.2. All line marking is to be long life road marking, with longitudinal lines in thermoplastic & transverse markings in cold applied.
- C14. Driveways to be constructed in accordance with the MPA standard drawings EDCM 501 & EDCM 502. Single driveways to be a minimum 3.5m wide & to be offset 0.75m from side boundary or easement unless otherwise shown.
- C15. Kerb transition to take place in the minor street over a 2.0m length from either the tangent point or TP pit.
- C16. Existing road works to be reconstructed as required to provide, without discontinuity, a connection in accordance with design levels & grades.
- C17. Provide 2.5m wide shared footpath through reserves as shown on a curvilinear alignment to the satisfaction of the engineer.
- C18. Tactile ground surface indicators (TGS) are to be installed at all pram crossings & pedestrian cross points in accordance with AS1428.4 : 2002 & MPA standard drawing EDCM 403.

DRAINAGE

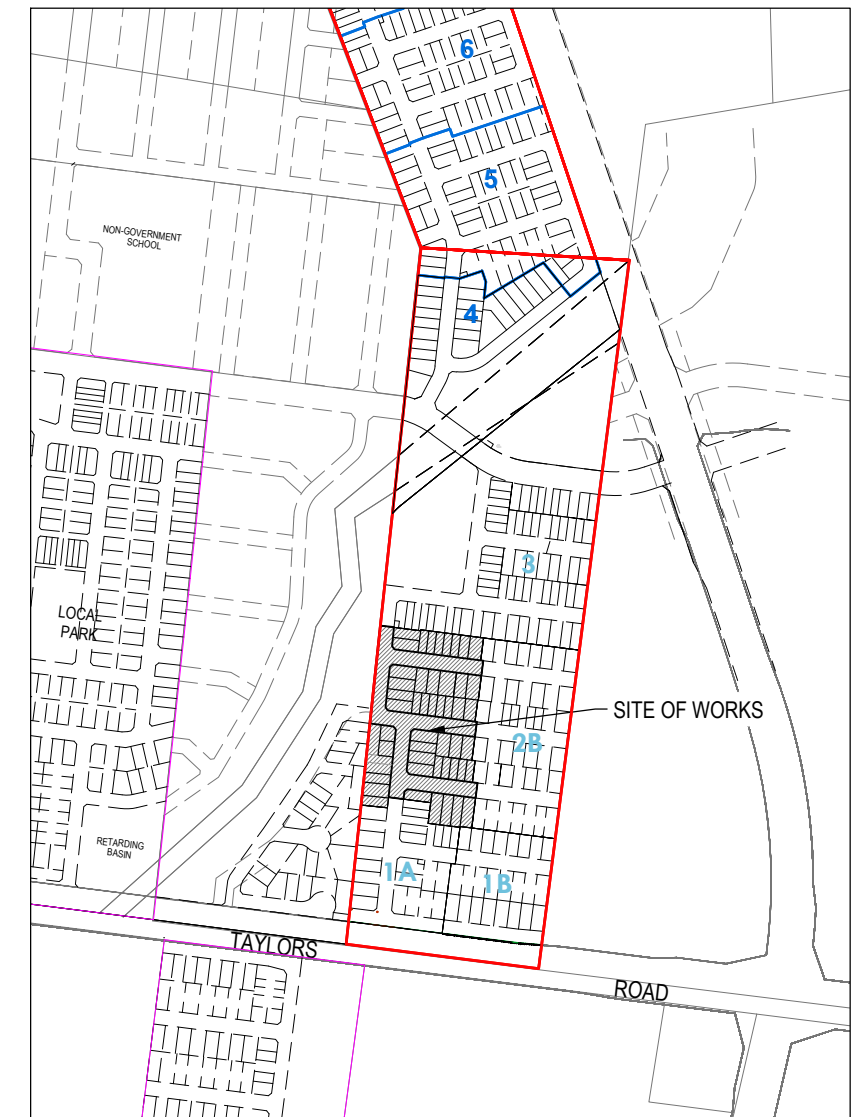
- D1. Drainage & pits to be set out from offsets shown rather than from centreline pipe chainages. Centreline of pits at TP's to be offset 1.0m.
- D2. Terra Firma or fibreglass type pit lids are required for all drainage pits & all grates for pits are to be Class D, to comply with AS3996 unless otherwise shown. All drainage works are to be constructed to council specifications.
- D3. All pipes up to and including 750mm in diameter shall be rubber ring jointed (RRJ). Pipes above this size may be flush jointed with external sealing bands. For pipes greater than 900mm and changes in direction between 2 connecting pipes exceeding 10° construct segmented curves using splayed pipes with bandage joints, having deflections within the manufacturer's specification. All pipes under roadways to be RRJ.
- D4. All pipes to be Class 2 R.C. rubber ring joint unless noted otherwise. PVC pipes to be Class SH unless specified.
- D5. Pipe trenches beneath the road pavement, footpath or within 150mm of the kerb & channel to be backfilled with 20mm Class 3 FCR in 150mm layers.
- D6. Property inlets to be constructed as per MPA standard drawing EDCM 701 - EDCM 704.
- D7. All proposed drainage stubs to be blanked off at end of pipe with timber planks to the satisfaction of the supervising engineer.

PAVEMENT

- E1. Modification of the pavement requires approval by the Melton City Council works supervisor.

DRAWING INDEX

DRAWING No.	TITLE
1700987-02A-001	COVER SHEET
1700987-02A-002	TYPICAL ROAD CROSS SECTIONS
1700987-02A-010	LAYOUT PLAN
1700987-02A-011	INTEGRATED WATER MANAGEMENT PLAN
1700987-02A-100	ROAD LONGITUDINAL SECTIONS ELM DRIVE
1700987-02A-101	ROAD LONGITUDINAL SECTIONS PETUNIA WAY
1700987-02A-102	ROAD LONGITUDINAL SECTIONS WATTLESEED DRIVE
1700987-02A-103	ROAD LONGITUDINAL SECTIONS CHERISH STREET
1700987-02A-104	ROAD LONGITUDINAL SECTIONS WINTON DRIVE
1700987-02A-200	ROAD CROSS SECTIONS ELM DRIVE
1700987-02A-201	ROAD CROSS SECTIONS PETUNIA WAY
1700987-02A-202	ROAD CROSS SECTIONS WATTLESEED DRIVE
1700987-02A-203	ROAD CROSS SECTIONS CHERISH STREET
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1700987-02A-300	INTERSECTION DETAILS (SHEET 1 OF 3)
1700987-02A-301	INTERSECTION DETAILS (SHEET 2 OF 3)
1700987-02A-302	INTERSECTION DETAILS (SHEET 3 OF 3)
1700987-02A-303	RETARDING BASIN DETAILS
1700987-02A-350	SIGNAGE & LINE MARKING PLANS (SHEET 1 OF 2)
1700987-02A-351	SIGNAGE & LINE MARKING PLANS (SHEET 2 OF 2)
1700987-02A-400	DRAINAGE LONGITUDINAL SECTIONS (SHEET 1 OF 3)
1700987-02A-401	DRAINAGE LONGITUDINAL SECTIONS (SHEET 2 OF 3)
1700987-02A-402	DRAINAGE LONGITUDINAL SECTIONS (SHEET 3 OF 3)
1700987-02A-403	DRAINAGE PIT SCHEDULE
1700987-02A-450	PLAN OF SUBDIVISION (SHEET 1 OF 2)
1700987-02A-451	PLAN OF SUBDIVISION (SHEET 2 OF 2)



SITE PLAN

NOT TO SCALE

MELWAY REF: 355 HS

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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					

Designed
Date
J. MONGAN
08.08.2019

Drawn
D. COOPER

Approved
Date
J. MONGAN
08.08.2019

PS Number
PS823200D

BW Beveridge Williams

1 Glenferrie Road
 Malvern VIC 3144
 ph: 03 9524 8888
 www.beveridgewilliams.com.au

Project
Details
BOTANIA ESTATE
 STAGE 2A
 MELTON CITY COUNCIL

Drawing
Title
COVER SHEET

Sheet 01 of 26

Scale
NOT TO SCALE

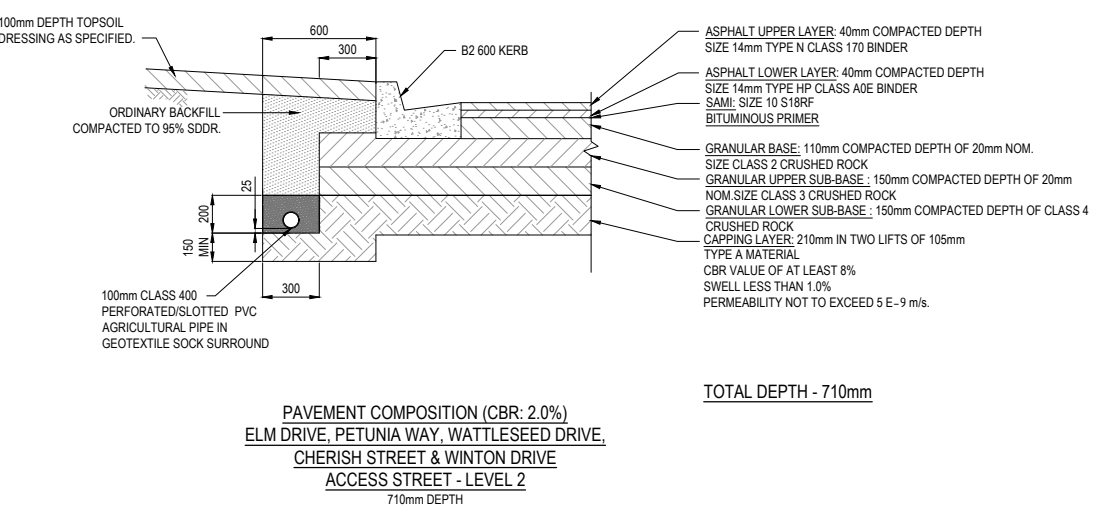
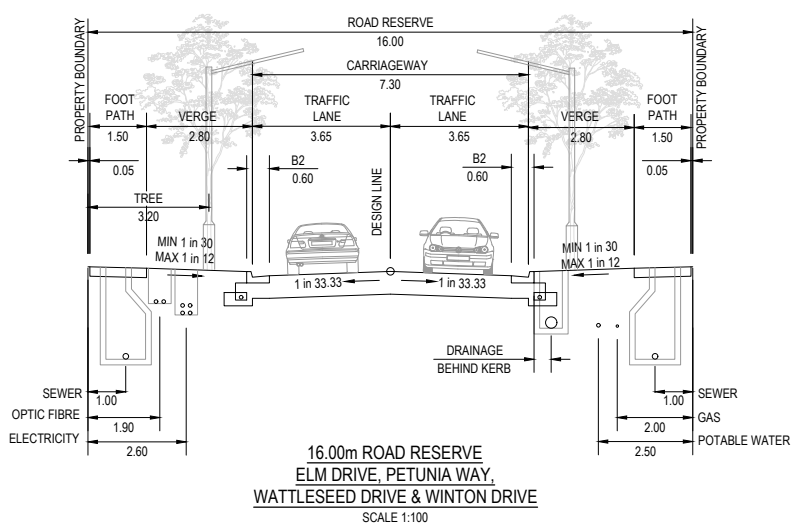
Project Ref
1700987

Stage No
02A

Drawing No
001

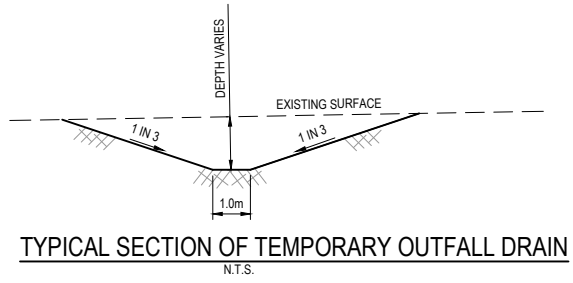
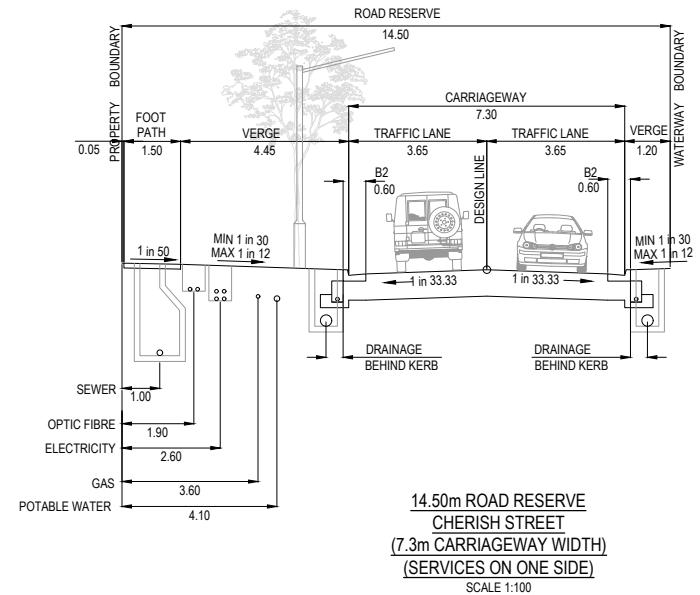
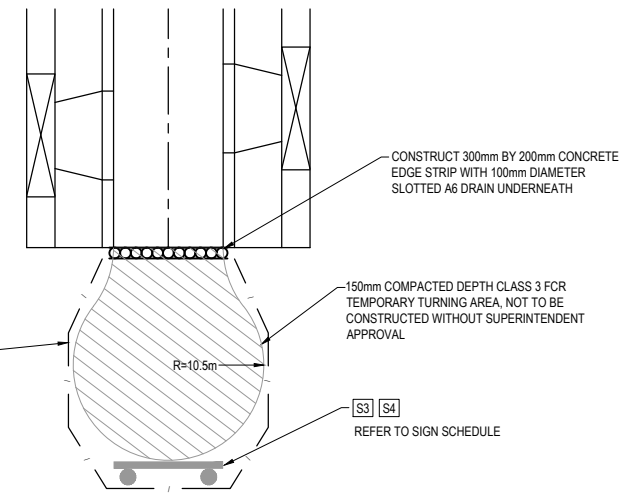
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SIGN SCHEDULE

IDENTIFIER	NUMBER	SIGN
S3	D4-5	
S4	G9-20	



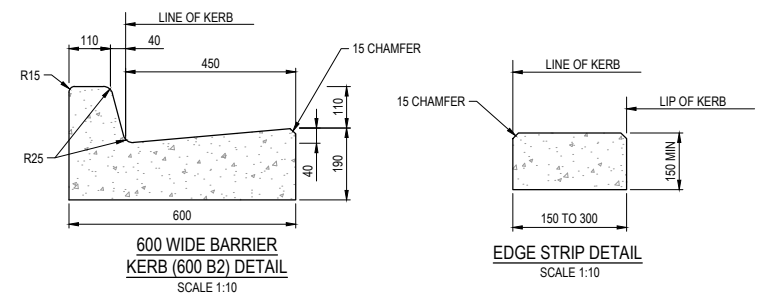
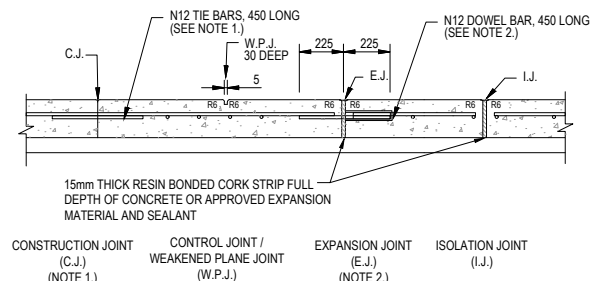
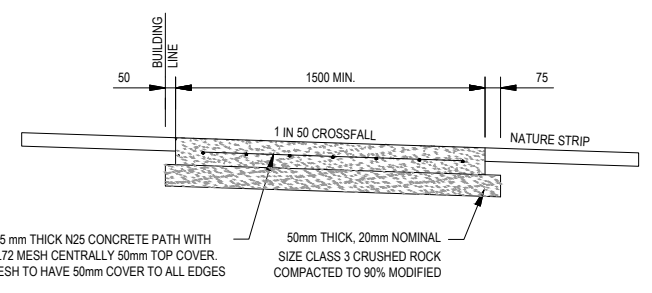
NOTE:
MINIMUM LONGITUDINAL GRADE OF 1 IN 300.
TEMPORARY SWALE TO BE CONSTRUCTED WITH ENVIRONMENTAL CONTROLS, SAFE BATTERS & FENCING, IF REQUIRED.

CITY OF MELTON

APPROVED
DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

CONCRETE NOTES:

- TIE BARS TO BE INSTALLED AT 400 MAXIMUM CENTRES COMMENCING 150 FROM EDGE.
- DOWEL BARS TO BE INSTALLED AT 400 CENTRES COMMENCING AT A MINIMUM OF 100 AND A MAXIMUM OF 200 FROM THE EDGE OF PATH. 16 DIAMETER PVC SLEEVE WITH END CAP OR CLOSED END TO BE FITTED TO ONE END OF THE BAR. DOWEL BARS TO BE SECURELY TIED TO LONGITUDINAL REINFORCING MESH.
- EXPANSION JOINTS (E.J.) LOCATED BOTH SIDE OF VEHICLE CROSSING AND AT A MAXIMUM OF 12000 CENTRES.
- WEAKENED PLANE JOINTS LOCATED AT SPACINGS EQUAL TO THE WIDTH OF THE PATH AND MADE WITH A 'T' IRON OR CONCRETE SAW CUT.
- IN SHARED PATHS WEAKENED PLANE JOINTS MUST BE MADE BY CONCRETE SAW CUTTING.
- CONCRETE TO BE LIGHT BROOM FINISH WITH EDGE AND JOINTS NEATLY TOOLED AFTER THE BROOM IS APPLIED.
- ALL FINISHED SURFACES TO COMPLY WITH AS 4586 SLIP RESISTANT CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIAL.
- THE USE OF COLOURED CONCRETE MUST BE APPROVED BY COUNCIL. MINIMUM STRENGTH OF COLOURED CONCRETE TO BE 32 MPa.
- FORMWORK TIMBER TO BE MIN. 125mm DEEP.
- ALL DIMENSIONS IN MILLIMETRES.
- SHARED PATHS TO BE 3.0m IN WIDTH MINIMUM. REFER TO APPROVED CONSTRUCTION PLANS FOR ACTUAL WIDTH.



ALL DIMENSIONS IN MILLIMETRES. REFER STANDARD DRAWING EDCM 301 & 302 FOR KERB DETAILS.

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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
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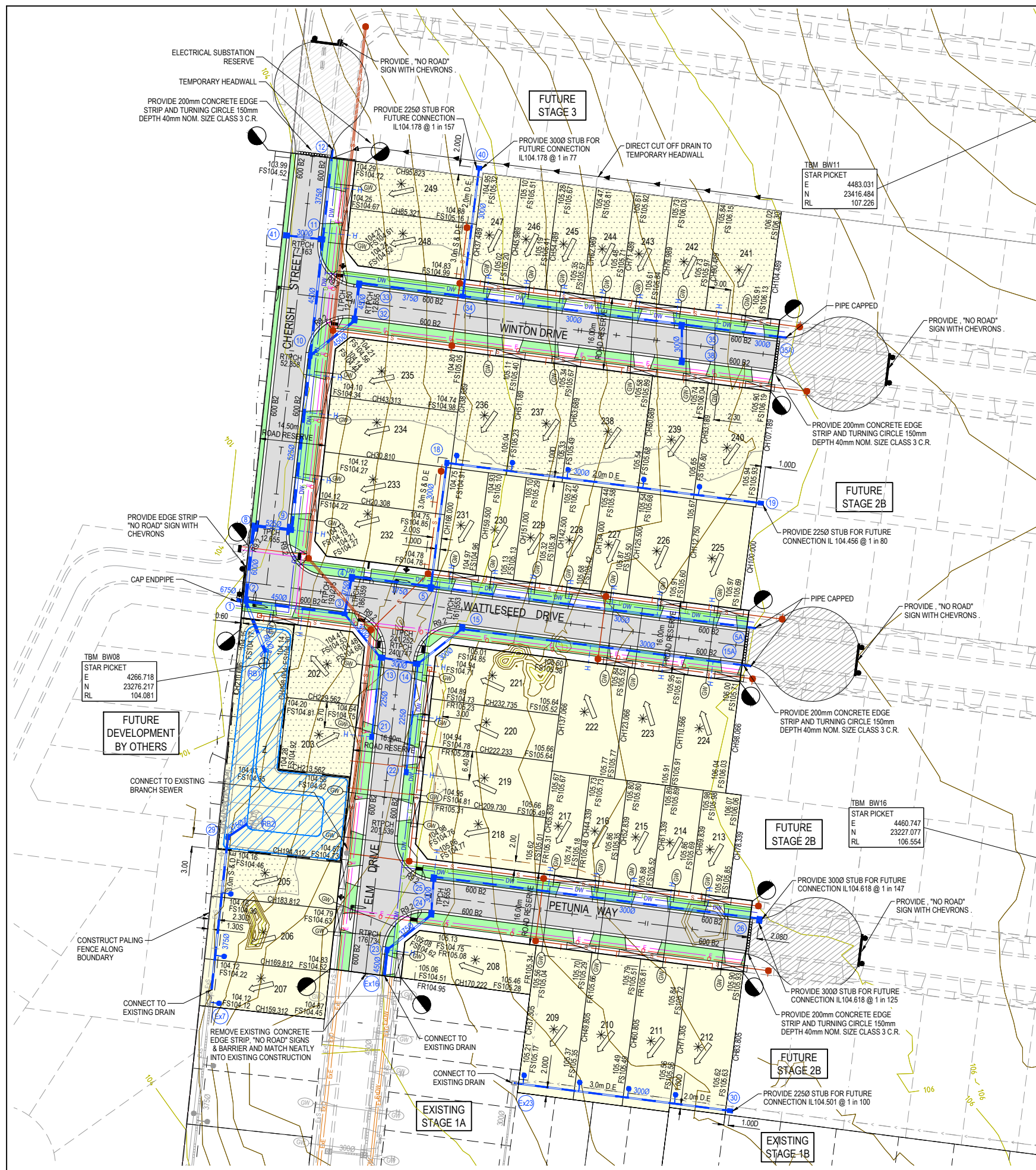
DESIGNED	DATE	DRAWN	DATE	APPROVED	DATE
J. MONGAN	08.08.2019	D. COOPER		J. MONGAN	08.08.2019

Designed: J. MONGAN
Date: 08.08.2019
Drawn: D. COOPER
Approved: J. MONGAN
Date: 08.08.2019
PS Number: PS823200D

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Project Details	BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title	TYPICAL ROAD CROSS SECTIONS

Sheet	02 of 26
Scale	NOT TO SCALE
Project Ref	1700987
Stage No	02A
Drawing No	002
Rev	P2




APPROVED
DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS (INDICATIVE ONLY)
- ELECTRICITY (UNDERGROUND)
- ELECTRICITY (OVERHEAD)
- OPTIC FIBRE
- TELECOMMUNICATIONS
- GAS
- WATER
- RECYCLED WATER
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELECOMMUNICATIONS
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- TOP OF RETAINING WALL
- BOTTOM OF RETAINING WALL
- RIDGE LINE
- RETAINING WALL
- ZERO LOT LINES
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY
- TREE PROTECTION ZONE (TPZ)

ROAD LAYOUT TABLE

Road Name	Road Classification	Reserve Width (m)	Road Width (m)			Kerb Type		Verge Width (m)	
			Lip to Lip	Inv to Inv	Back to Back	Nth/West	Sth/East	Nth/West	Sth/East
ELM DRIVE	ACCESS ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	2.80	2.80
PETUNIA WAY	ACCESS ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	2.80	2.80
WATTLESEED DRIVE	ACCESS ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	2.80	2.80
CHERISH STREET	ACCESS ROAD	14.50	6.40	7.30	7.60	600 B2	600 B2	4.45	1.20
WINTON DRIVE	ACCESS ROAD	16.00	6.40	7.30	7.60	600 B2	600 B2	2.80	2.80

SERVICE OFFSET TABLE

Location	Gas		Water		Electricity		Telecommunication		Sewer		Branch Sewer	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
ELM DRIVE	E	2.00	E	2.50	W	2.60	W	1.90	E	1.00	W	1.00
PETUNIA WAY	N	2.00	N	2.50	S	2.60	S	1.90	N&S	1.00	-	-
WATTLESEED DRIVE	N	2.00	N	2.50	S	2.60	S	1.90	N&S	1.00	-	-
CHERISH STREET	E	3.60	E	4.10	E	2.60	E	1.90	-	-	E	1.00
WINTON DRIVE	N	2.00	N	2.50	S	2.60	S	1.90	N&S	1.00	-	-

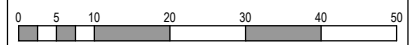
NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

WARNING
BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site.
 No guarantee is given that all existing services are shown. Locate all underground services before commencement of works.
DIAL 1100 BEFORE YOU DIG
 www.1100.com.au

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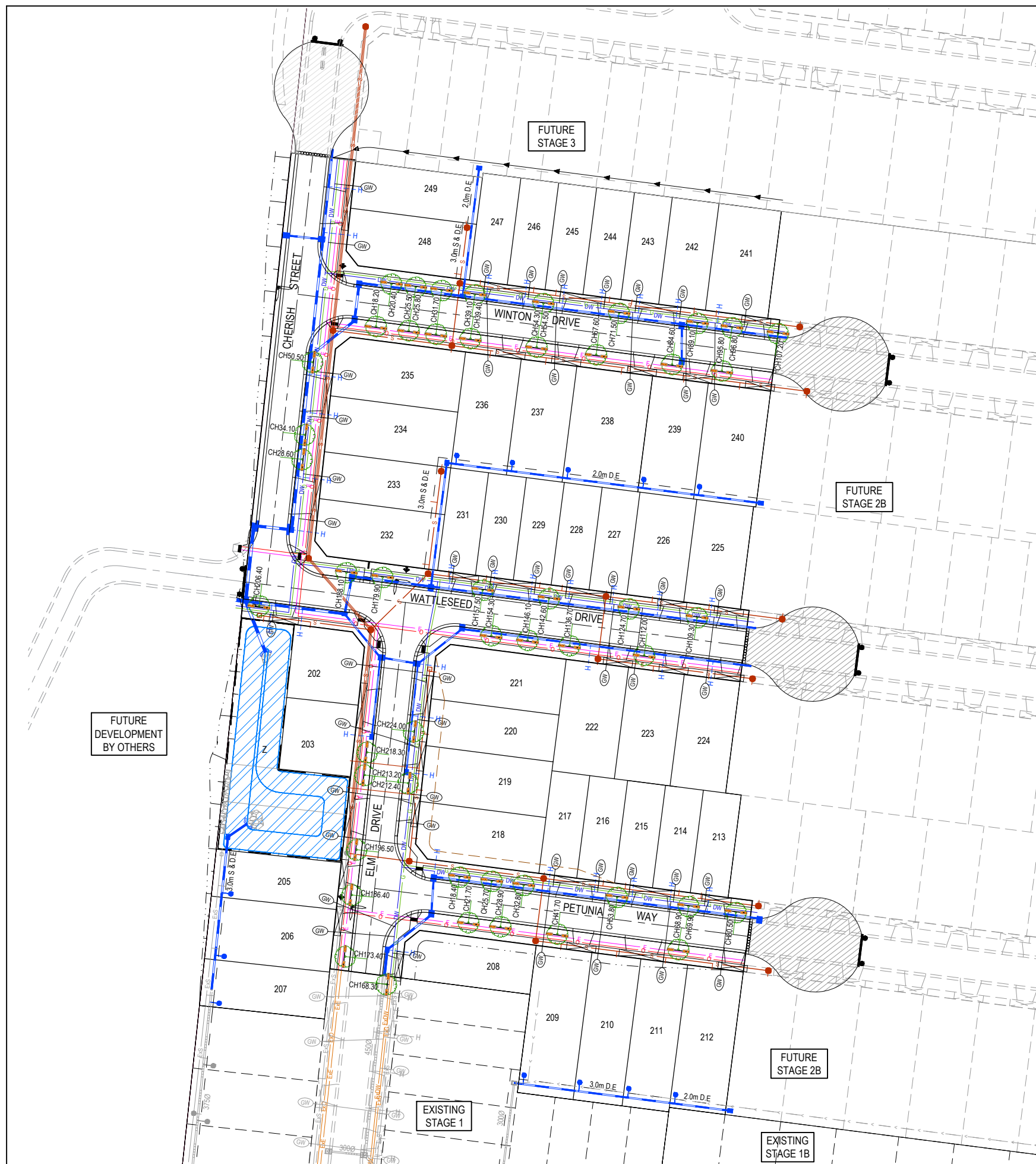


Designed Date: J. MONGAN 08.08.2019
 Drawn: D. COOPER
 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D

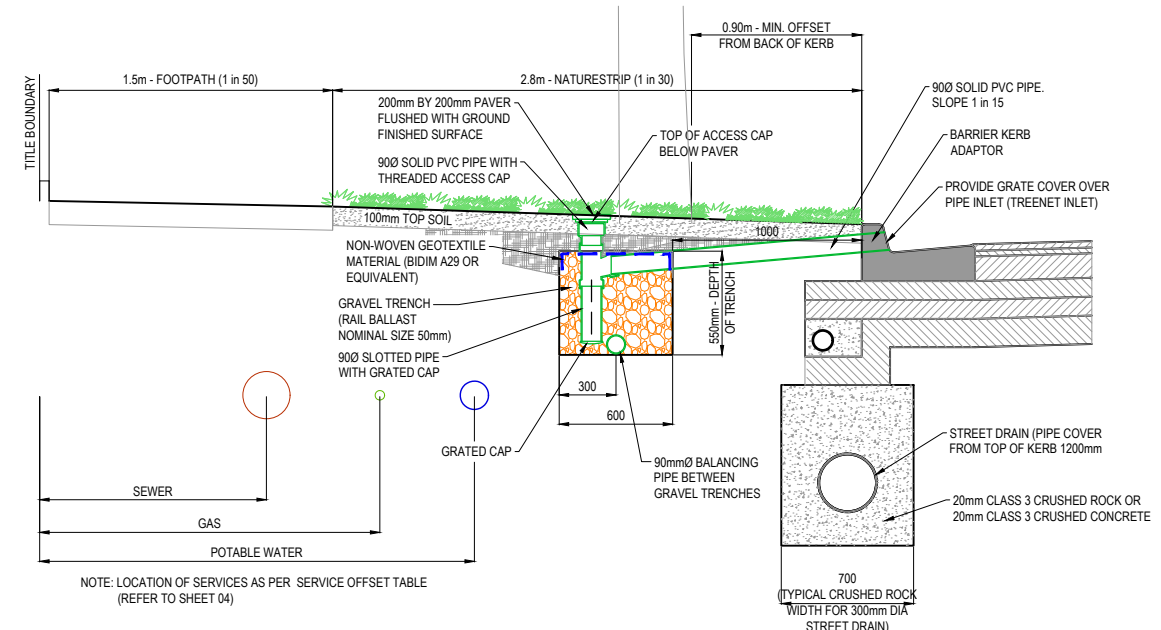


Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: LAYOUT PLAN

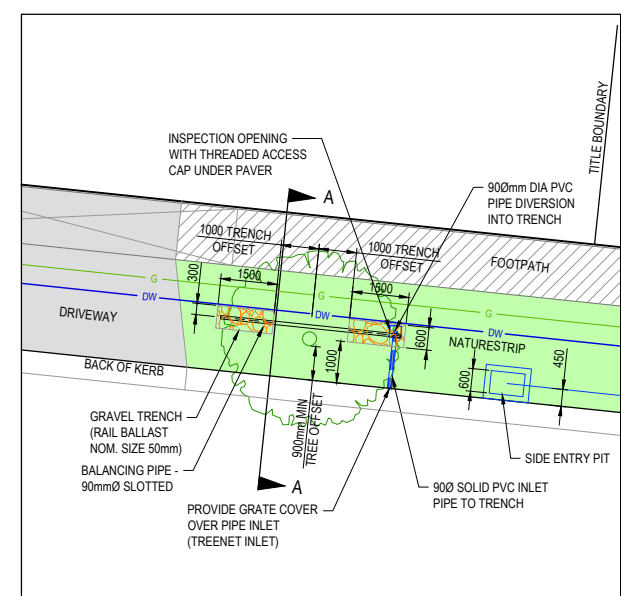
Sheet 03 of 26
 Scale: 1:500 @ A1
 Project Ref: 1700987 Stage No: 02A Drawing No: 010 Rev: P3



LEGEND - FUNCTIONAL LAYOUT PLAN			
	ELECTRICITY (UNDERGROUND)		TACTILE PAVERS (INDICATIVE ONLY)
	OPTIC FIBRE		EXISTING ELECTRICITY (UNDERGROUND)
	TELECOMMUNICATIONS		EXISTING ELECTRICITY (OVERHEAD)
	GAS		EXISTING GAS
	WATER		EXISTING OPTIC FIBRE
	RECYCLED WATER		EXISTING WATER
	STORMWATER DRAIN, PIT & PROPERTY INLET		EXISTING RECYCLED WATER
	MELBOURNE WATER DRAIN & PIT		EXISTING STORMWATER DRAIN
	SWALE DRAIN		EXISTING SEWER
	SEWER & MAINTENANCE STRUCTURES		EXISTING HOUSE DRAIN
	HOUSE DRAIN		EXISTING SWALE DRAIN
	SERVICE CONDUITS		TREE PROTECTION ZONE (TPZ)
			ZERO LOT LINES
			PAVEMENT TREATMENT
			DIRECTION OF FALL
			OVERLAND FLOW
			ALLOTMENT TO BE GRADED EVENLY IN
			DIRECTION OF FALL TO LEVELS INDICATED
			CONCRETE EDGE STRIP WITH SUBSOIL DRAIN,
			"NO ROAD" SIGN & BARRIER
			LIMIT OF WORKS
			EXISTING TREE TO BE REMOVED
			RIDGE LINE
			RETAINING WALL



PASSIVE STREET TREE IRRIGATION GRAVEL TRENCH (KERB INLET DIVERSION)
CROSS SECTION A-A
N.T.S.



PASSIVE STREET TREE IRRIGATION GRAVEL TRENCH (KERB INLET DIVERSION)
PLAN
N.T.S.

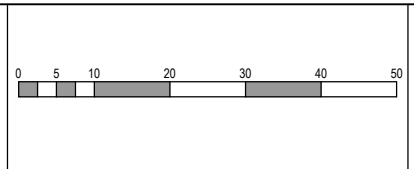
CITY OF MELTON

APPROVED DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

WARNING
BWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site.
No guarantee is given that all existing services are shown. Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
www.1100.com.au

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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
P4	TREE LOCATIONS AMENDED TO MATCH LANDSCAPING	29.01.20	JM	JM					
P3	STREET TREE RELOCATION	03.10.19	M.F.J.	J.M.					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



Designed Date: J. MONGAN 08.08.2019
Drawn: D. COOPER
Approved Date: J. MONGAN 08.08.2019
PS Number: PS823200D

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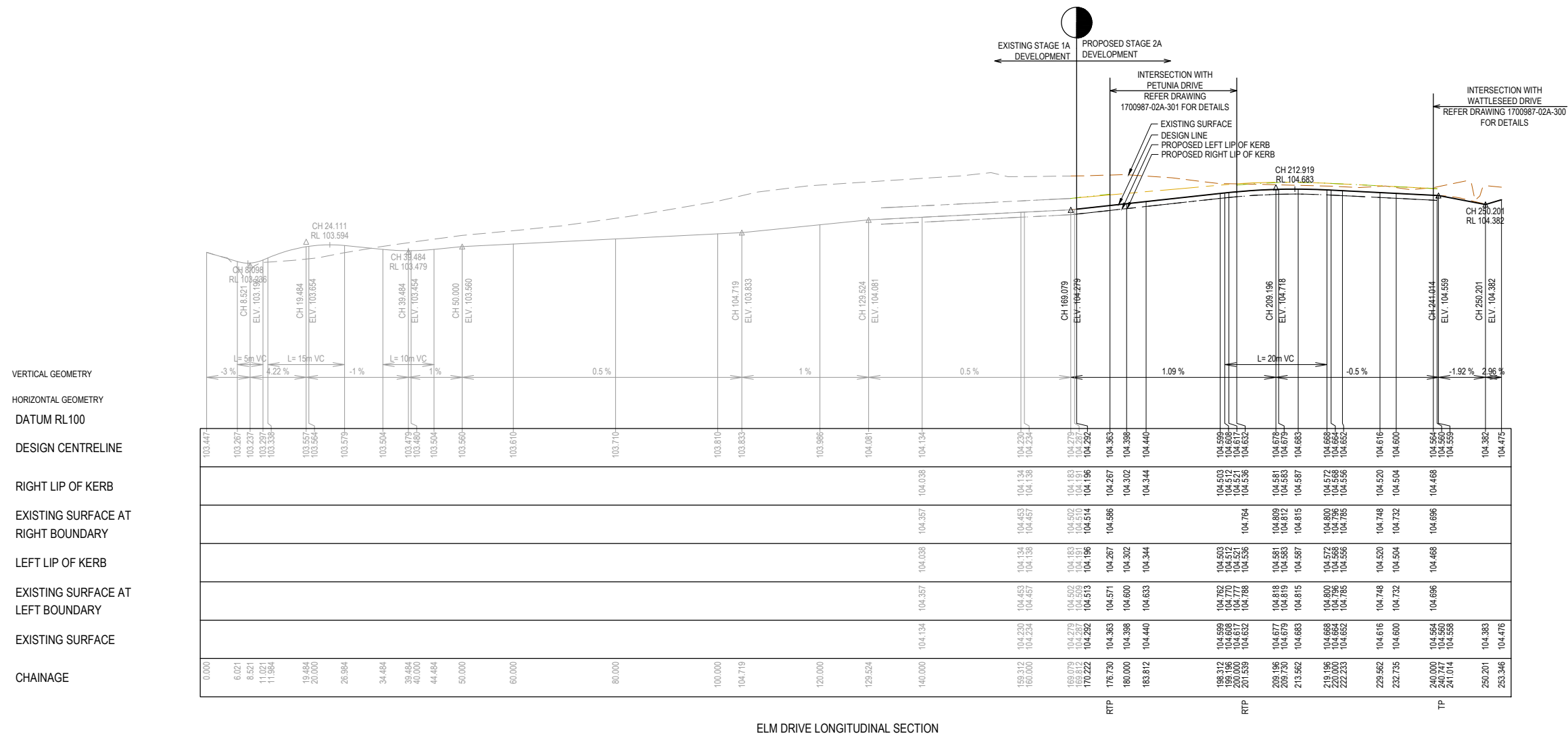
Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title: INTEGRATED WATER MANAGEMENT PLAN

Sheet 04 of 26
Scale: 1:500 @ A1
Project Ref: 1700987
Stage No: 02A
Drawing No: 011
Rev: P4



**APPROVED
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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020**

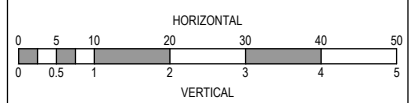
LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FUTURE DESIGN LINE
	RIGHT BUILDING LINE
	RIGHT LIP OF KERB
	LEFT BUILDING LINE
	LEFT LIP OF KERB



ELM DRIVE LONGITUDINAL SECTION

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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM						
P1	TENDER ISSUE	30.04.19	LS	JM						
REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP	



Designed Date: J. MONGAN 08.08.2019
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PS Number: PS823200D



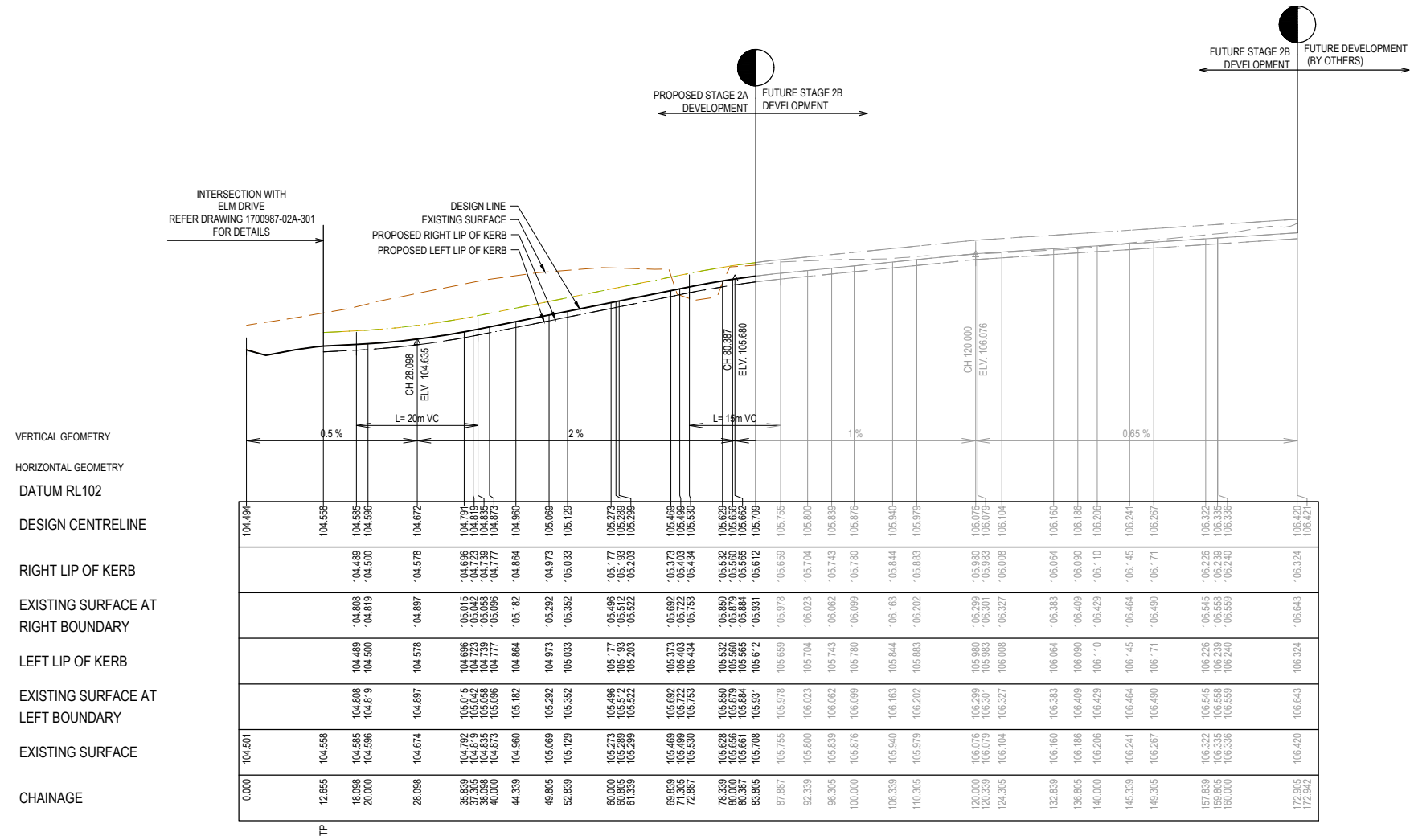
Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title: ROAD LONGITUDINAL SECTIONS ELM DRIVE

Sheet 05 of 26			
Scale: 1:500 H 1:50 V @ A1			
Project Ref	Stage No	Drawing No	Rev
1700987	02A	100	P2



**APPROVED
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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020**

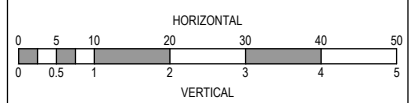
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	FUTURE DESIGN LINE
	RIGHT BUILDING LINE
	RIGHT LIP OF KERB
	LEFT BUILDING LINE
	LEFT LIP OF KERB



PETUNIA WAY LONGITUDINAL SECTION

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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



Designed Date: J. MONGAN 08.08.2019
 Drawn: D. COOPER
 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D



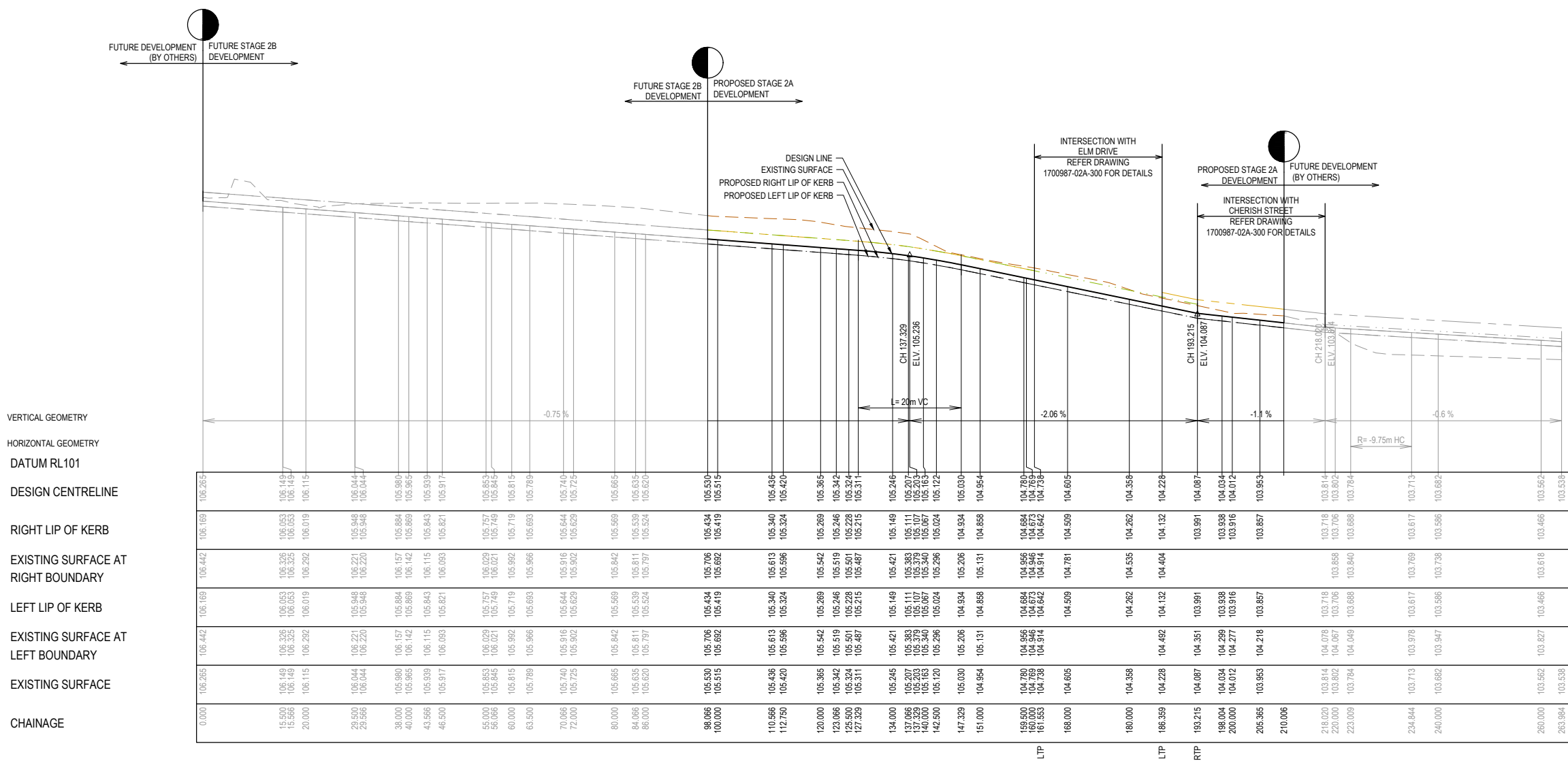
Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: ROAD LONGITUDINAL SECTIONS PETUNIA WAY

Sheet 06 of 26
 Scale: 1:500 H 1:50 V @ A1
 Project Ref: 1700987 Stage No: 02A Drawing No: 101 Rev: P2

K:\Jobs Data\1700987 - 1152-1174 Taylors Road & 451-471 Beattys, Plumpton_Eng\Stage 2A\Drawings\1700987-02A-100-RLS.dwg


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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

LEGEND	
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	DESIGN LINE
	FUTURE DESIGN LINE
	RIGHT BUILDING LINE
	RIGHT LIP OF KERB
	LEFT BUILDING LINE
	LEFT LIP OF KERB



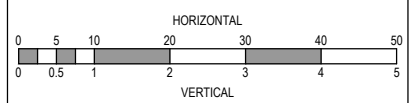
VERTICAL GEOMETRY
 HORIZONTAL GEOMETRY
 DATUM RL101
 DESIGN CENTRELINE
 RIGHT LIP OF KERB
 EXISTING SURFACE AT RIGHT BOUNDARY
 LEFT LIP OF KERB
 EXISTING SURFACE AT LEFT BOUNDARY
 EXISTING SURFACE
 CHAINAGE

0.000	106.265	106.442	106.169	106.442	106.265	0.000
15.500	106.149	106.326	106.053	106.326	106.149	15.500
20.000	106.115	106.292	106.019	106.292	106.115	20.000
29.500	106.044	106.221	105.948	106.221	106.044	29.500
38.000	105.980	106.157	105.884	106.157	105.980	38.000
40.000	105.965	106.142	105.869	106.142	105.965	40.000
43.566	105.939	106.115	105.843	106.115	105.939	43.566
46.500	105.917	106.093	105.821	106.093	105.917	46.500
55.000	105.863	106.029	105.767	106.029	105.863	55.000
56.066	105.845	106.021	105.749	106.021	105.845	56.066
60.000	105.815	105.992	105.719	105.992	105.815	60.000
63.500	105.789	105.966	105.693	105.966	105.789	63.500
70.066	105.740	105.916	105.644	105.916	105.740	70.066
72.000	105.725	105.902	105.629	105.902	105.725	72.000
80.000	105.665	105.842	105.569	105.842	105.665	80.000
84.066	105.635	105.811	105.539	105.811	105.635	84.066
86.000	105.620	105.797	105.524	105.797	105.620	86.000
98.066	105.530	105.706	105.454	105.706	105.530	98.066
100.000	105.515	105.692	105.419	105.692	105.515	100.000
110.566	105.436	105.613	105.340	105.613	105.436	110.566
112.750	105.420	105.596	105.324	105.596	105.420	112.750
120.000	105.365	105.542	105.269	105.542	105.365	120.000
123.066	105.342	105.519	105.246	105.519	105.342	123.066
125.500	105.324	105.501	105.228	105.501	105.324	125.500
127.329	105.311	105.487	105.215	105.487	105.311	127.329
134.000	105.245	105.421	105.149	105.421	105.245	134.000
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147.329	105.030	105.206	104.934	105.206	105.030	147.329
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161.553	104.738	104.914	104.642	104.914	104.738	161.553
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180.000	104.598	104.598	104.535	104.598	104.598	180.000
186.359	104.428	104.492	104.404	104.428	104.428	186.359
193.215	104.087	104.351	103.991	104.087	104.087	193.215
198.004	104.034	104.299	103.938	104.034	104.034	198.004
200.000	104.012	104.277	103.916	104.012	104.012	200.000
206.365	103.953	104.218	103.857	103.953	103.953	206.365
210.006						210.006
218.020	103.814	104.075	103.718	103.814	103.814	218.020
220.000	103.802	104.067	103.706	103.802	103.706	220.000
223.009	103.784	104.049	103.688	103.784	103.688	223.009
234.844	103.713	103.978	103.617	103.713	103.617	234.844
240.000	103.682	103.947	103.586	103.682	103.586	240.000
260.000	103.562	103.827	103.466	103.562	103.466	260.000
263.984	103.538			103.538		263.984

WATTLESEED DRIVE LONGITUDINAL SECTION

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REV	DESCRIPTION	DATE	DRN	APP.	REV	DESCRIPTION	DATE	DRN	APP.
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					




Designed: J. MONGAN 08.08.2019
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 Drawn: D. COOPER
 Approved: J. MONGAN 08.08.2019
 Date:
 PS Number: PS823200D


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Project Details	BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title	ROAD LONGITUDINAL SECTIONS WATTLESEED DRIVE

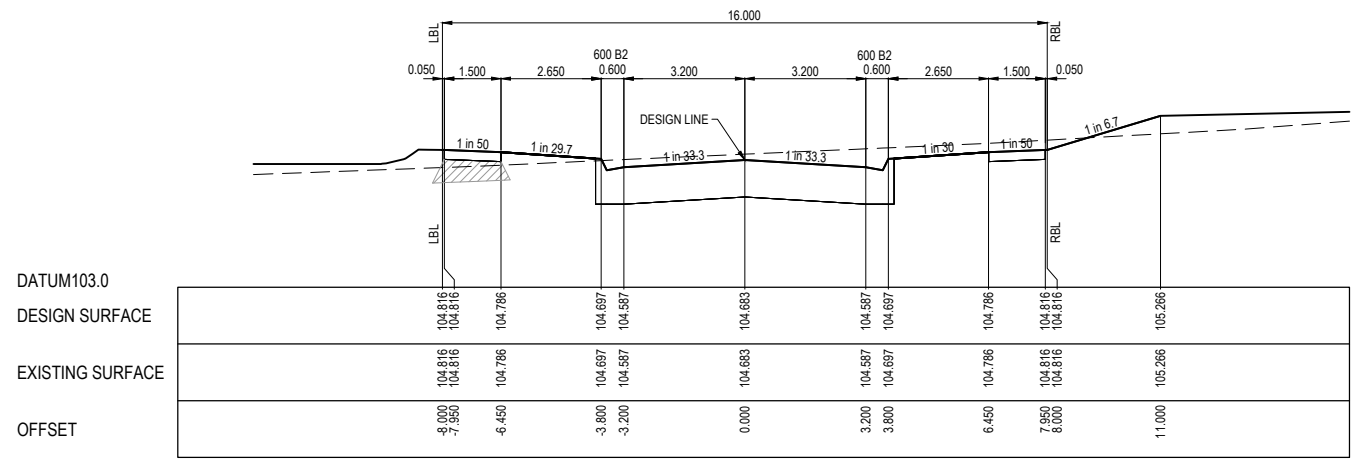
Sheet	07 of 26
Scale	1:500 H 1:50 V @ A1
Project Ref	1700987
Stage No	02A
Drawing No	102
Rev	P2

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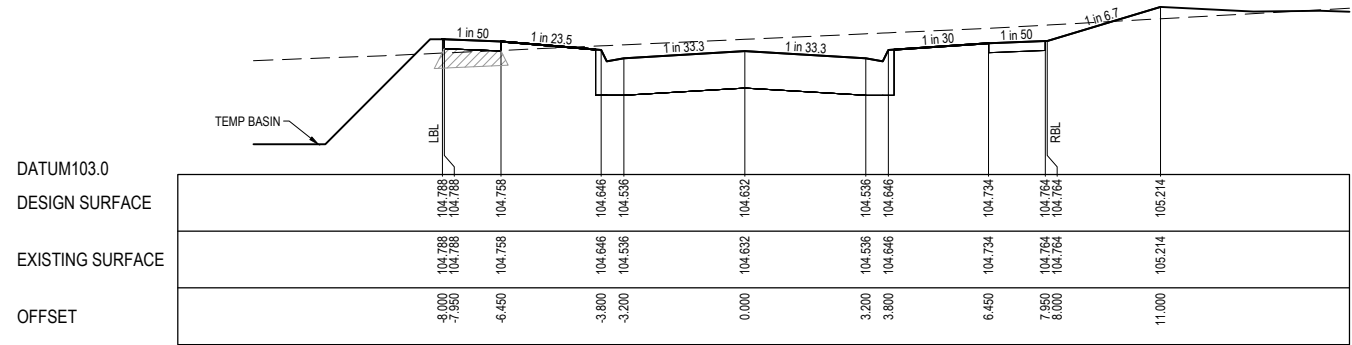

APPROVED
DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

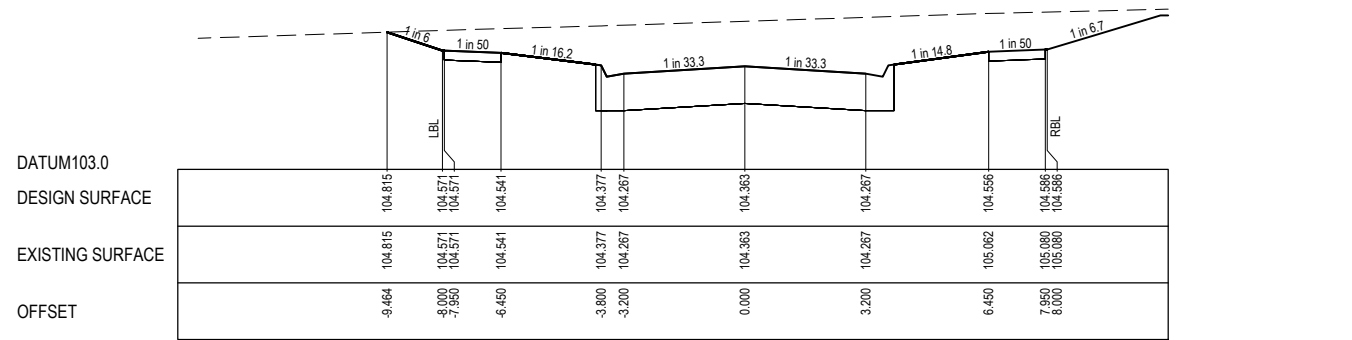
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	DESIGN SURFACE
	STRUCTURAL FILL



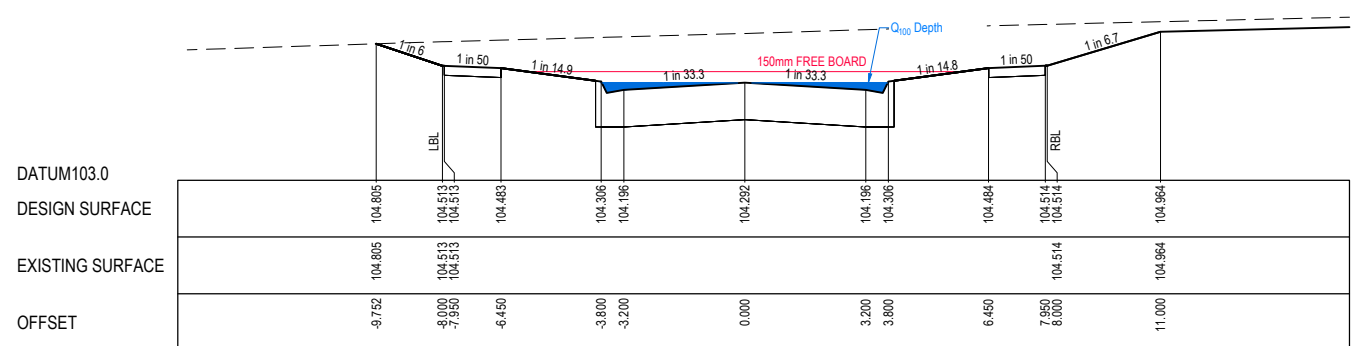
CH 212.919



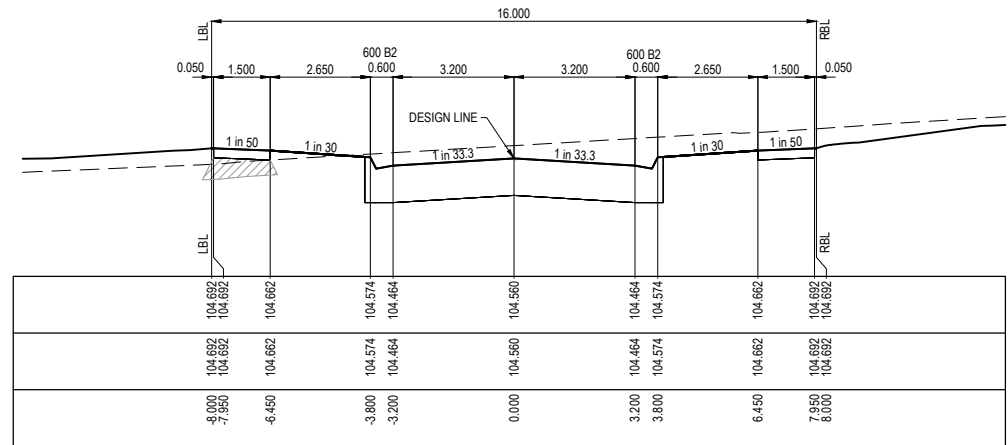
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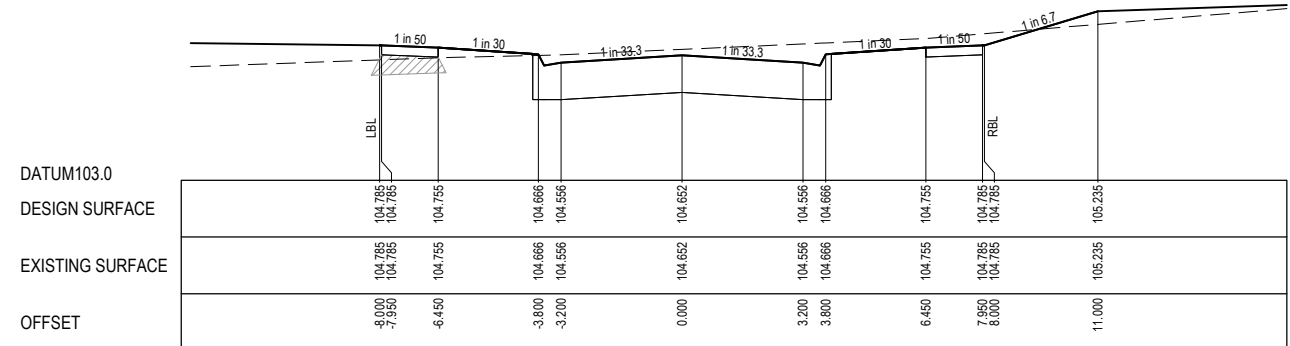
RTPCH 176.734



CH 170.222 START OF WORKS



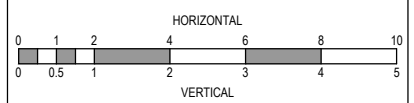
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CH 222.233

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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title: ROAD CROSS SECTIONS ELM DRIVE

Sheet 10 of 26
Scale: 1:100 H 1:50 V @ A1
Project Ref: 1700987
Stage No: 02A
Drawing No: 200
Rev: P3

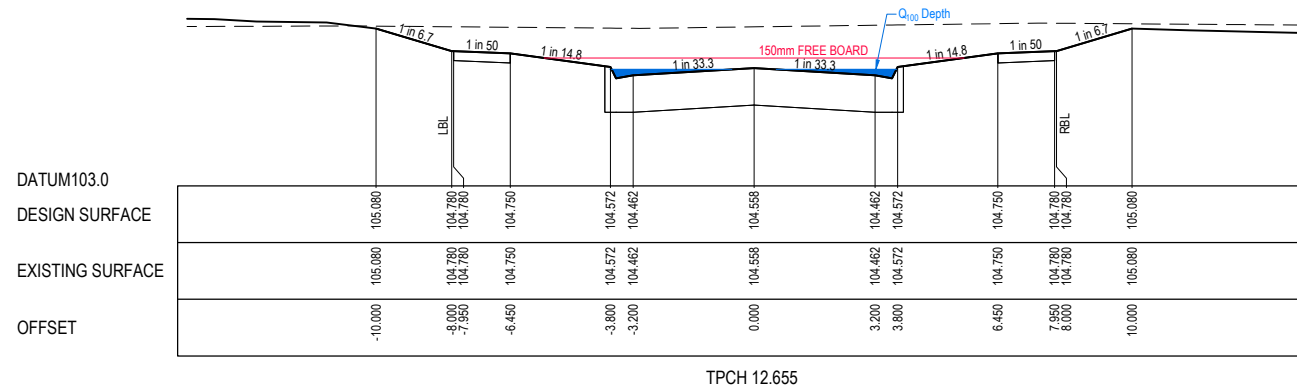
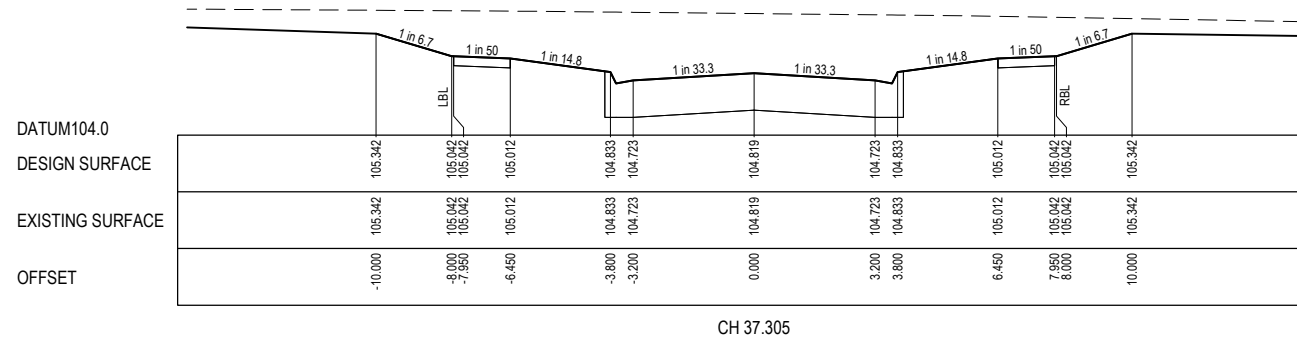
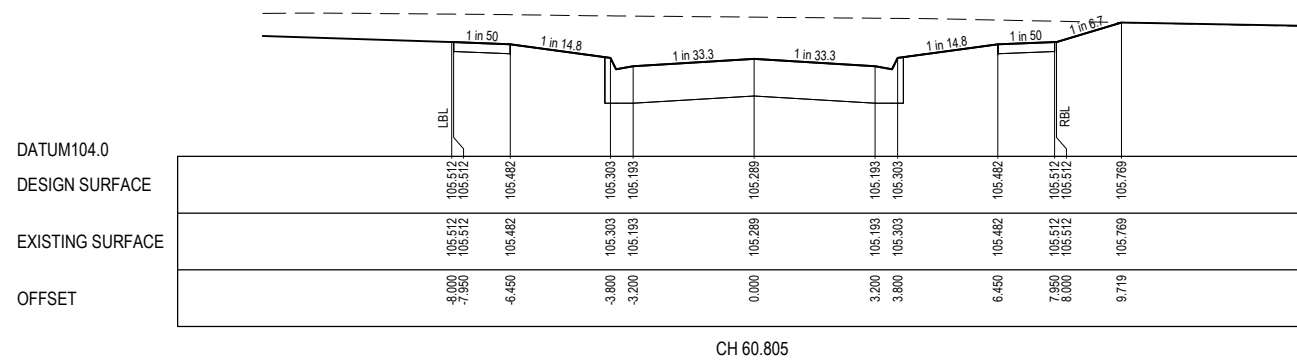
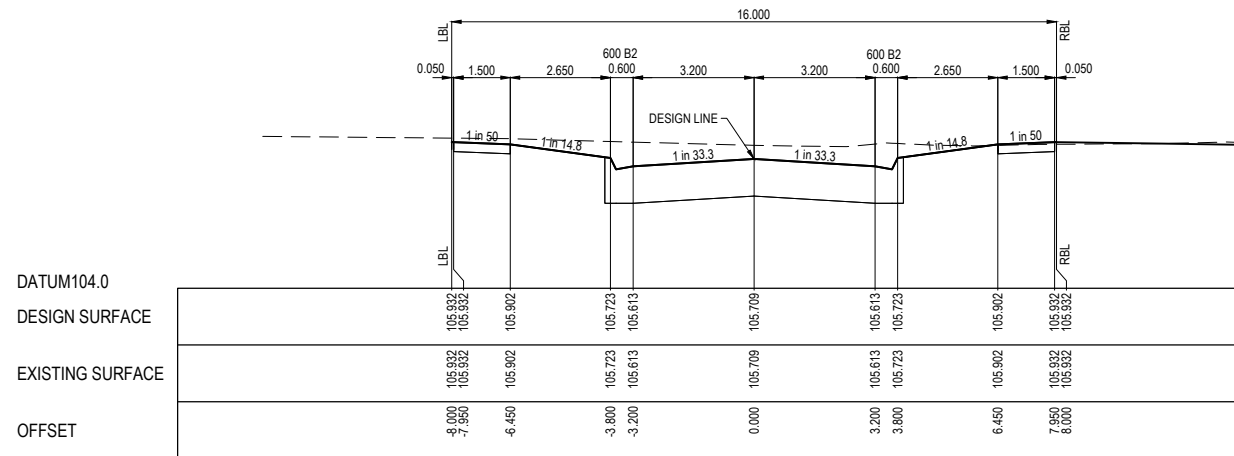
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STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	STRUCTURAL FILL

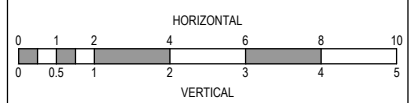


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ENGINEERING SERVICES
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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
P3	Q100 FLOWS ADDED	02.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



Designed Date: J. MONGAN 08.08.2019
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Approved Date: J. MONGAN 08.08.2019
PS Number: PS823200D



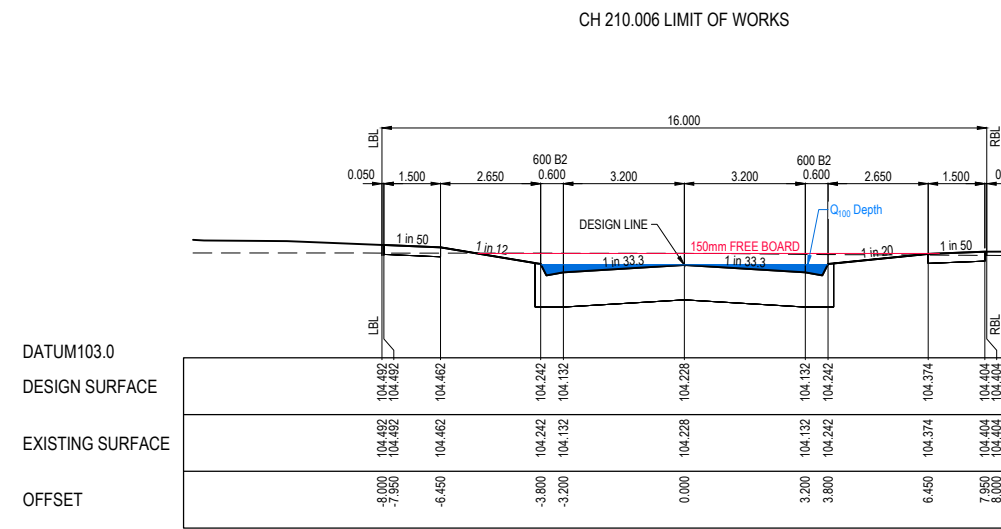
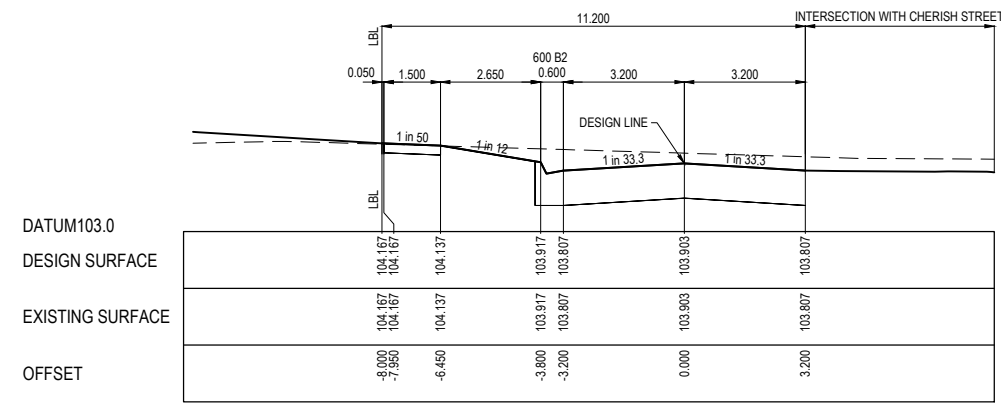
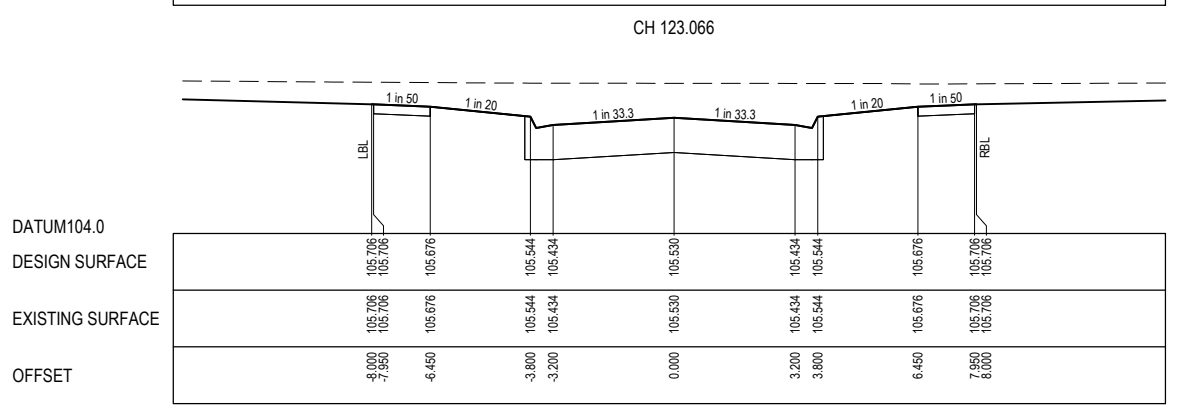
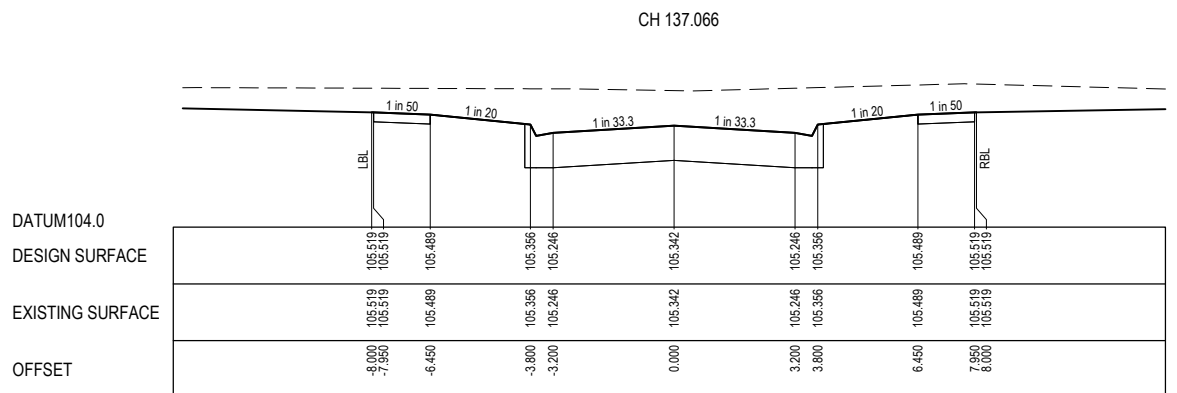
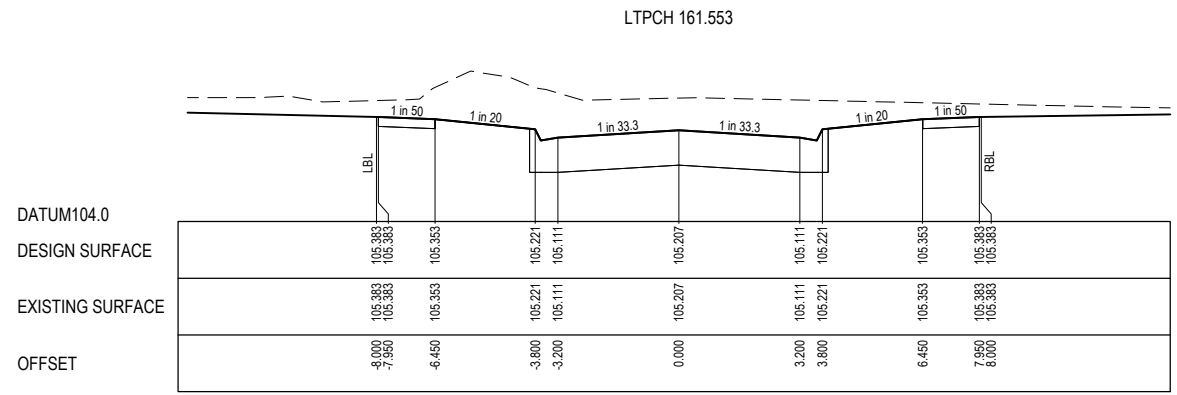
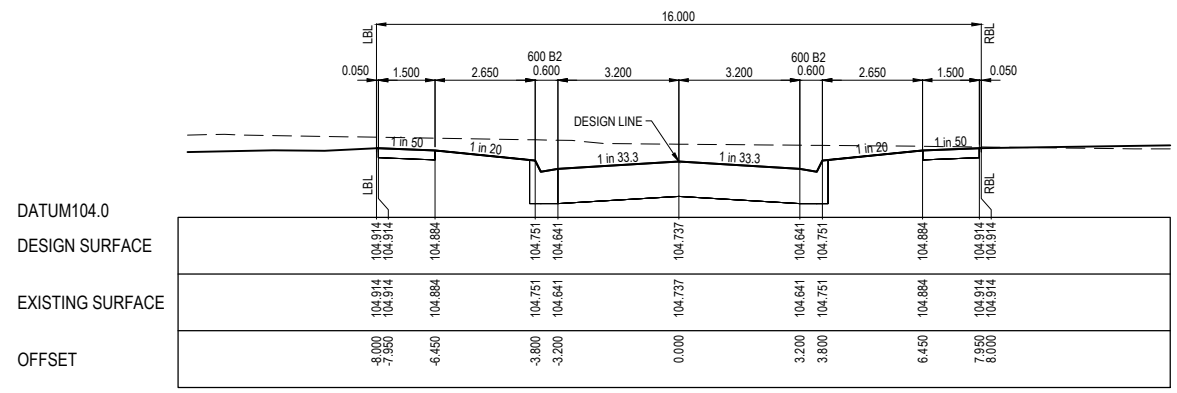
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Malvern VIC 3144
ph: 03 9524 8888
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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title: ROAD CROSS SECTIONS PETUNIA WAY

Sheet 11 of 26
Scale: 1:100 H 1:50 V @ A1
Project Ref: 1700987
Stage No: 02A
Drawing No: 201
Rev: P3

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

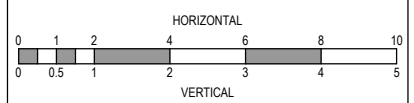
LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	STRUCTURAL FILL




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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

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P3	Q100 FLOWS ADDED	02.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



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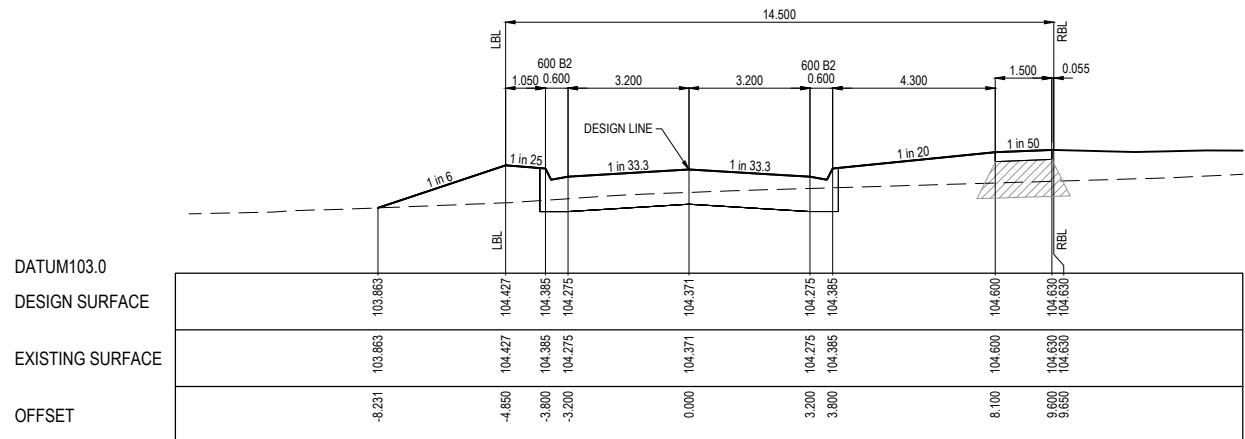
Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: ROAD CROSS SECTIONS WATTLESEED DRIVE
 Project Ref: 1700987 Stage No: 02A Drawing No: 202 Rev: P3

Sheet 12 of 26
 Scale: 1:100 H 1:50 V @ A1

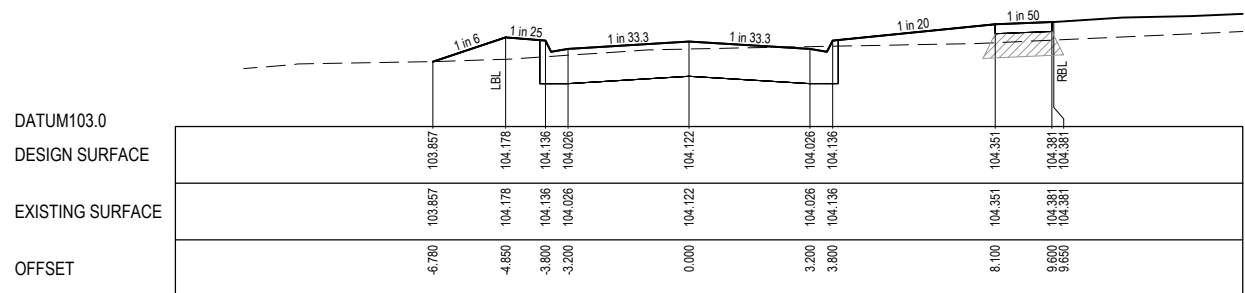
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STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

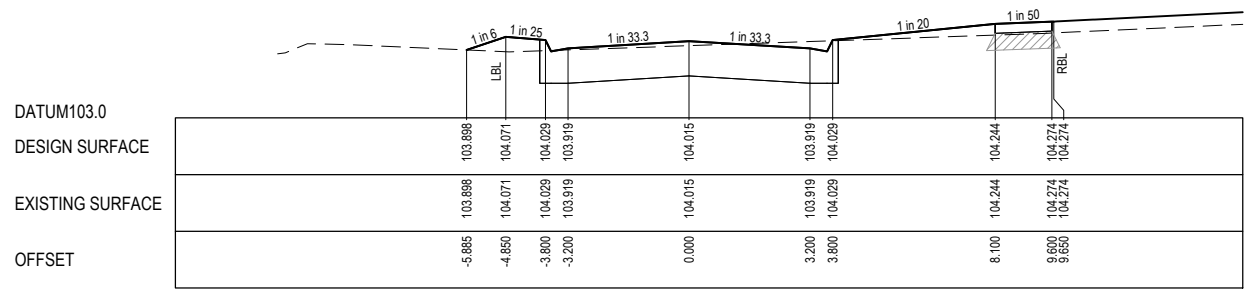
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	DESIGN SURFACE
	STRUCTURAL FILL



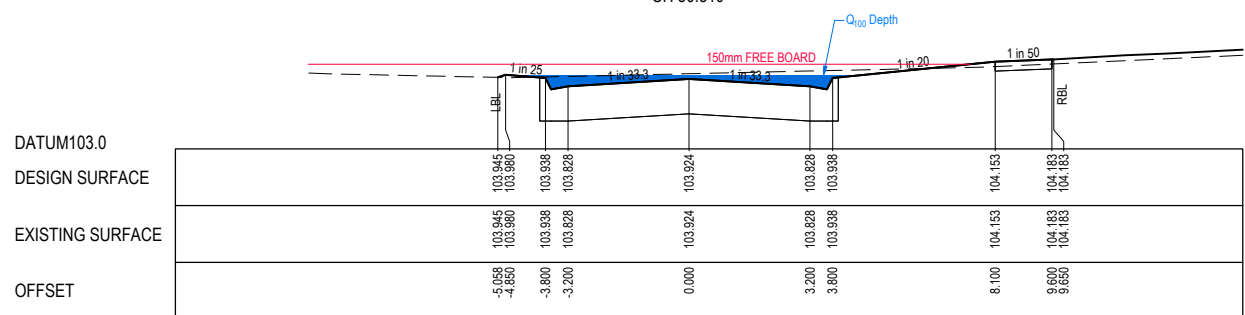
RTPCH 77.163



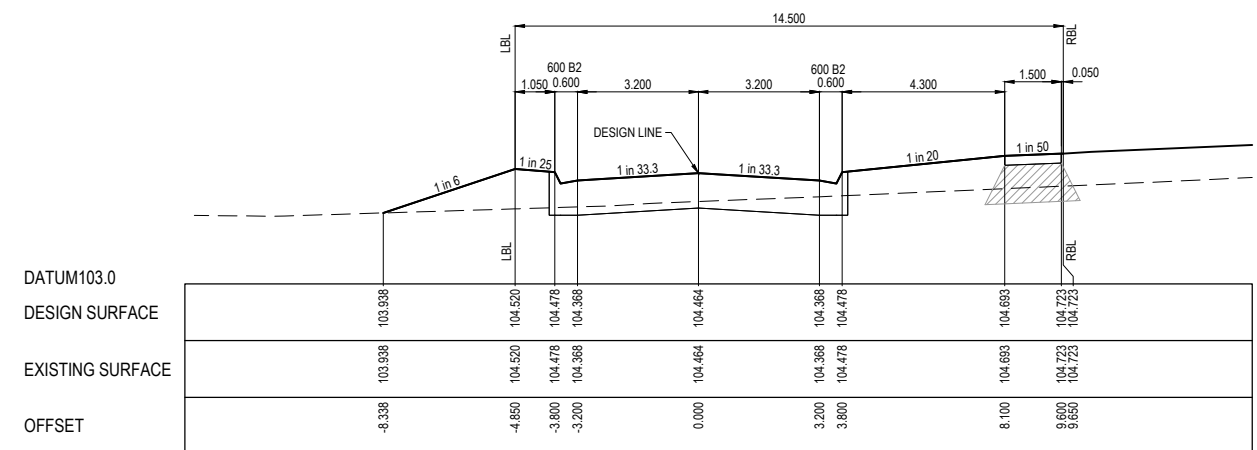
RTPCH 52.358




CH 30.810



CH 12.655 START OF WORKS



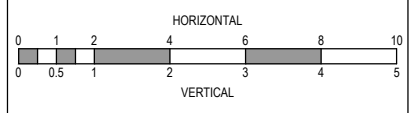
CH 95.823 LIMIT OF WORKS



APPROVED
DETAILED ENGINEERING PLANS
 Nihal Jayasekara
 ENGINEERING SERVICES
 Date: 5/2/2020

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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
P3	Q100 FLOWS ADDED	02.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: ROAD CROSS SECTIONS CHERISH STREET

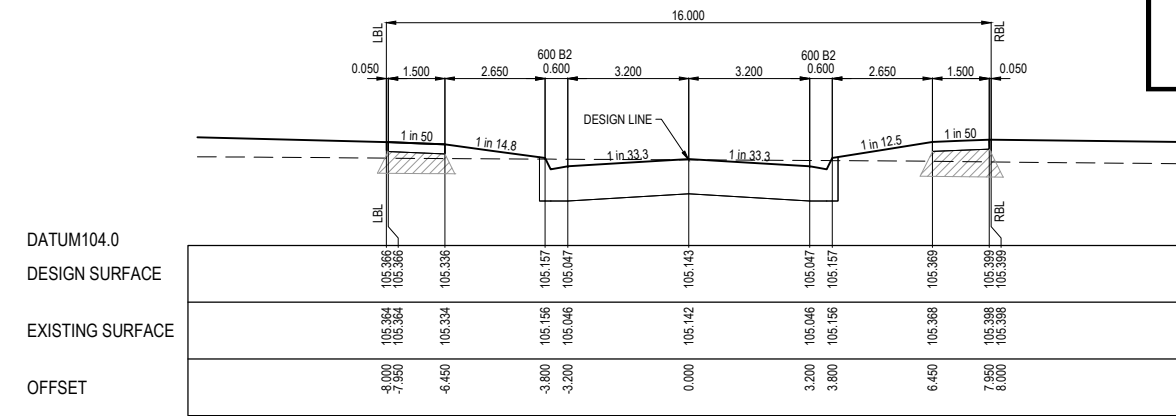
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 Scale: 1:100 H 1:50 V @ A1
 Project Ref: 1700987 Stage No: 02A Drawing No: 203 Rev: P3

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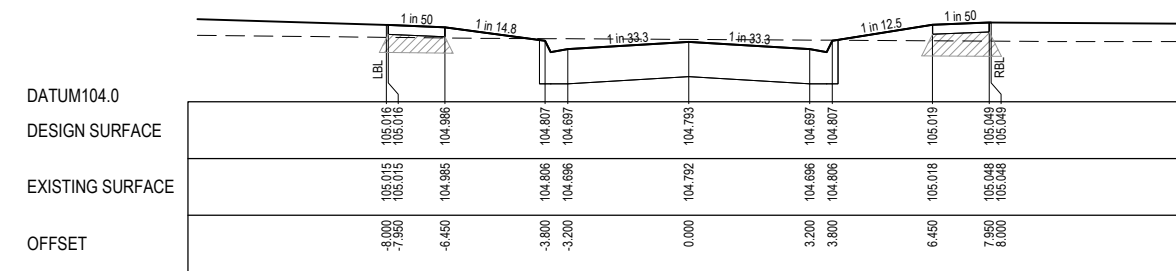

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DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE NATURAL SURFACE. REFER GEOTECH REPORT FOR SPECIFICATION

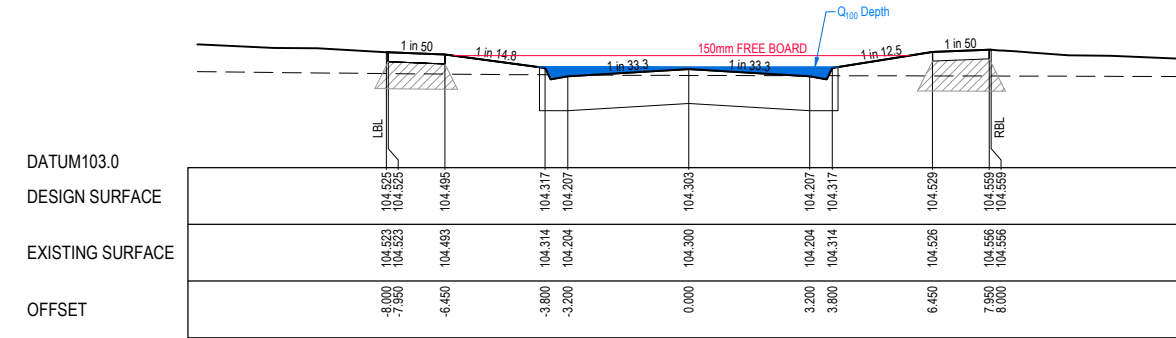
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	EXISTING SURFACE
	DESIGN SURFACE
	STRUCTURAL FILL



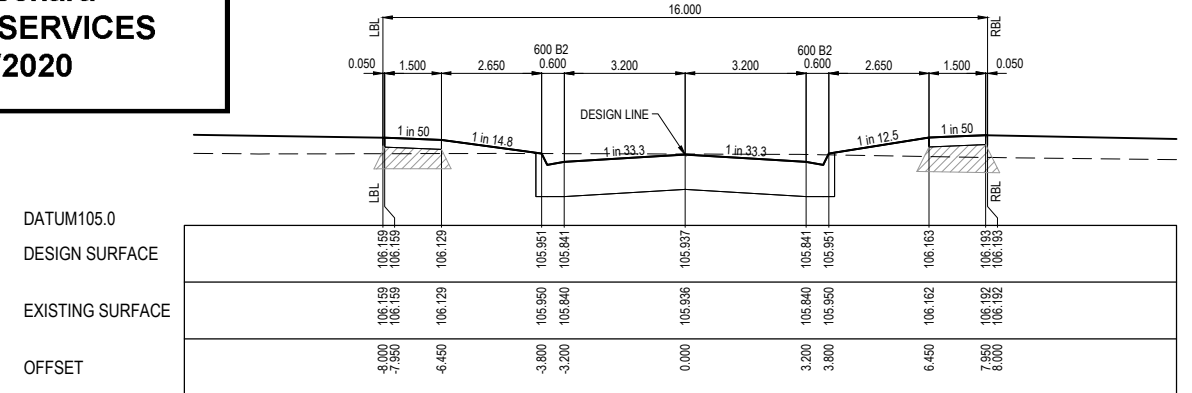
CH 52.689



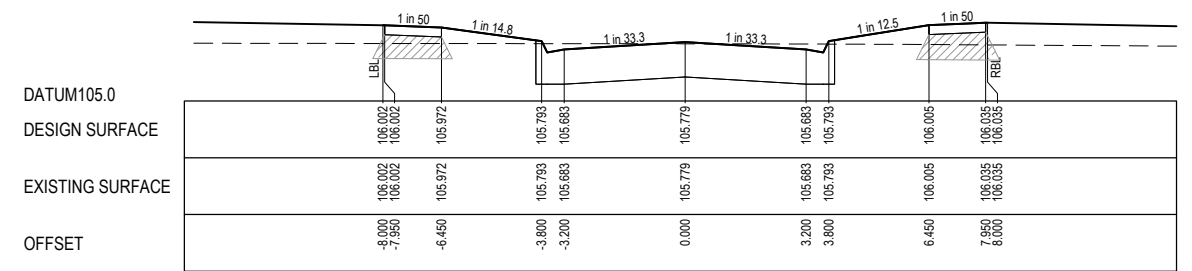
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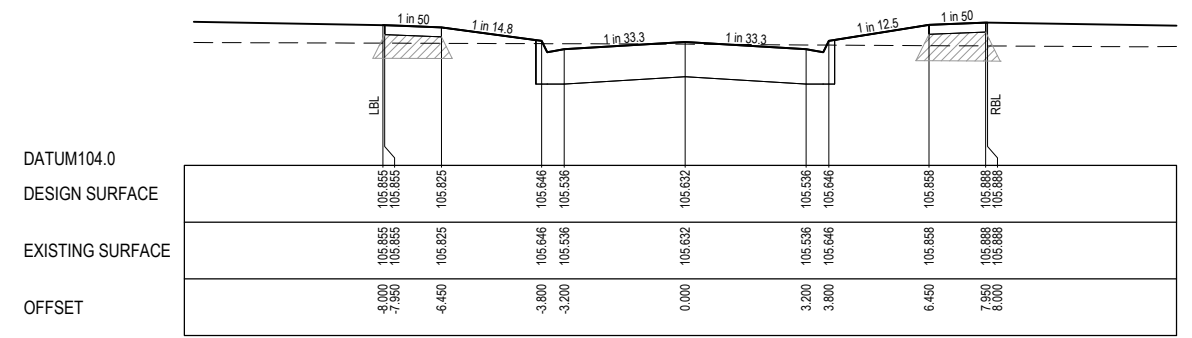
RTPCH 12.655



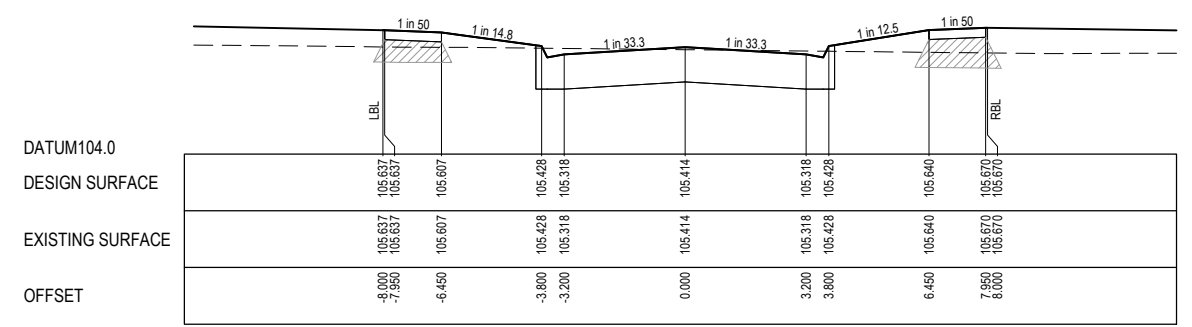
CH 107.189 LIMIT OF WORKS



CH 93.189



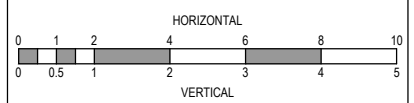
CH 80.689



CH 66.689

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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



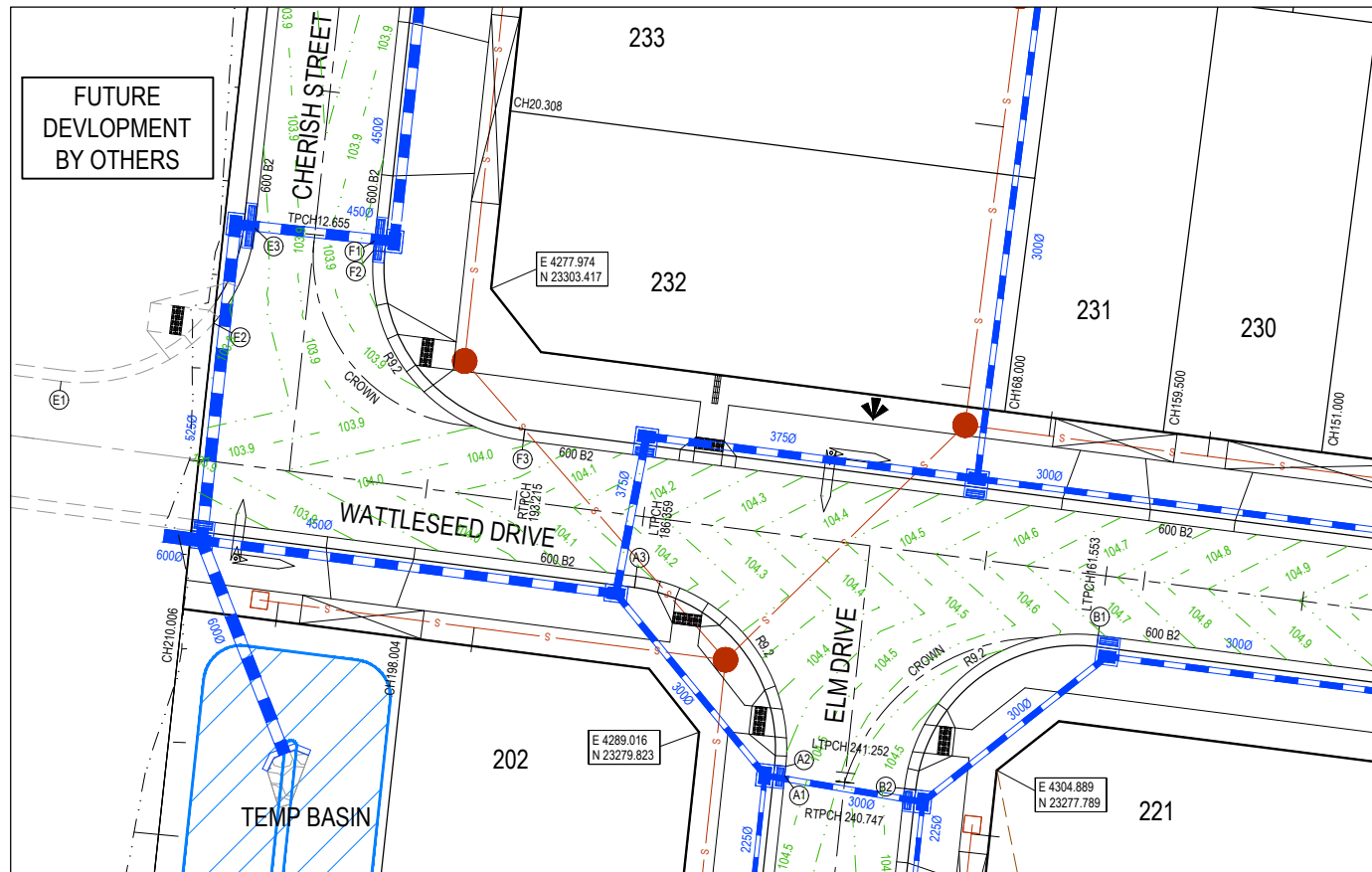
Designed Date: J. MONGAN 08.08.2019
 Drawn: D. COOPER
 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D

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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: ROAD CROSS SECTIONS WINTON DRIVE

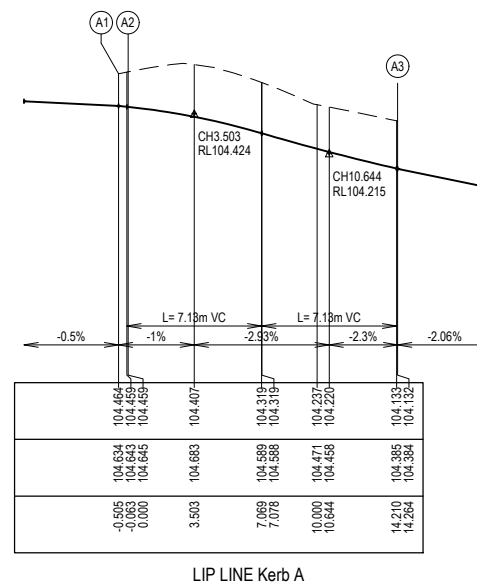
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 Scale: 1:100 H 1:50 V @ A1
 Project Ref: 1700987 Stage No: 02A Drawing No: 204 Rev: P3

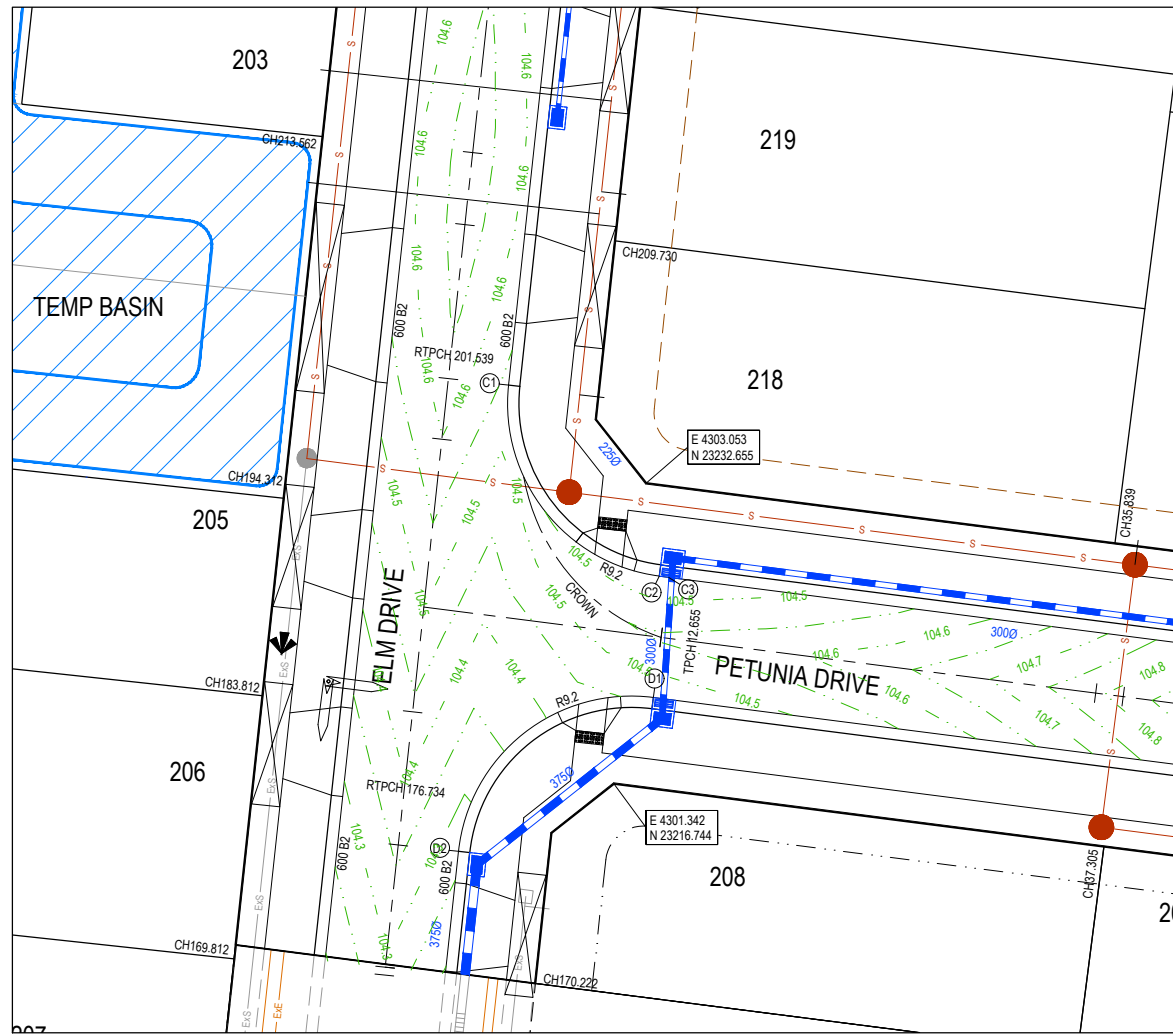
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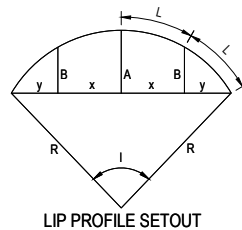
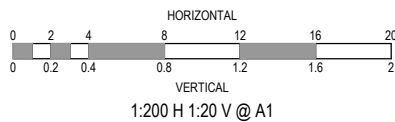
VERTICAL GEOMETRY
 DATUM RL103
 DESIGN LEVEL
 EXISTING SURFACE
 CHAINAGE





LEGEND

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- TACTILE PAVERS (INDICATIVE ONLY)
- EXISTING HOUSE DRAIN
- RETAINING WALL
- PAVEMENT TREATMENT
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY



Alignment C

Point no	Easting	Northing	RL
C1	4295.766	23237.837	104.536
C2	4303.743	23227.728	104.464
C3	4304.244	23227.663	104.462

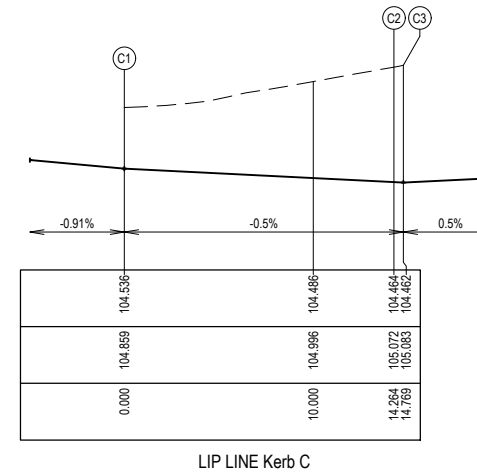
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
C1 - C2	88.833	9.200	14.264	2.629	1.946	3.477	2.961	3.566	104.500

Alignment D

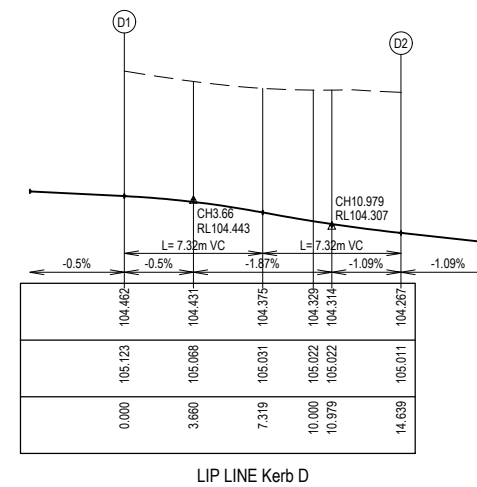
Point no	Easting	Northing	RL
D1	4303.431	23221.315	104.462
D2	4293.114	23213.174	104.267

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
D1 - D2	91.167	9.200	14.639	2.761	2.043	3.564	3.007	3.660	104.375

VERTICAL GEOMETRY
DATUM RL104
DESIGN LEVEL
EXISTING SURFACE
CHAINAGE



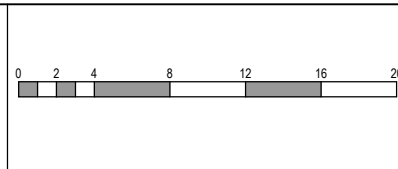
VERTICAL GEOMETRY
DATUM RL104
DESIGN LEVEL
EXISTING SURFACE
CHAINAGE



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ENGINEERING SERVICES
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P1	TENDER ISSUE	30.04.19	LS	JM					

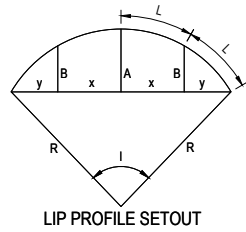
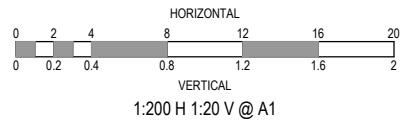
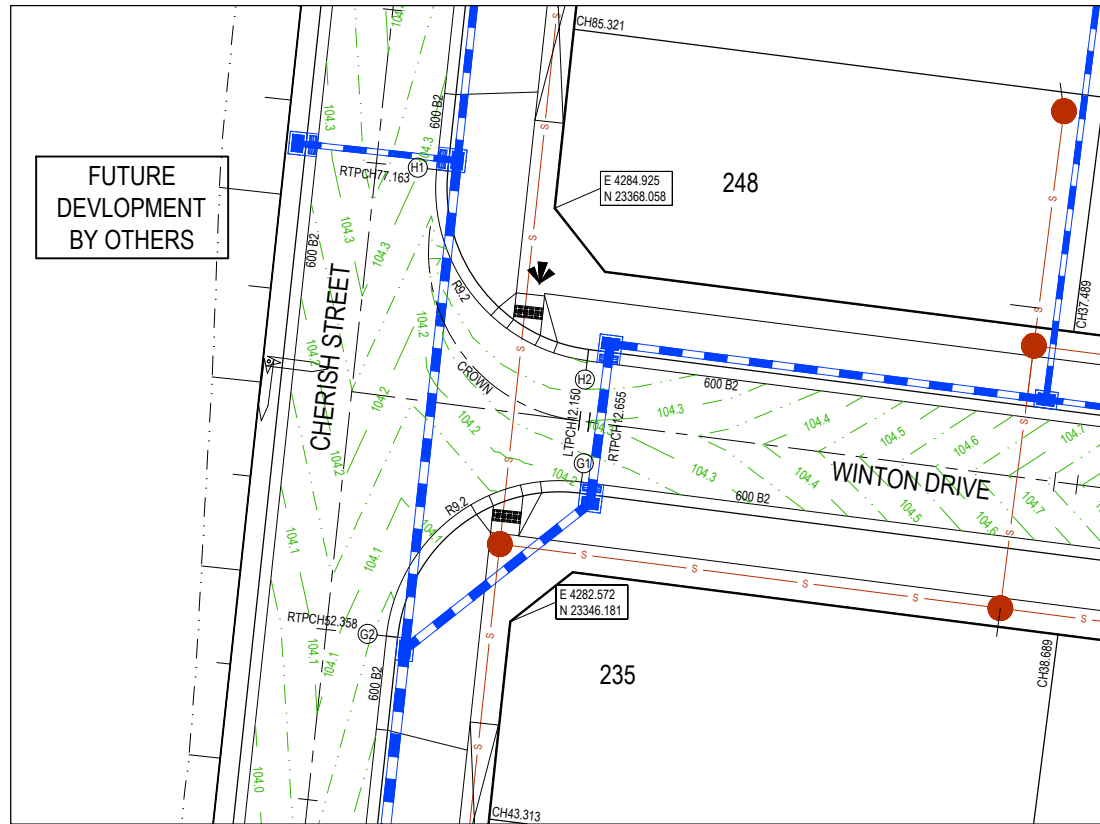


Designed Date: J. MONGAN 08.08.2019
Drawn: D. COOPER
Approved Date: J. MONGAN 08.08.2019
PS Number: PS823200D

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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title: INTERSECTION DETAILS (SHEET 2 OF 3)

Sheet 16 of 26
Scale: 1:200 @ A1
Project Ref: 1700987 Stage No: 02A Drawing No: 301 Rev: P2



Alignment G

Point no	Easting	Northing	RL
G1	4286.320	23353.564	104.204
G2	4276.004	23345.422	104.026

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
G1 - G2	91.167	9.200	14.639	2.761	2.043	3.564	3.007	3.660	104.115

Alignment H

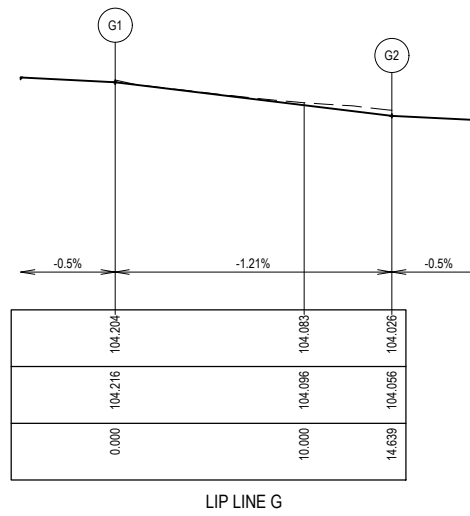
Point no	Easting	Northing	RL
H1	4278.655	23370.085	104.275
H2	4286.633	23359.976	104.196

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
H1 - H2	88.833	9.200	14.264	2.629	1.946	3.477	2.961	3.566	104.233

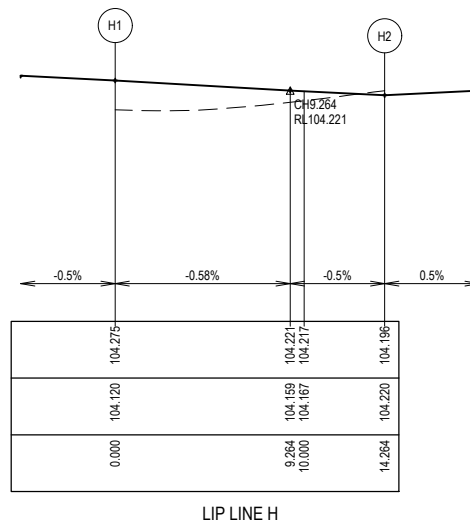
LEGEND

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- TACTILE PAVERS (INDICATIVE ONLY)
- EXISTING HOUSE DRAIN
- RETAINING WALL
- PAVEMENT TREATMENT
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN
- "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY

VERTICAL GEOMETRY
DATUM RL103
DESIGN LEVEL
EXISTING SURFACE
CHAINAGE



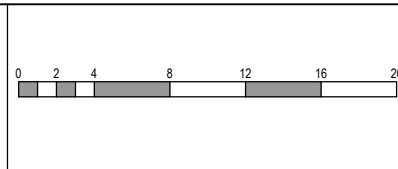
VERTICAL GEOMETRY
DATUM RL103
DESIGN LEVEL
EXISTING SURFACE
CHAINAGE



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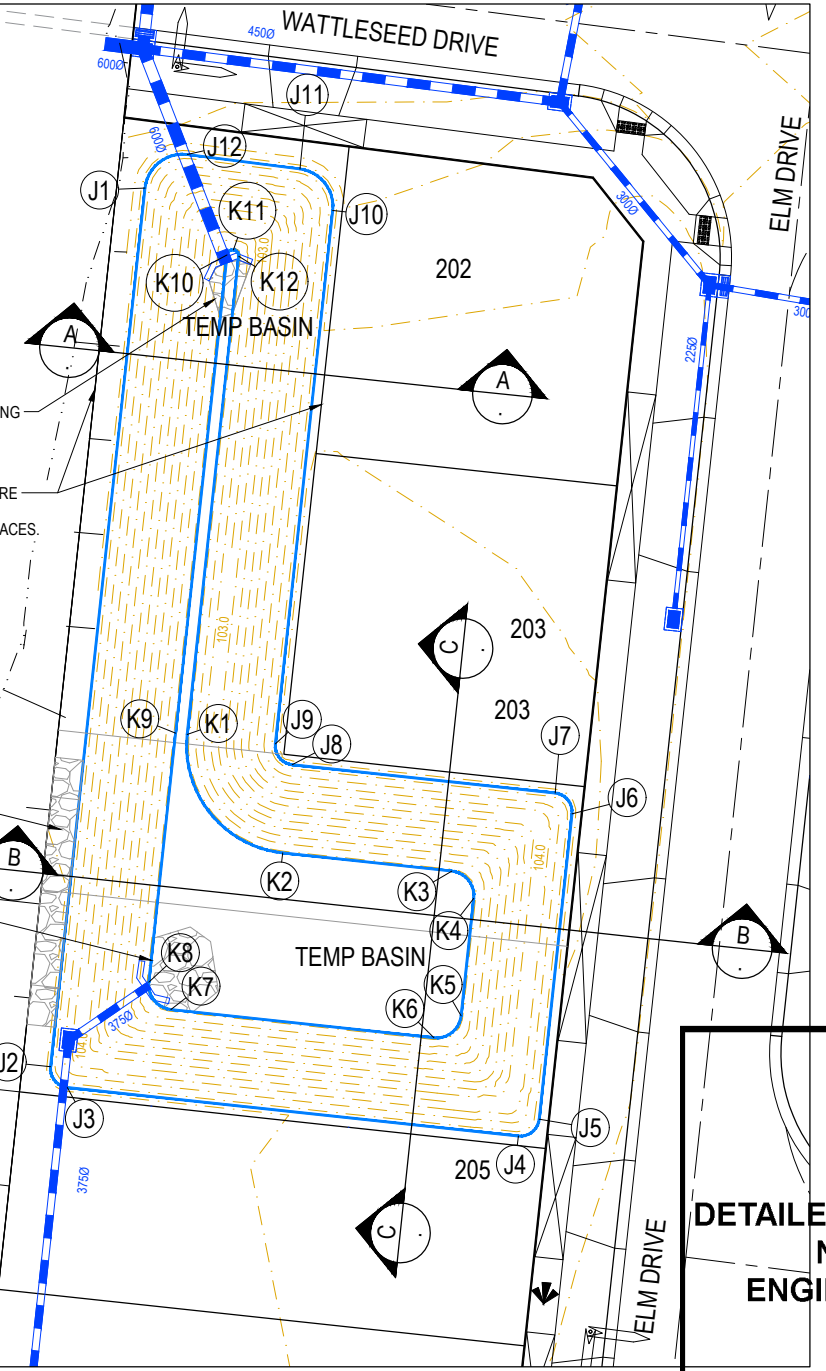
Designed Date: J. MONGAN 08.08.2019
 Drawn: D. COOPER
 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D

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Project Details	BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title	INTERSECTION DETAILS (SHEET 3 OF 3)

Sheet 17 of 26	Scale: 1:200 @ A1
Project Ref: 1700987	Stage No: 02A
Drawing No: 302	Rev: P2

- LEGEND**
- STORMWATER DRAIN, PIT & PROPERTY INLET
 - MELBOURNE WATER DRAIN & PIT
 - SWALE DRAIN
 - SEWER & MAINTENANCE STRUCTURES
 - HOUSE DRAIN
 - TACTILE PAVERS (INDICATIVE ONLY)
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 - CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
 - LIMIT OF WORKS
 - EXISTING TREE TO BE REMOVED
 - PERMANENT SURVEY MARK
 - TEMPORARY BENCH MARK
 - PROPOSED DRIVEWAY

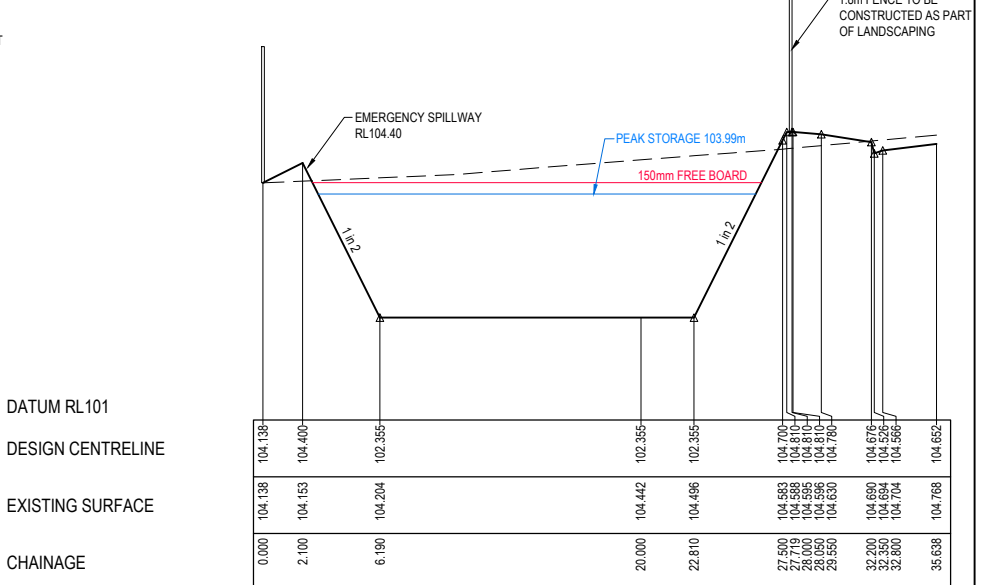
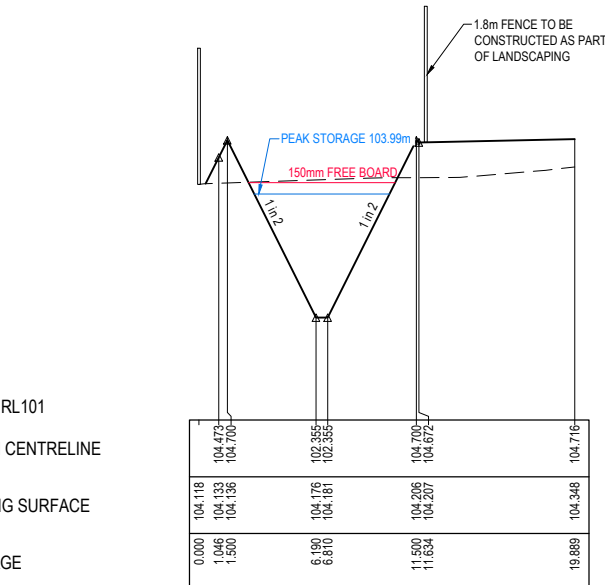
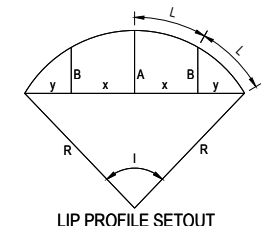


Alignment J

Point no	Easting	Northing	RL
J1	4262.967	23282.854	104.700
J2	4257.670	23236.173	104.700
J3	4258.557	23235.072	104.700
J4	4282.419	23232.506	104.700
J5	4283.521	23233.393	104.700
J6	4285.258	23249.550	104.700
J7	4284.370	23250.651	104.700
J8	4270.451	23252.148	104.700
J9	4269.563	23253.249	104.700
J10	4272.597	23281.464	104.700
J11	4270.863	23283.661	104.700
J12	4264.910	23284.424	104.700

Alignment K

Point no	Easting	Northing	RL
K1	4264.900	23253.751	102.355
K2	4269.949	23247.485	102.355
K3	4278.898	23246.523	102.355
K4	4280.060	23245.080	102.355
K5	4279.392	23238.866	102.355
K6	4277.949	23237.704	102.355
K7	4264.030	23239.200	102.355
K8	4262.867	23240.643	102.355
K9	4264.284	23253.817	102.355
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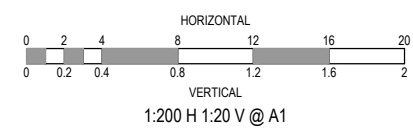
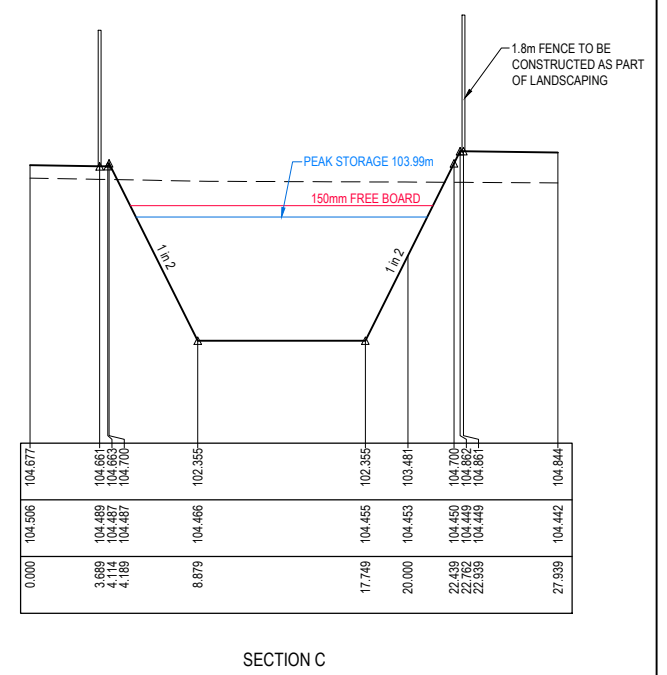
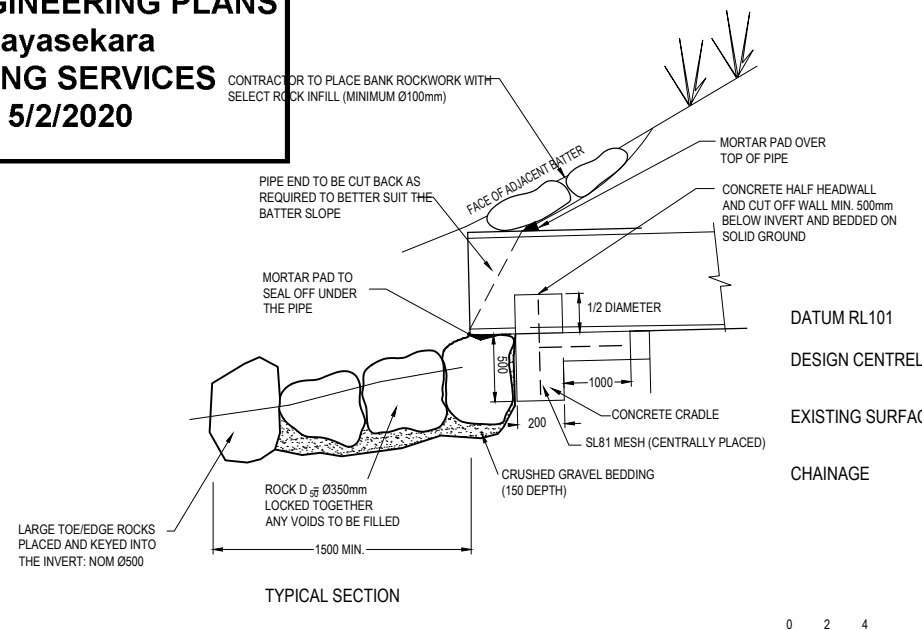
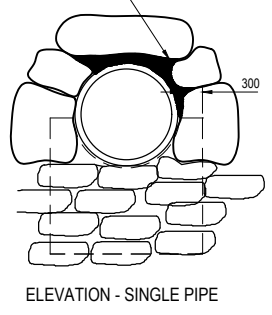
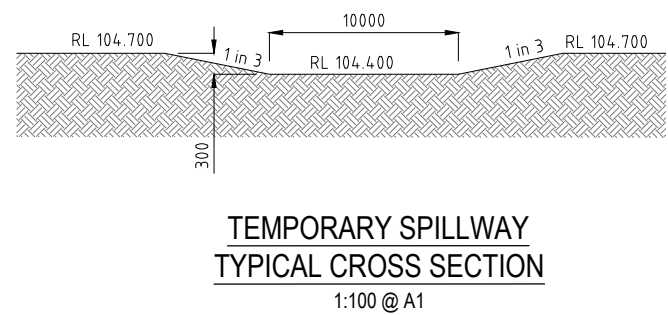
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APPROVED DETAILED ENGINEERING PLANS

Nihal Jayasekara

ENGINEERING SERVICES

Date: 5/2/2020



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P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					

DESIGNED	J. MONGAN	08.08.2019
DRAWN	D. COOPER	
APPROVED	J. MONGAN	08.08.2019
PS NUMBER	PS823200D	

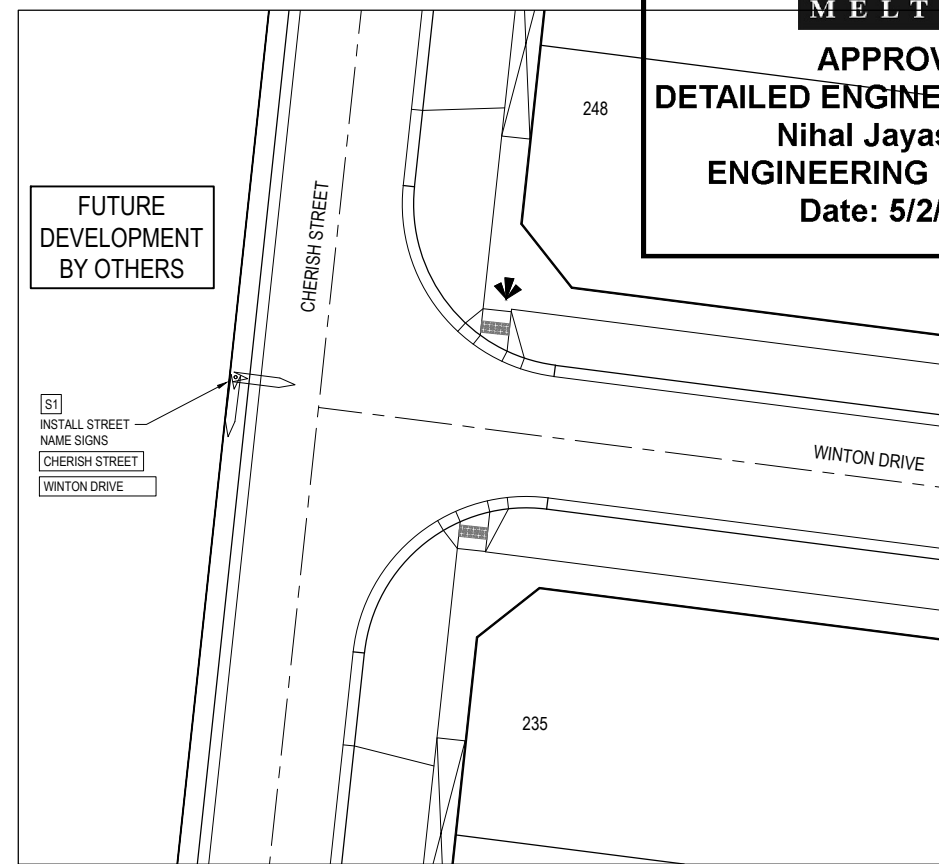
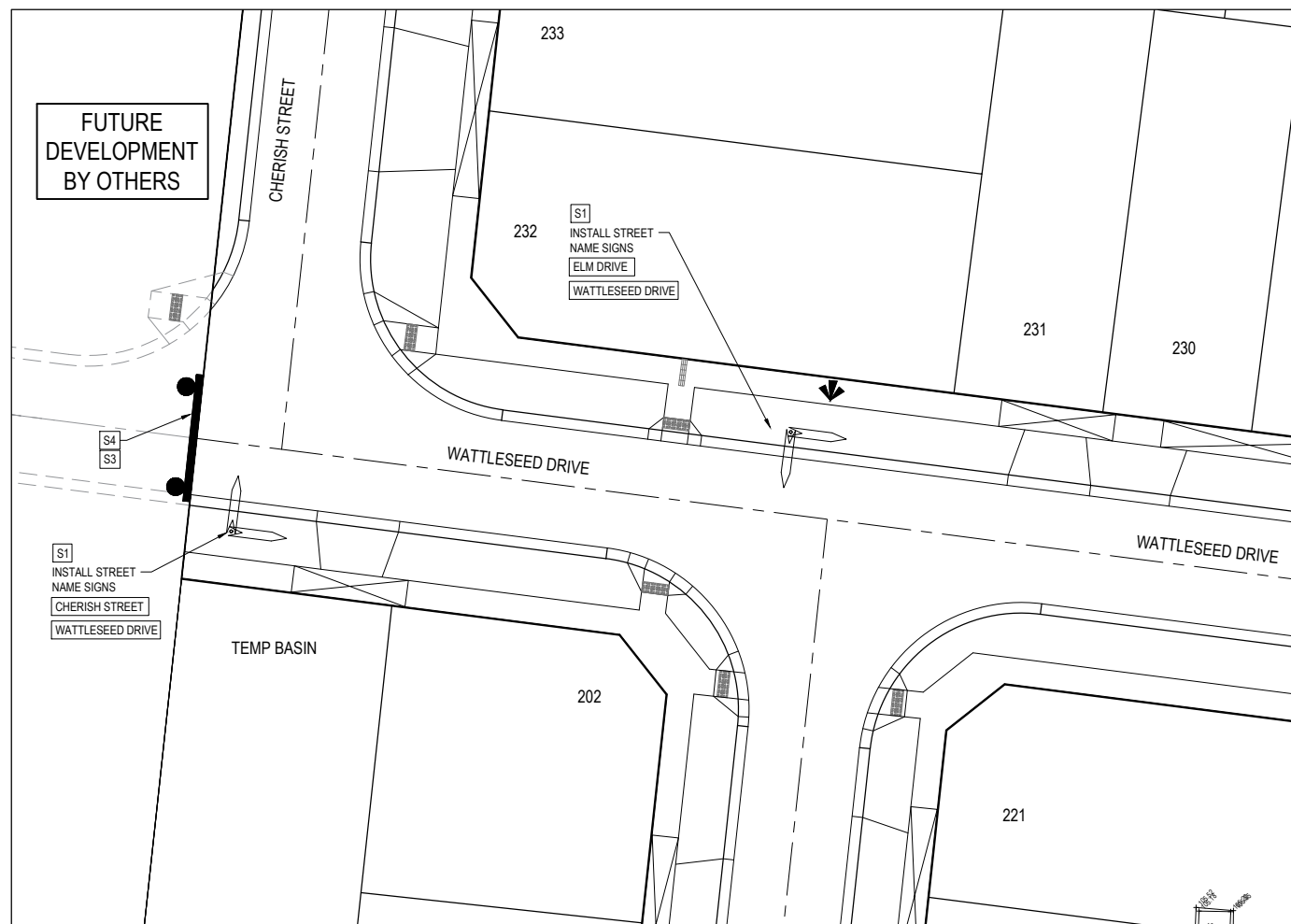
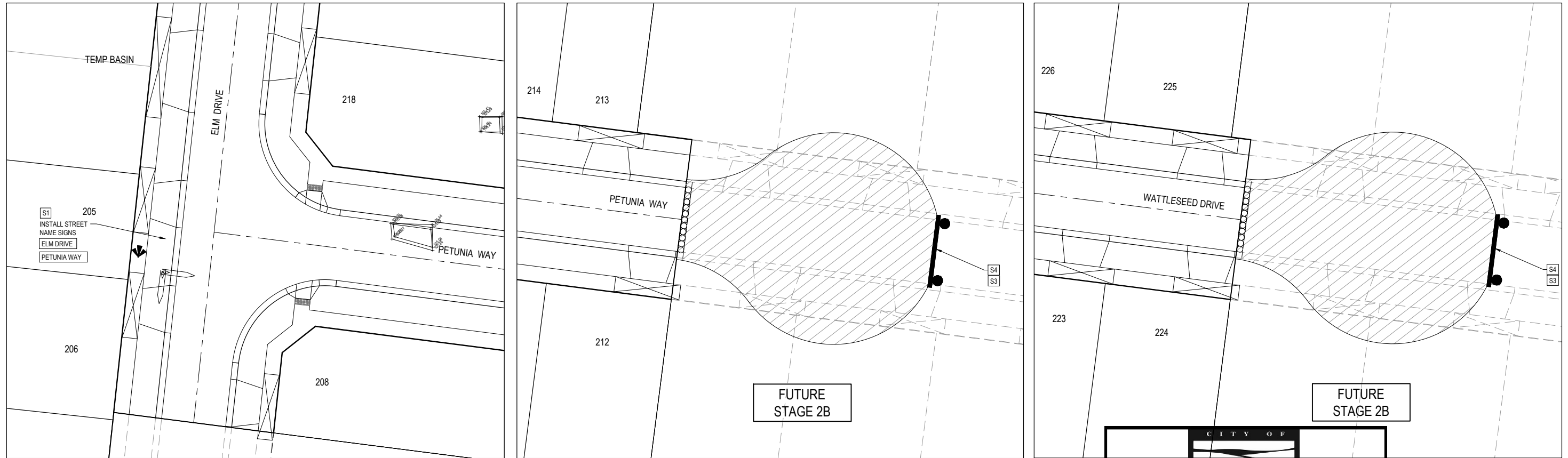
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Project Details	BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Drawing Title	RETARDING BASIN DETAILS





Sheet	18 of 26
Scale	1:200 @ A1
Project Ref	1700987
Stage No	02A
Drawing No	303
Rev	P3

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DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

SIGN SCHEDULE

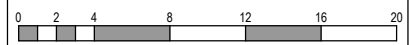
IDENTIFIER	NUMBER	SIGN
S1	STREET NAME SIGN	
S2	R1-2	
S3	D4-5	
S4	G9-20	

- NOTES**
- RRPM'S AT MAX 6m SPACING.
 - LINEMARKING TO BE EXTENDED AT LEAST 5m FROM THE TANGENT POINT
 - LINEMARKING IN ACCORDANCE WITH AS1742.
 - TGSI TO BE INSTALLED IN ACCORDANCE WITH VICROADS RDN 06-06 - JULY2010

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P1	TENDER ISSUE	30.04.19	LS	JM					



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 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D

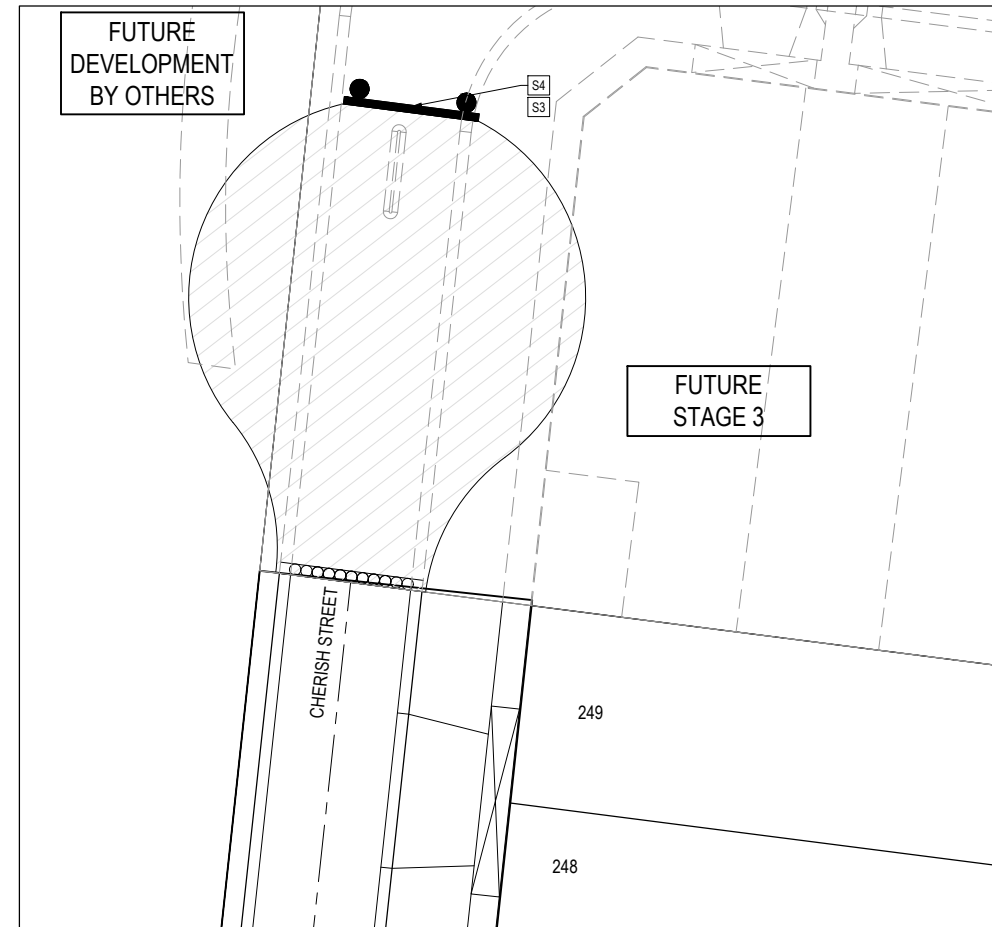
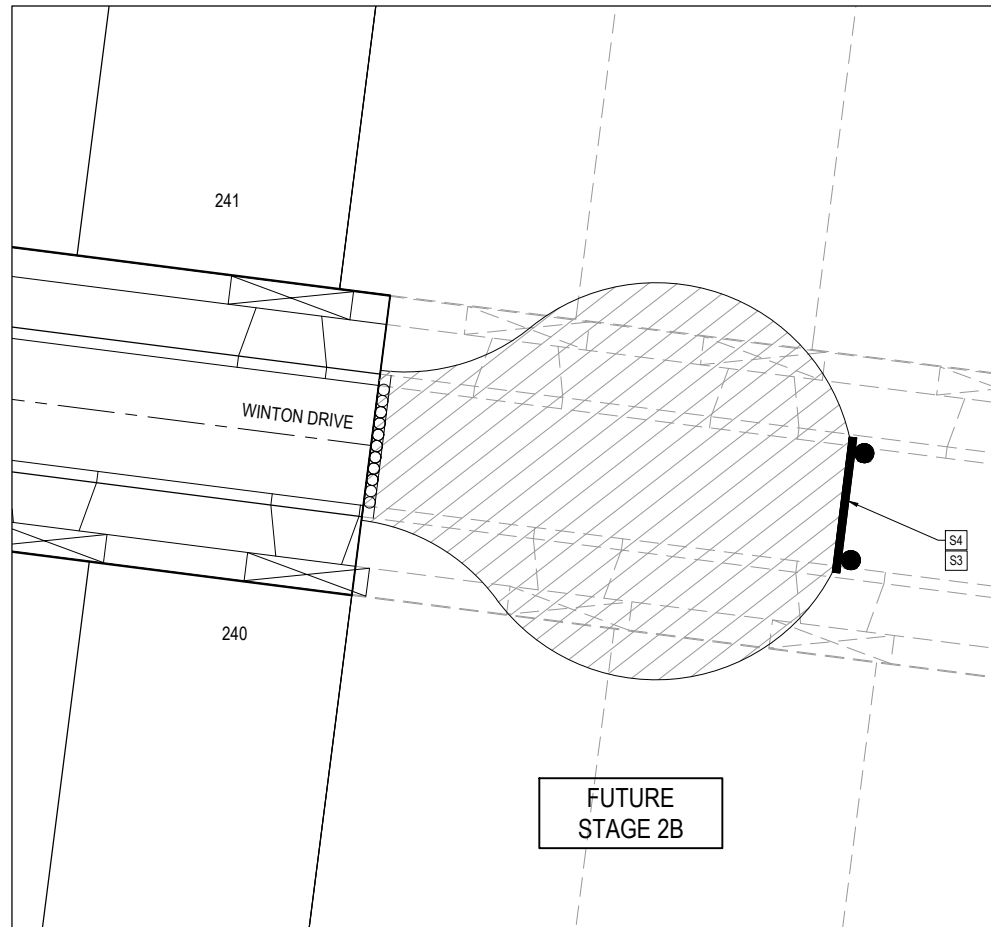
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Project Details: BOTANIA ESTATE
 STAGE 2A
 MELTON CITY COUNCIL
 Drawing Title: SIGNAGE & LINE MARKING PLANS
 (SHEET 1 OF 2)





Sheet 19 of 26
 Scale: 1:200 @ A1
 Project Ref: 1700987
 Stage No: 02A
 Drawing No: 350
 Rev: P2






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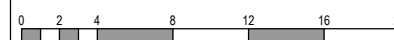
SIGN SCHEDULE

IDENTIFIER	NUMBER	SIGN
S1	STREET NAME SIGN	
S2	R1-2	
S3	D4-5	
S4	G9-20	

- NOTES**
- RRPM'S AT MAX 6m SPACING.
 - LINEMARKING TO BE EXTENDED AT LEAST 5m FROM THE TANGENT POINT
 - LINEMARKING IN ACCORDANCE WITH AS1742.
 - TGSI TO BE INSTALLED IN ACCORDANCE WITH VICROADS RDN 06-06 - JULY2010

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P1	TENDER ISSUE	30.04.19	LS	JM					



Designed Date: J. MONGAN 08.08.2019
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 Approved Date: J. MONGAN 08.08.2019
 PS Number: PS823200D


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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: SIGNAGE & LINE MARKING PLANS (SHEET 2 OF 2)

Sheet 20 of 26

Scale: 1:200 @ A1

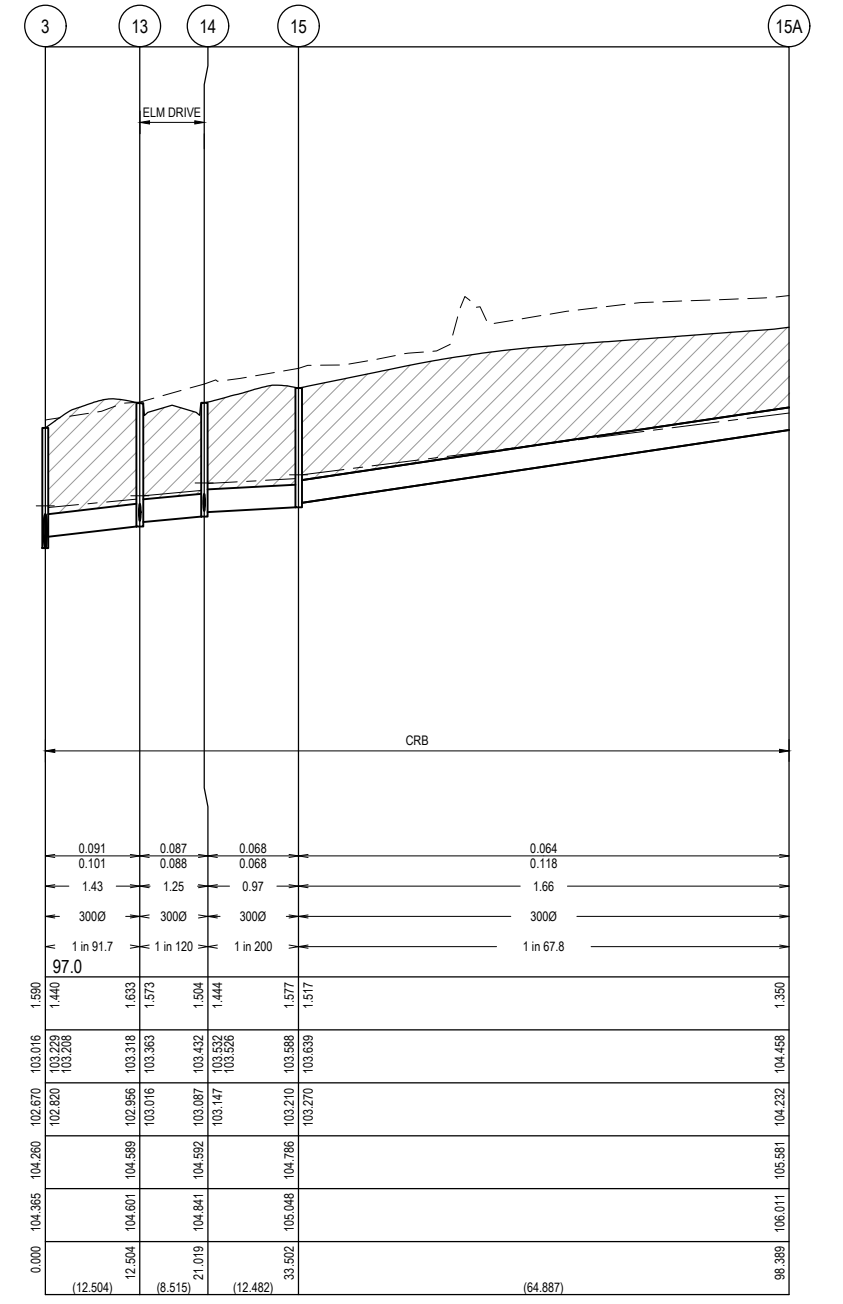
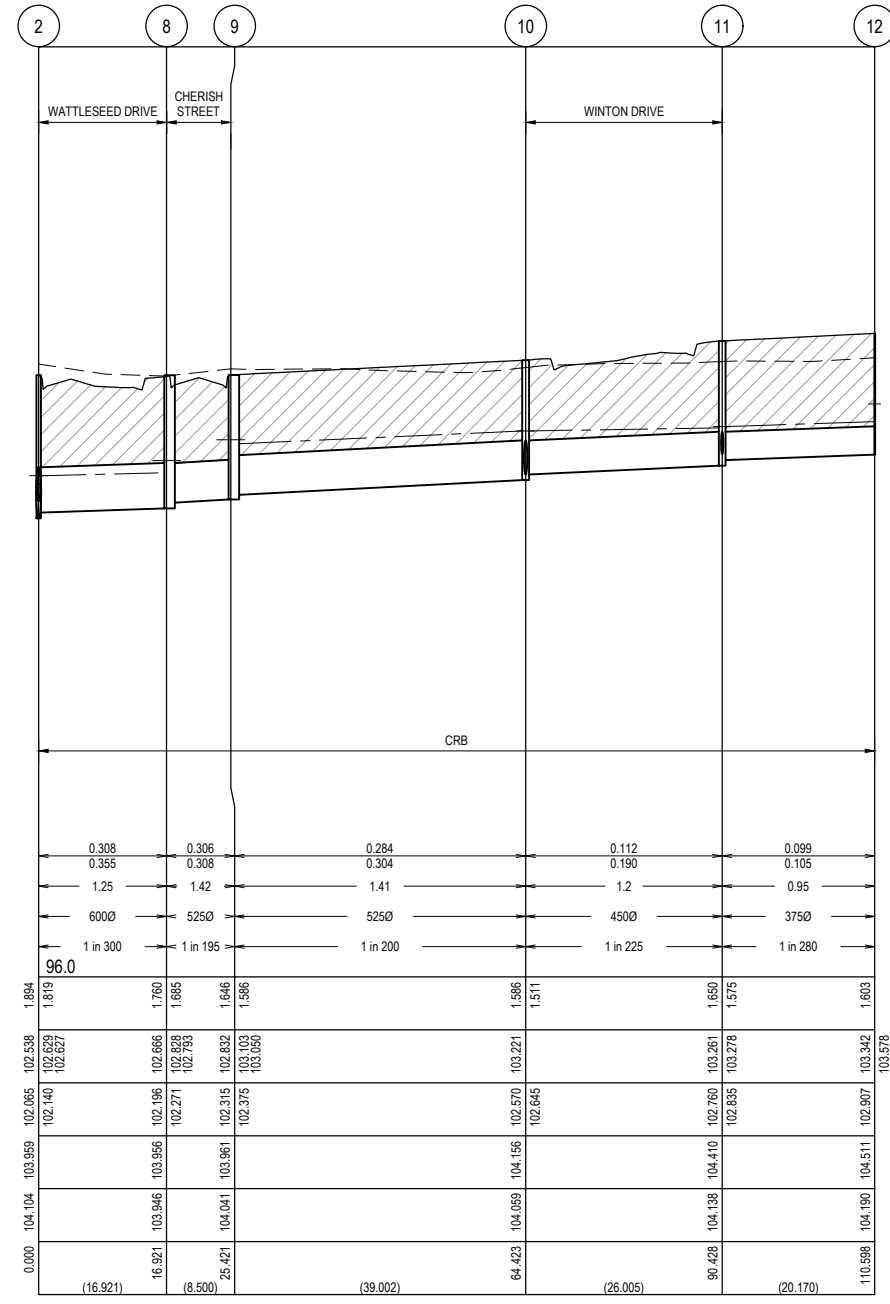
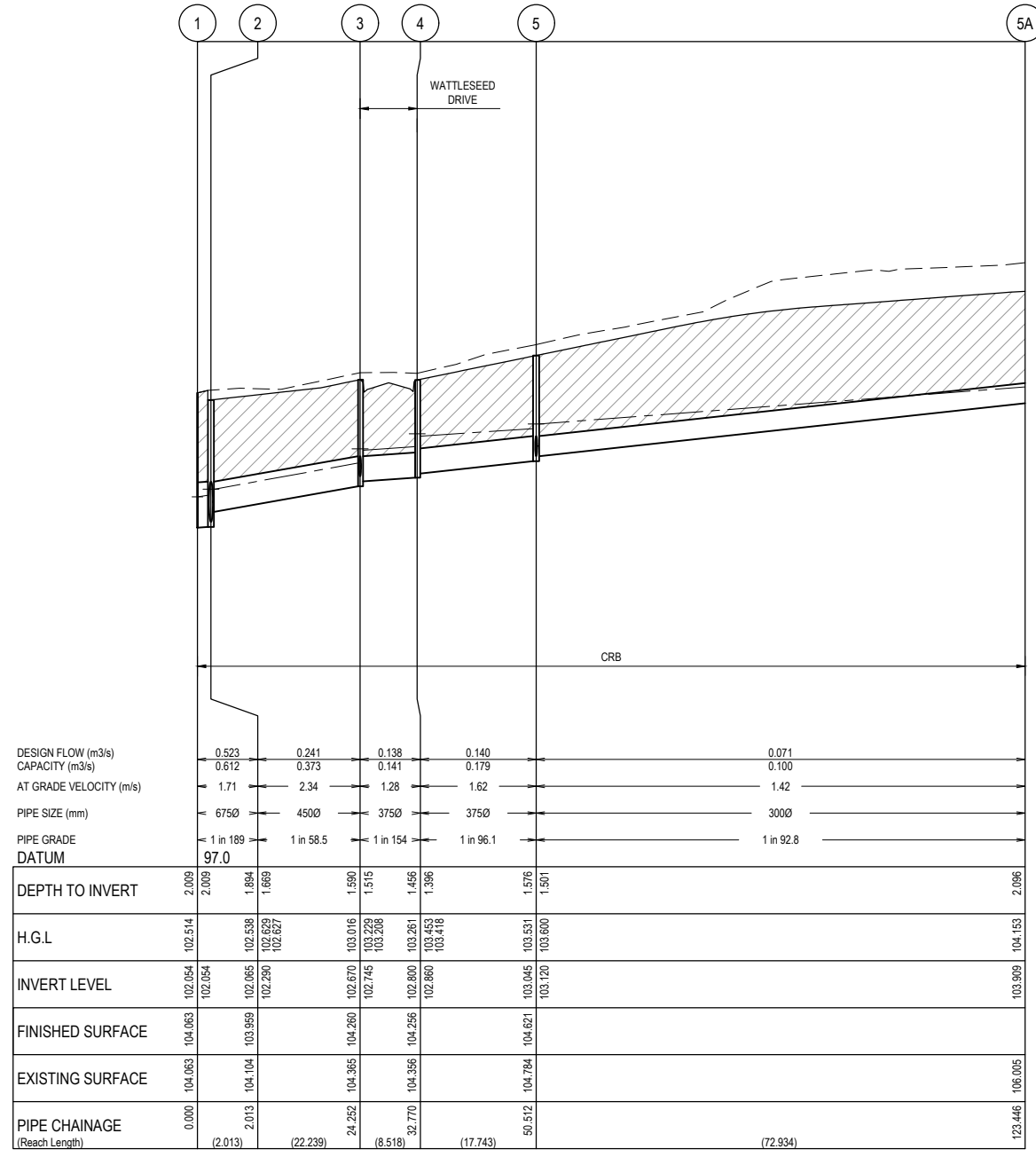
Project Ref	Stage No	Drawing No	Rev
1700987	02A	351	P2




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DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

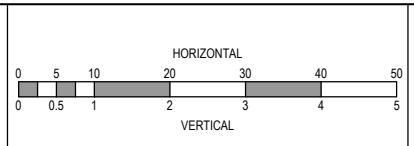
NOTES:
 ALL STORMWATER DRAINS UP TO AND INCLUDING 750mm DIA. ARE TO BE CLASS 2 R.R.J. PIPES UNLESS NOTED OTHERWISE.

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
P3	PIPE 15A TO 15 AMENDED	24.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



Designed: J. MONGAN 08.08.2019
 Drawn: D. COOPER
 Approved: J. MONGAN 08.08.2019
 PS Number: PS823200D



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 Malvern VIC 3144
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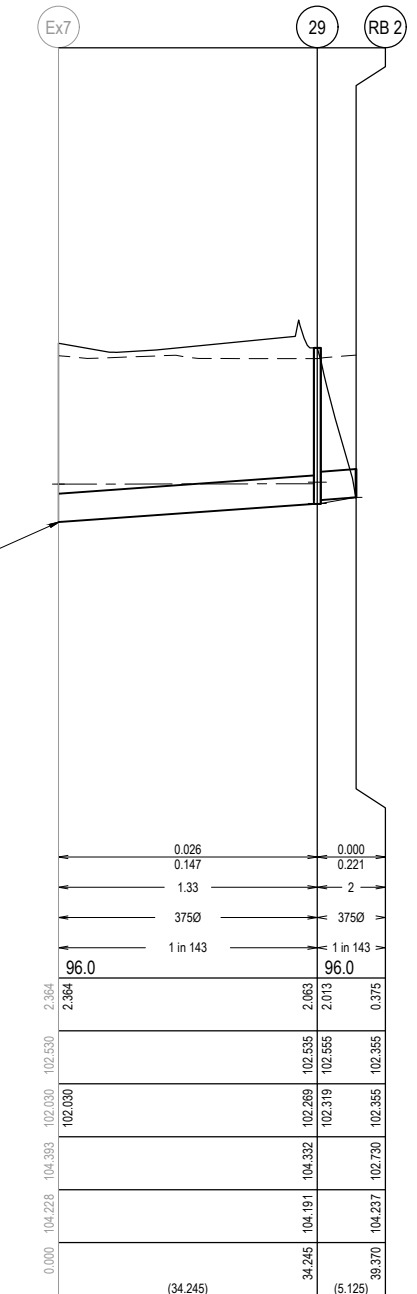
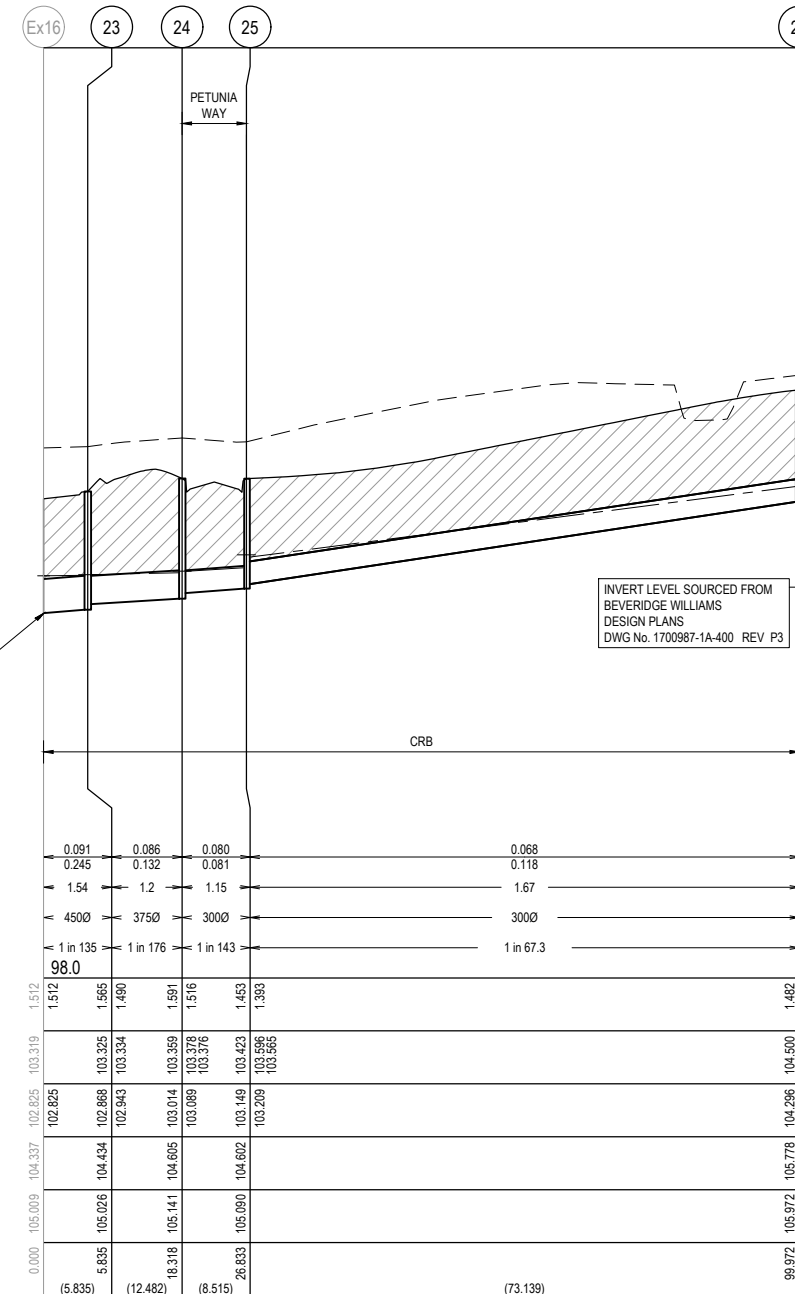
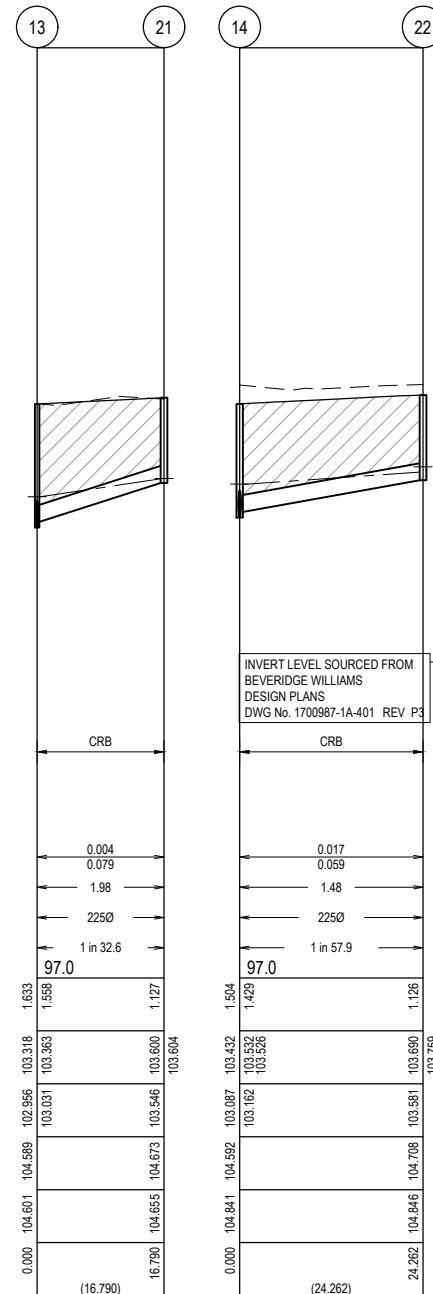
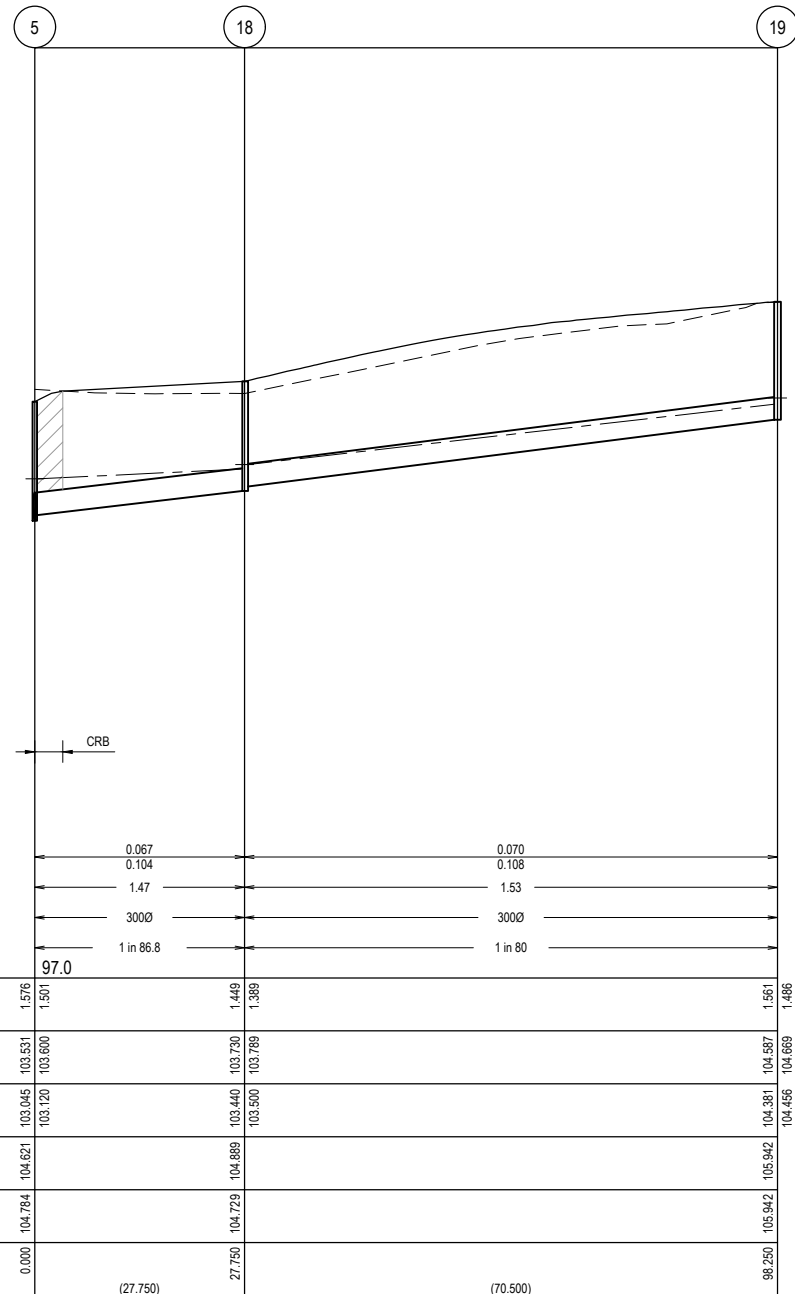
Project Details	BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
Sheet	21 of 26
Scale	1:500 H 1:50 V @ A1
Project Ref	1700987
Stage No	02A
Drawing No	400
Rev	P3



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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020**

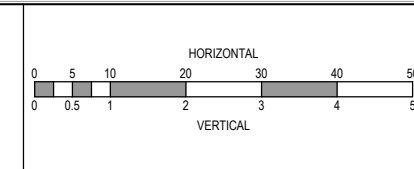
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LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



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P3	PIT 26 AMENDED	24.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					
REV	DESCRIPTION	DATE	DRN	APP.	REV	DESCRIPTION	DATE	DRN	APP.



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Project Details: BOTANIA ESTATE
STAGE 2A
MELTON CITY COUNCIL

Drawing Title: DRAINAGE LONGITUDINAL SECTIONS
(SHEET 2 OF 3)

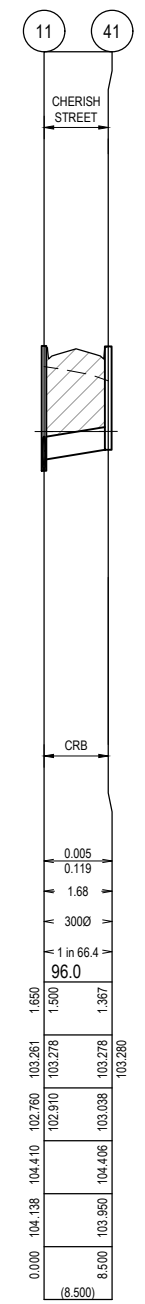
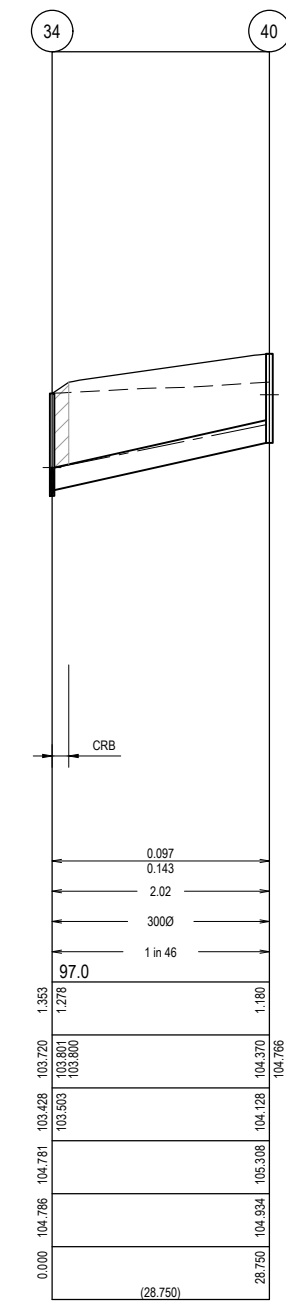
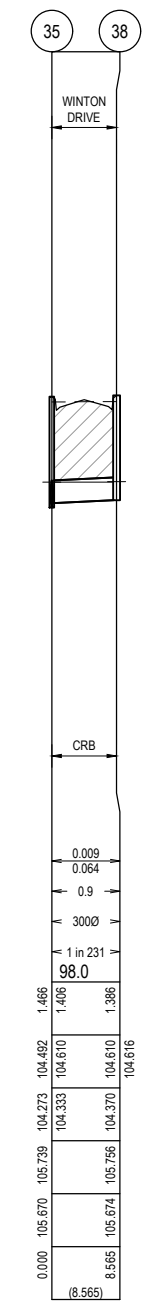
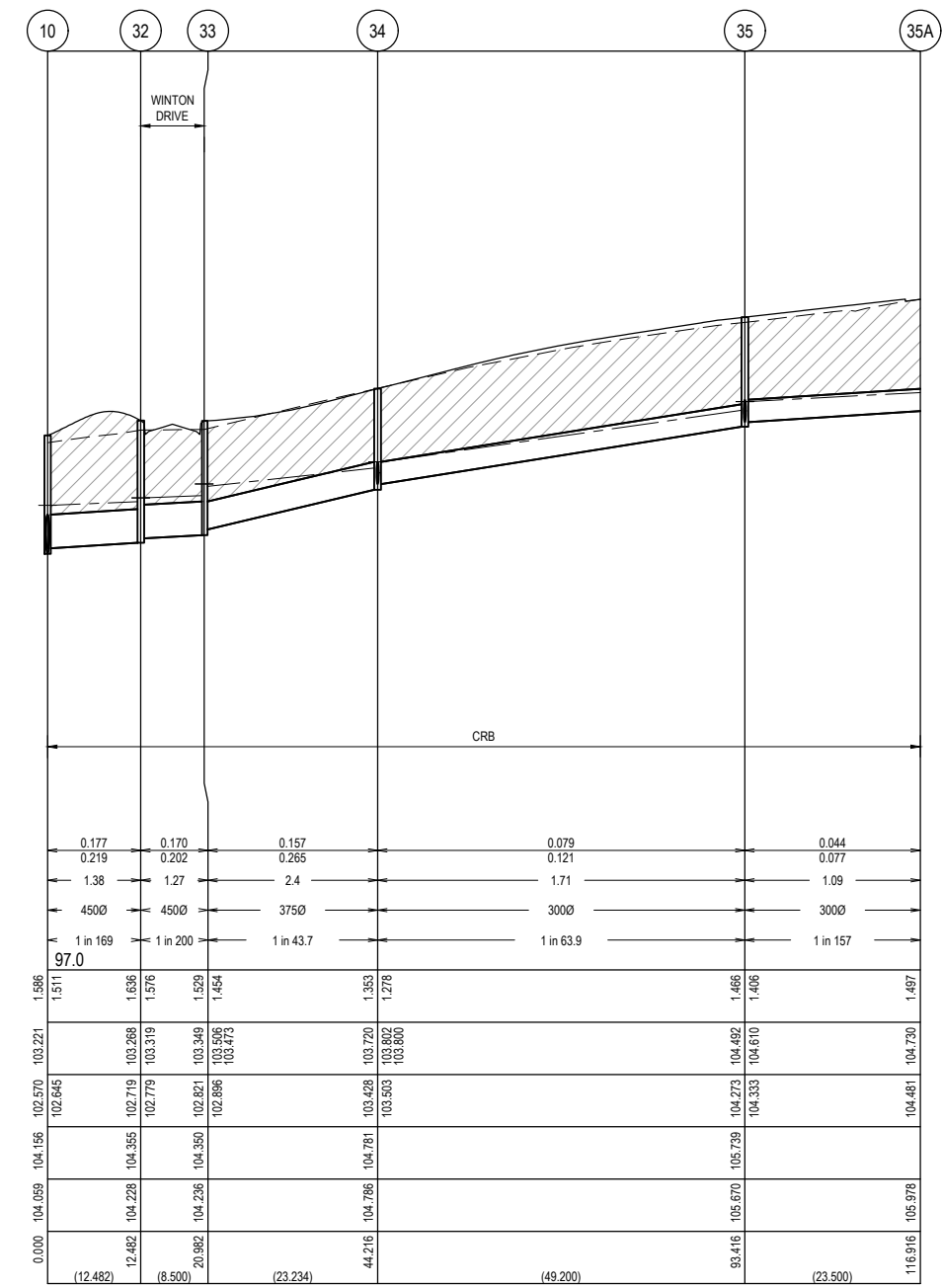
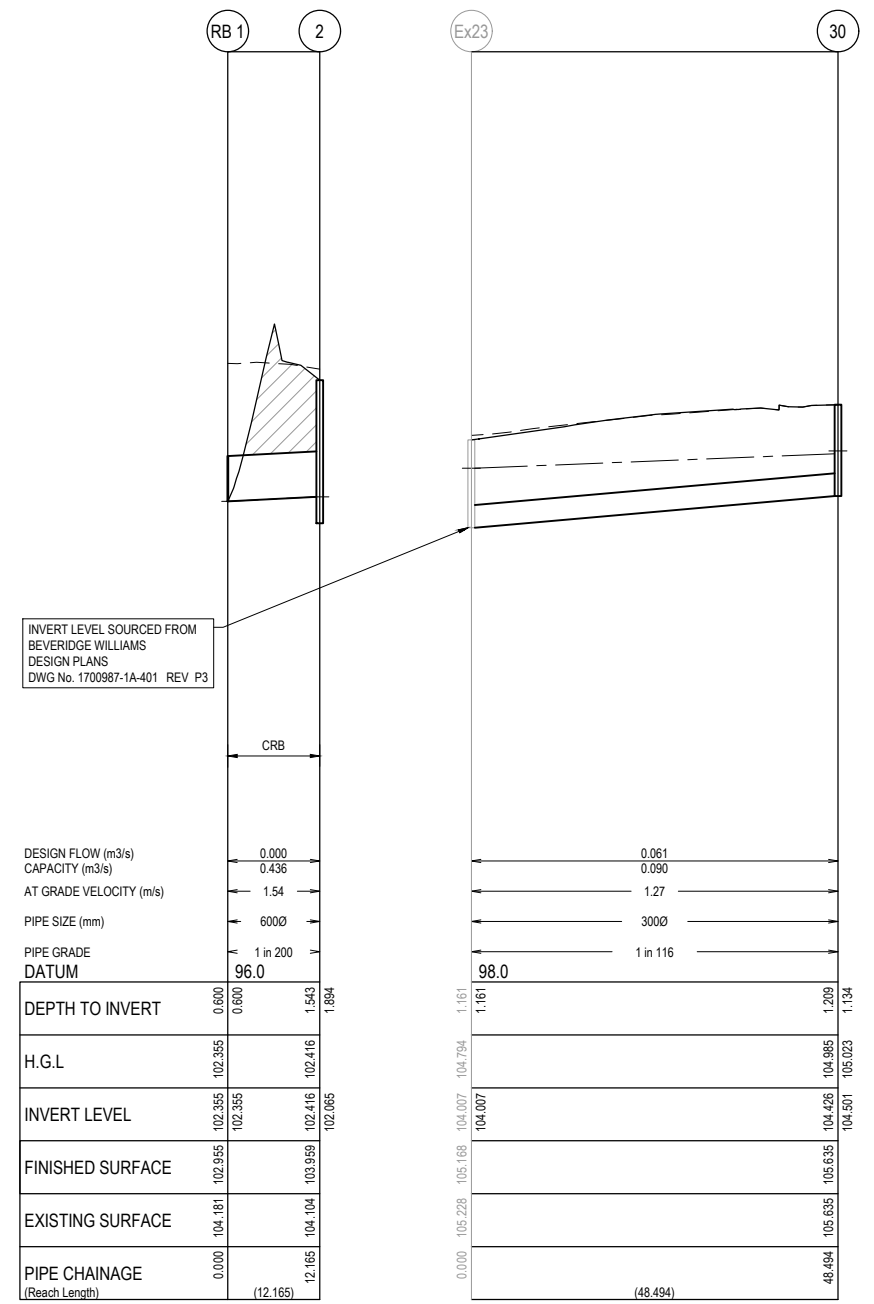
Sheet 22 of 26
Scale: 1:500 H 1:50 V @ A1

Project Ref: 1700987
Stage No: 02A
Drawing No: 401
Rev: P3


APPROVED
DETAILED ENGINEERING PLANS
Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020

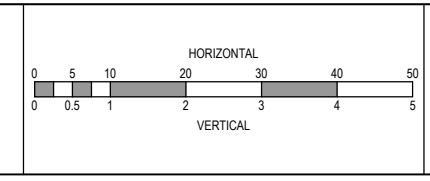
NOTES:
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LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	DENOTES 20mm CLASS 3 FCR BACKFILL



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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
P3	PIT 35 AND 38 AMENDED	02.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					



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BW

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Project Details: BOTANIA ESTATE STAGE 2A MELTON CITY COUNCIL
 Drawing Title: DRAINAGE LONGITUDINAL SECTIONS (SHEET 3 OF 3)

Sheet 23 of 26
 Scale: 1:500 H 1:50 V @ A1
 Project Ref: 1700987 Stage No: 02A Drawing No: 402 Rev: P3

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**APPROVED
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Nihal Jayasekara
ENGINEERING SERVICES
Date: 5/2/2020**

PIT NAME	TYPE	INTERNAL		INLET		OUTLET		PIT SETOUT RL	DEPTH	REMARKS
		WIDTH	LENGTH	DIA	INV LEV	DIA	INV LEV			
1	END PIPE	-	-	675	102.054			104.063	2.009	END PIPE TO BE CAPPED
2	SIDE ENTRY PIT	600(T) 900(B)	900(T) 900(B)	450 600	102.290 102.140	675	102.065	103.959	1.894	HAUNCHED - REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
3	JUNCTION PIT	600	900	375 300	102.745 102.820	450	102.670	104.26	1.59	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
4	SIDE ENTRY PIT	600	900	375	102.860	375	102.800	104.256	1.456	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
5	SIDE ENTRY PIT	600	900	300 300	103.120 103.120	375	103.045	104.621	1.576	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
5A	END PIPE	-	-			300	103.909	106.005	2.096	TEMP ENDWALL
8	DOUBLE SIDE ENTRY PIT	600	900	525	102.271	600	102.196	103.956	1.76	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
9	DOUBLE SIDE ENTRY PIT	600	2200	525	102.375	525	102.315	103.961	1.646	REFER TO EDCM FIGURE 602 FOR STANDARD DRAWING
10	JUNCTION PIT	600(T) 750(B)	900(T) 900(B)	450 450	102.645 102.645	525	102.570	104.156	1.586	HAUNCHED - REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
11	SIDE ENTRY PIT	600	900	375 300	102.835 102.910	450	102.760	104.41	1.65	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
12	END PIPE	-	-			375	102.907	104.511	1.603	
13	SIDE ENTRY PIT	600	900	300 225	103.016 103.031	300	102.956	104.589	1.633	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
14	SIDE ENTRY PIT	600	900	300 225	103.147 103.162	300	103.087	104.592	1.504	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
15	SIDE ENTRY PIT	600	900	300	103.270	300	103.210	104.786	1.577	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
15A	END PIPE	-	-			300	104.232	106.011	1.35	TEMP ENDWALL
18	JUNCTION PIT	600	900	300	103.500	300	103.440	104.889	1.449	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
19	JUNCTION PIT	600	900	225	104.456	300	104.381	105.942	1.561	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
21	JUNCTION PIT	600	900			225	103.546	104.673	1.127	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
22	JUNCTION PIT	600	900			225	103.581	104.708	1.126	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
23	JUNCTION PIT	600	900	375	102.943	450	102.868	104.434	1.565	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
24	SIDE ENTRY PIT	600	900	300	103.089	375	103.014	104.605	1.591	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
25	SIDE ENTRY PIT	600	900	300	103.209	300	103.149	104.602	1.453	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
26	SIDE ENTRY PIT	600	900	300 300	104.356 104.356	300	104.296	105.778	1.482	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
29	JUNCTION PIT	600	900			375	102.269	104.332	2.063	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
30	JUNCTION PIT	600	900	225	104.501	300	104.426	105.635	1.209	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
32	SIDE ENTRY PIT	600	900	450	102.779	450	102.719	104.355	1.636	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
33	SIDE ENTRY PIT	600	900	375	102.896	450	102.821	104.35	1.529	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
34	JUNCTION PIT	600	900	300 300	103.503 103.503	375	103.428	104.781	1.353	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
35	SIDE ENTRY PIT	600	900	300 300	104.333 104.333	300	104.273	105.67	1.466	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
35A	END PIPE	-	-			300	104.481	105.978	1.497	TEMP ENDWALL
38	SIDE ENTRY PIT	600	900			300	104.470	105.855	1.385	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
40	JUNCTION PIT	600	900	300 225	104.178 104.178	300	104.128	105.308	1.18	REFER TO EDCM FIGURE 605 FOR STANDARD DRAWING
41	SIDE ENTRY PIT	600	900			300	103.038	104.406	1.367	REFER TO EDCM FIGURE 601 FOR STANDARD DRAWING
RB 1	ROCK HEADWALL	100	100	600	102.355			102.955	0.6	REFER TO DWG NO. 303 FOR DETAILS
RB 2	ROCK HEADWALL	100	100			375	102.355	102.73	0.375	REFER TO DWG NO. 303 FOR DETAILS

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P4	PIT 15A AND 26 AMENDED	24.10.19	DC	JM					
P3	PIT 35 AND 38 AMENDED	02.10.19	DC	JM					
P2	ISSUED FOR INFORMATION	09.09.19	DC	JM					
P1	TENDER ISSUE	30.04.19	LS	JM					

Designed Date
J. MONGAN
08.08.2019

Drawn
D. COOPER

Approved Date
J. MONGAN
08.08.2019

PS Number
PS823200D



Project Details
BOTANIA ESTATE
STAGE 2A
MELTON CITY COUNCIL

Drawing Title
DRAINAGE PIT SCHEDULE

Sheet 24 of 26

Scale
NOT TO SCALE

Project Ref Stage No Drawing No Rev
1700987 02A 403 P4