TBM POINTS & LOCATIONS				
Name	Type	Easting	Northing	RL
C17PIPEG	SURVEY PIPE	291724.7	5809039.78	-
C374RVTKL	RIVET	291874.44	5808758.78	45.43
C428RVTCL	RIVET	291963.57	5808824.68	45.65

PSM POINTS & LOCATIONS			
Name	Easting	Northing	RL
C373PML	292048.18	5808966.57	47.64
C382PML	291859.36	5808748.89	45.37
C429PML	291961.31	5808803.38	45.47

ALAMORA

STAGE 32

WYNDHAM CITY COUNCIL

NOTES:

GENERAL:
1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS, CURRENT COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS AND VPA EDCM GUIDELINES TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT & A.S.2124-1992 GENERAL CONDITIONS OF CONTRACT.
2. PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 1985, INCLUDING ALL RELEVANT REGULATIONS, HAVE BEEN ADDRESSED IN PARTICULAR THE REQUIRED NOTIFICATIONS MUST BE CONVEYED TO THE VICTORIAN WORK COVER AUTHORITY - HEALTH AND SAFETY DIVISION WITH RESPECT TO TRENCHING OPERATIONS. DETAILS OF THE CONTRACTORS OCCUPATIONAL HEALTH AND SAFETY PROCEDURES MUST BE LODGED WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS.
3. THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCING CONSTRUCTION.
4. THE CONTRACTOR SHALL CO-OPERATE WITH OTHER CONTRACTORS AND/OR AUTHORITIES AND SHALL ENSURE THAT ALL SERVICES ARE INSTALLED PRIOR TO THE FINAL PAVEMENT COURSE. THE CONTRACTOR SHALL CHECK WITH THE ENGINEER THE EXACT LOCATION OF ALL PROPOSED SERVICES PRIOR TO THE INSTALLATION OF CONDUITS. ALL WORKS ARE TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND SERVICES PRIOR TO COMMENCING EXCAVATIONS AND THE VARIOUS AUTHORITIES ARE TO BE NOTIFIED. SHOULD ANY EXISTING SERVICES BE DAMAGED DURING CONSTRUCTION WORKS, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR REPAIRS. ALL COSTS FOR THIS SHALL BE BORNE BY THE CONTRACTOR.
6. PRIOR TO COMMENCING WORK ON TRENCHES IN EXCESS OF 1.50m DEEP, NOTICE OF SUCH PROPOSAL IS TO BE SENT TO THE SECRETARY OF MINERALS AND ENERGY IN ACCORDANCE WITH CLAUSE 202 OF THE MINES (TRENCHES) REGULATIONS 1982. A FOREMAN QUALIFIED AS A MINES MANAGER MUST BE IN ATTENDANCE AT ALL TIMES DURING SUCH EXCAVATION WORKS.
7. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL NECESSARY SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC. NECESSARY TO KEEP THE WORKS IN A SAFE AND STABLE CONDITION TO PROTECT THE PUBLIC FROM THE WORKS.
8. UPON COMPLETION OF CONSTRUCTION, THE WHOLE SITE SHALL BE CLEANED UP & GRADED OVER AND ALL RUBBISH IS TO BE REMOVED. THE SITE IS TO BE LEFT CLEAN & TIDY AND TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. UPON COMPLETION OF THE CIVIL WORKS, THE CONTRACTOR SHALL PROVIDE "AS CONSTRUCTED" PLANS IN A D-SPEC AND R-SPEC DIGITAL FORMAT TO COUNCIL'S REQUIREMENTS AND TO THE SATISFACTION OF ALL PARTIES.
10. THE INFRASTRUCTURE MANAGER OR HIS REPRESENTATIVE SHALL BE GIVE ACCESS TO THE SITE AT ALL TIMES. ALL CONSTRUCTION WORKS SHALL BE COMPLETED TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
11. BLASTING REQUIRES BLASTING PERMIT FROM COUNCIL.
12. ANY EXISTING PAVEMENT OR DRAINAGE DAMAGED DURING CONSTRUCTION OR THE MAINTENANCE PERIOD IS TO BE REINSTATED BY THE CONTRACTOR TO THE SATISFACTION OF THE SUPERINTENDENT.

SURVEY & SETOUT:
1. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
2. PERMANENT SURVEY MARK SKETCH PLANS ARE TO BE PREPARED ESTABLISHING A.H.D. LEVELS AND A.M.G. CO-ORDINATES FOR REGISTRATION WITH THE C.P.O. BY A LICENSED SURVEYOR.
3. ALL TBM'S AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CONSULTANT TO ARRANGE REINSTATEMENT AT THE CONTRACTORS EXPENSE.

EARTHWORKS:
4. EARTHWORKS ARE TO BE PERFORMED IN ACCORDANCE WITH A.S.3798-2007 (GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS). FILLING TO BE CARRIED OUT USING APPROVED CLAY FILL COMPACTED TO 95% AASHO. DAMS AND OPEN CHANNELS TO BE EXCAVATED TO A FIRM BASE TO THE SATISFACTION OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO COMMENCEMENT OF FILLING. ALL FILLING MUST COMPLY WITH A.S. 3798-2007 LEVEL 1 AND BE COMPACTED IN 150mm LAYERS. CONTRACTOR TO TAKE LEVELS IN EXISTING DAMS AND CHANNELS PRIOR TO FILLING & LEVELS RECORDED TO BE SUPPLIED TO THE ENGINEER FOR AS CONSTRUCTED PLAN.
5. FILLING TO BE CARRIED OUT USING APPROVED MATERIAL. TOPSOIL AND ALL VEGETABLE MATERIAL TO BE STRIPPED FROM FILL SITE PRIOR TO ANY PLACEMENT OF MATERIAL. ALL FILLING TO BE CARRIED OUT IN 150mm LAYERS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
6. FILL AREAS TO BE STRIPPED OF TOPSOIL, THEN REPLACED TO OBTAIN FINAL LEVELS AS SHOWN ON THE DRAWINGS. ALL FILLING TO BE COMPACTED AS SPECIFIED.
7. NO TOP SOIL TO BE REMOVED FROM THE SITE WITHOUT THE APPROVAL OF COUNCIL.
8. THE NATURE STRIPS IN CUT OR FILLED AREAS ARE TO BE TOPSOILED WITH 100mm OF APPROVED TOPSOIL MATERIAL. IF THE SOIL ON THE SITE, IS NOT SUITABLE, IT SHALL BE IMPORTED AT THE CONTRACTORS EXPENSE. THE APPROVED TOPSOIL MATERIAL IS TO BE TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. ALL ALLOTMENTS TO BE GRADED AT A MINIMUM OF 1 IN 150 TO THE LOW CORNER.
10. UNLESS OTHERWISE SHOWN BATTERS INTO ALLOTMENTS SHALL NOT BE STEEPER THAN 1 in 6. ALL BATTERS ARE TO BE GRASSED AND MULCHED WITH A MIXTURE OF CHOPPED GRASS, HAY, STRAW AND BITUMINOUS EMULSION, ALL TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
11. FOR THE TERM OF THE CONTRACT PERIOD THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTION TO PREVENT THE EMISSION OF DUST, WHETHER FROM THE OPERATION OF CONSTRUCTION EQUIPMENT OR EXPOSURE OF SOIL TO WINDS.
12. APPROPRIATE SILTATION CONTROL IS TO BE CARRIED OUT DURING CONSTRUCTION AND MAINTENANCE PERIOD.
13. ON COMMENCEMENT OF CONSTRUCTION WORKS THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE EPA PUBLICATION "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL" (PUBLICATION NO. 275).
14. COMPACTION RESULTS OF EASEMENTS TO BE PROVIDED TO COUNCILS CONSTRUCTION ENGINEER.

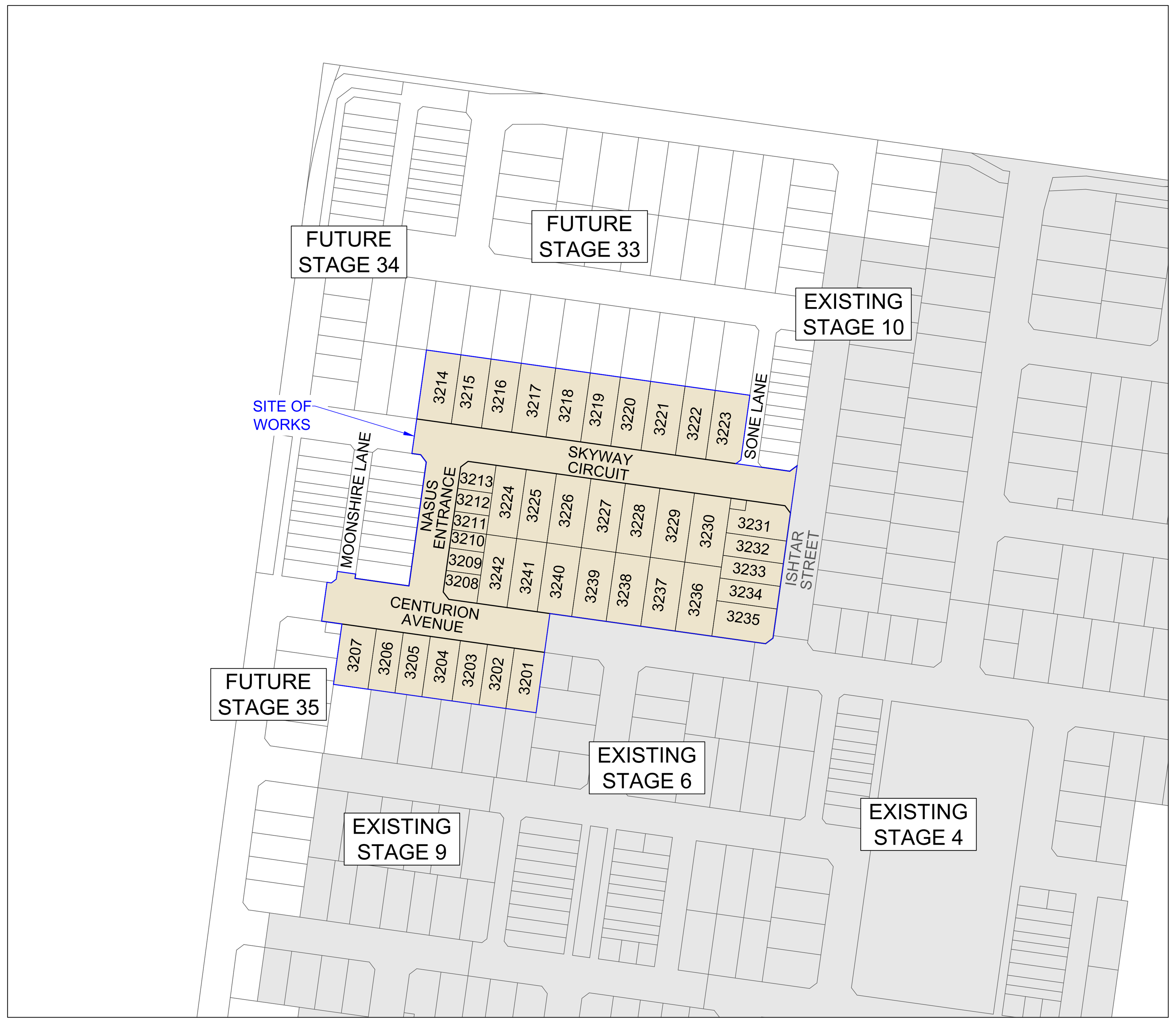
ROADS:
1. ALL DIMENSIONS AND RADII ARE GIVEN TO LIP OF KERBS, CHAINAGES ARE WITH RESPECT TO CENTRE LINE OF ROAD RESERVE, UNLESS OTHERWISE SHOWN.
2. ALL PAVEMENT MATERIALS ARE TO BE VICROADS APPROVED MATERIALS.
3. PAVEMENT SUB-BASE AND BEDDING TO KERB & CHANNEL IS TO EXTEND 600mm BEHIND BACK OF KERB.
4. ALL SERVICES ARE TO BE CONSTRUCTED PRIOR TO PLACEMENT OF CAPPING LAYER UNDER ROADS.
5. ALL DRIVEWAYS ARE TO BE 3.5m WIDE AND OFFSET 0.75m FROM THE SIDE BOUNDARY OR EASEMENT, UNLESS OTHERWISE SHOWN - REFER EDCM 501 & 502. DRIVEWAY LAYBACK AND WINGS TO BE CONSTRUCTED AS A SINGLE SEGMENT OF CONCRETE.
6. ACCESS RAMPS (DRIVEWAYS INTO LOTS) SHOULD HAVE A MAXIMUM GRADE OF 1 IN 10.
7. CONCRETE SHALL BE 25 MPa FOR BOTH KERB AND CHANNEL AND FOOTPATH, HAVING A MINIMUM CEMENT CONTENT OF 280Kg PER CUBIC METRE.
8. FOOTPATHS AND VEHICLE CROSSINGS TO BE DOWELLED AT THE END OF EACH DAY'S POUR OF CONCRETE.
9. SIGNS, LINEMARKING AND DELINEATORS ARE TO BE INSTALLED AS APPLICABLE ON ROADS IN ACCORDANCE WITH A.S.1742.2.
10. STREET SIGNS ARE TO BE PROVIDED TO THE WYNDHAM CITY COUNCIL STANDARD, INCLUDING THE PROVISION OF LOGOS.
11. INSTALL BLUE RAISED REFLECTIVE PAVEMENT MARKER ON ALL ROAD CENTRELINE AND "GROUND BALL" MARKER POST TO INDICATE THE LOCATION OF ALL FIREPLUGS.

DRAINAGE:
1. DRAINAGE PIPES SHALL BE RUBBER RING JOINTS REINFORCED CONCRETE CLASS 2, UNLESS OTHERWISE SHOWN.
2. ALL PVC STORM WATER DRAINAGE PIPES TO BE SEWER QUALITY PVC.
3. NO PVC STORM WATER DRAINAGE PIPES TO BE LAID UNDER ROADS.
4. DRAINAGE PIPES AND PITS ARE SETOUT FROM OFFSETS, RATHER THAN FROM CENTRELINE PIPE CHAINAGES. CURVILINEAR DRAINAGE PIPES MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURES GUIDELINES.
5. DRAINAGE PIPES SHALL NOT BE SUBJECTED TO CONSTRUCTION TRAFFIC LOADING DURING CONSTRUCTION UNLESS THE PIPE STRENGTH CHARACTERISTICS HAVE BEEN APPROVED BY THE CONTRACTORS ENGINEER. COMPUTATIONS ARE TO ACCORD WITH AS.3725-2007, LOADS ON BURIED PIPES.
6. PROPERTY INLET PITS ARE TO BE LOCATED 1.00m FROM LOW SIDE BOUNDARY, UNLESS OTHERWISE SHOWN. INVERTS OF PROPERTY INLETS ARE TO BE A MINIMUM OF 400mm BELOW FINISHED SURFACE.
7. HOUSE DRAINS ARE TO BE CONNECTED DIRECTLY INTO UNDERGROUND DRAINAGE PIPES OR PITS AND OFFSET FROM SIDE BOUNDARY 5.50m WHERE POSSIBLE AS PER EDCM 701. THE LOCATION OF THE HOUSE DRAIN TO BE MARKED AS PER EDCM 303. HOUSE DRAIN LEVEL TO BE A MINIMUM 0.4m BELOW THE LOWEST CORNER OF THE LOT.
8. ALL DRAINAGE PIPES UNDER ROAD PAVEMENT, DRIVEWAY, FOOTPATH & KERB AND CHANNEL SHALL BE BACKFILLED WITH CLASS 3 F.C.R.
9. PRIOR TO THE ISSUE OF STATEMENT OF COMPLIANCE, ALL DRAINS ARE TO BE CCTV TESTED AND THE RESULTS PROVIDED TO COUNCIL.
10. SUBSURFACE DRAINS ARE TO BE LAID BEHIND ALL KERB AND CHANNEL AS PER EDCM 202.
11. WHEN ROADS ARE TRUNCATED AGAINST RISING LAND PENDING DEVELOPMENT OF FUTURE STAGES, TEMPORARY A.G. DRAINS SHALL BE INSTALLED ACROSS THE END OF THE ROAD TO PREVENT SEEPAGE INTO PAVEMENT.
12. WHERE DRAINAGE AND SEWER PIPE ARE IN CLOSE PROXIMITY, COMPACTION TO BE ACCORDANCE WITH SD6-10.

UTILITIES:
13. SERVICE CONDUITS ARE TO BE INSTALLED AT THE LOCATIONS SHOWN ON THIS DRAWING. LOCATION OF ALL UNDERGROUND SERVICE CONDUITS TO BE MARKED ON KERB & CHANNEL AS PER EDCM 303. SERVICE CONDUITS THAT ARE SUBJECT TO AMENDMENT SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT.
14. ALL CONDUIT TRENCHES UNDER ROAD PAVEMENT, DRIVEWAY, FOOTPATH & KERB AND CHANNEL SHALL BE BACKFILLED WITH CLASS 2 F.C.R.
15. NBN TO BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO CONCRETE WORKS BEING PLACED.
16. NBN PITS ARE TO BE CLEAR OF PATHS - WITH THE EXCEPTION OF NEMI PARADE (WEST SIDE).
17. LOCATION OF ELECTRICITY AND VUF CONDUITS WILL BE PROVIDED ON SEPARATE DRAWINGS.
18. CONCRETE IS TO BE PLACED AROUND ELECTRICAL DISTRIBUTION PITS TO A MINIMUM DEPTH OF 125mm. DISTRIBUTION PITS WITHIN FOOTPATHS ARE TO A MINIMUM OF 300mm WITHIN THE EDGE OF PATH.

VEGETATION:
1. ALL EXISTING TREES ARE TO BE PROTECTED DURING CONSTRUCTION.
2. ANY TREE REMOVAL MUST BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN OR AS DIRECTED ONSITE BY THE LANDSCAPE APPROVALS OFFICER.TREES SHOWN ON THE PLANS ARE TO BE RETAINED AND PROTECTED FROM DAMAGE DURING CONSTRUCTION.
3. ALL ROOTS AND DECOMPOSABLE MATERIAL UNDER ROAD PAVEMENTS SHALL BE REMOVED TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
4. NO SURPLUS TREES OR VEGETATION ARE TO BE BURNT ON SITE.

STRUCTURAL:
1. A BUILDING PERMIT MUST BE OBTAINED FOR ANY STRUCTURE/RETAINING WALL EXCEEDING 1.0m IN HEIGHT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA. COPY OF BUILDING PERMITS AND 'CERTIFICATE F COMPLIANCE-CONSTRUCTION' TO BE SUBMITTED TO COUNCIL PRIOR TO 'STATEMENT OF COMPLIANCE'.
2. ALL STRUCTURAL WORK MUST BE SUPERVISED BY A QUALIFIED STRUCTURAL ENGINEER.



LOCALITY PLAN

MELWAYS REF: 234 D4

Drawing Index

Drawing No.	Drawing Title	Revision
R100	COVER SHEET	C
R200	EXISTING CONDITIONS & DEMOLITION	B
R201	LAYOUT PLAN	B
R202	SERVICES PLAN	C
R203	EARTHWORKS PLAN	A
R204	TYPICAL CROSS SECTIONS	B
R300	INTERSECTION DETAILS - 1	A
R301	INTERSECTION DETAILS - 2	B
R400	ROAD LONGITUDINAL SECTIONS - 1	A
R401	ROAD LONGITUDINAL SECTIONS - 2	A
R500	ROAD CROSS SECTIONS - 1	B
R501	ROAD CROSS SECTIONS - 2	A
R502	ROAD CROSS SECTIONS - 3	A
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R600	DRAINAGE LONG SECTIONS - 1	B
R601	DRAINAGE LONG SECTIONS - 2	B
R602	DRAINAGE LONG SECTIONS - 3	A
R603	DRAINAGE LONG SECTIONS & PIT SCHEDULE	B
R700	PAVEMENT PLAN	B
R701	TYPICAL DETAILS	B
R800	SIGNAGE & LINEMARKING PLAN	A
R900	CONCRETE JOINTING PLAN	B

C

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required
under Condition 41
Permit No WYP10107/17
Date 20/11/2025

NOTE:
THE SITE OF WORKS IS SUBJECT TO THE PROVISIONS OF CULTURAL HERITAGE MANAGEMENT PLAN No.15676.
ALL WORKS AND PERSONNEL MUST OBSERVE THE REQUIREMENTS OF THE MANAGEMENT PLAN AT ALL TIMES.

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
THE LOCATIONS OF UNDERGROUND & OVERHEAD SERVICES ARE APPROXIMATE ONLY & 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
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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
C	27/08/25	DRAWING INDEX UPDATED - COUNCIL COMMENTS	A.W	A.W	M.T
B	14/08/25	DRAWING INDEX UPDATED - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT
villawood properties
Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT
ALAMORA Tarneit

DRAWING TITLE
ALAMORA - STAGE 32
COVER SHEET

STATUS
ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:2000
20 0 20 40 60 80 100

N

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R100	C

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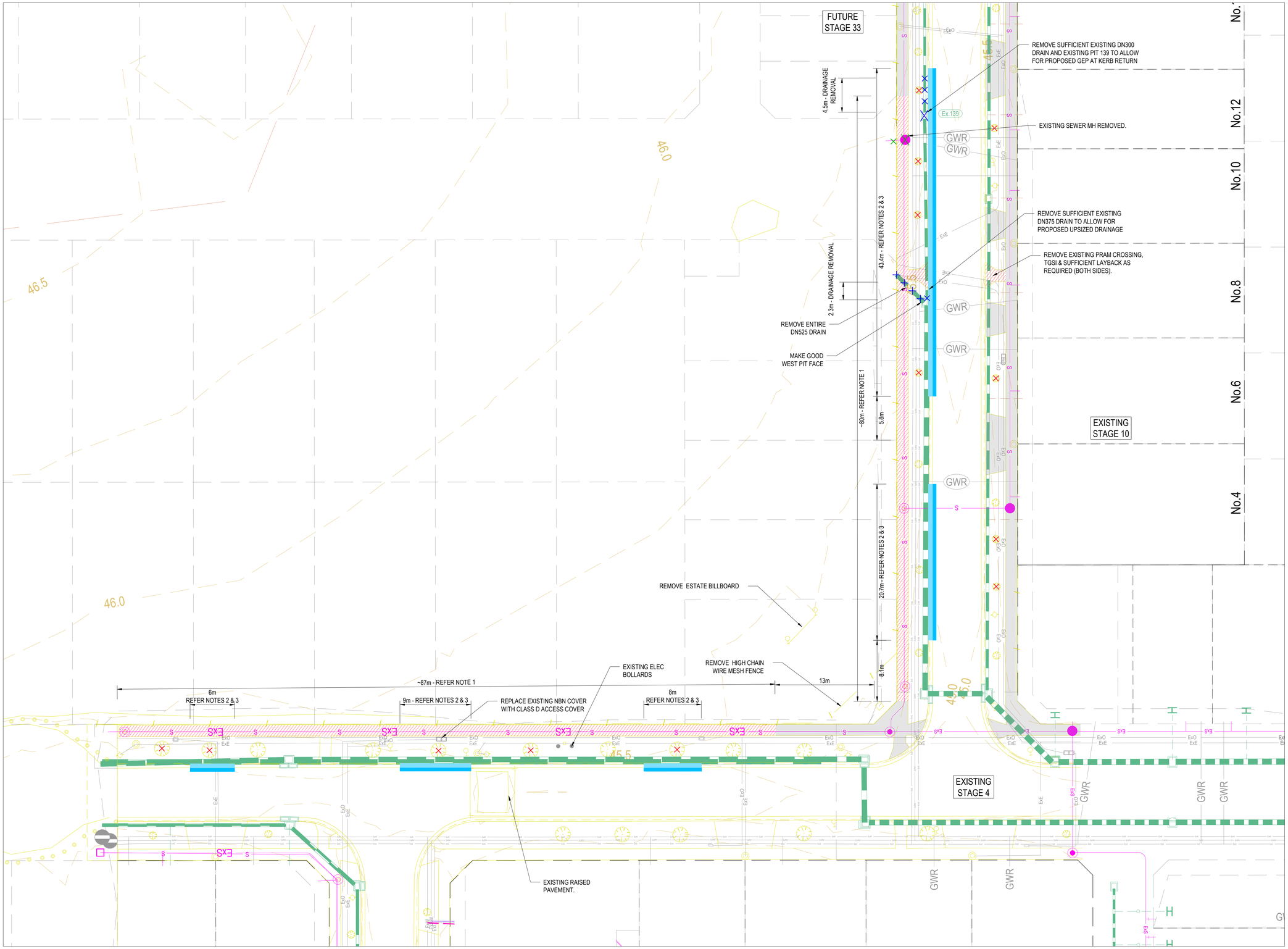

LEGEND - EXISTING CONDITIONS PLAN

- EXISTING STORMWATER DRAIN
- EXISTING HOUSE DRAIN
- EXISTING SEWER
- EXISTING SERVICE CONDUITS
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN
- EXISTING PAVEMENT, KERB & CHANNEL, FOOTPATH & CROSS OVER
- RIDGE LINE
- EXISTING CONTOURS (200mm INCREMENT)

NOTE 1:
SAWCUT EXISTING FOOTPATH & REMOVE AND DISPOSE OFF SITE.

NOTE 2:
SAWCUT EXISTING K&C & REMOVE AND DISPOSE OFF SITE.

NOTE 3:
SAWCUT EXISTING ASPHALT WEARING COARSE & REMOVE 300mm WIDE AND DISPOSE OFF SITE.

REMOVE & DISPOSE EXISTING TREE

REMOVE & DISPOSE EXISTING DRAINAGE PIPE / PIT

REMOVE & DISPOSE EXISTING SEWER PIPE / STRUCTURE

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 18/12/2025

NOTE:
CONTRACTOR IS TO VERIFY ALL CONNECTION LEVELS PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY CREO CIVIL IF THERE ARE DIFFERENCES

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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
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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	27/11/25	ISSUED FOR CONSTRUCTION	M.P	A.W	E.S
D	30/09/25	UPDATED TENDER INFORMATION	M.P	A.W	E.S
C	12/09/25	ISSUED FOR TENDER	A.W	A.W	M.T
B	14/08/25	TGSI REMOVAL NOTE ADDED ON ISHTAR STREET - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

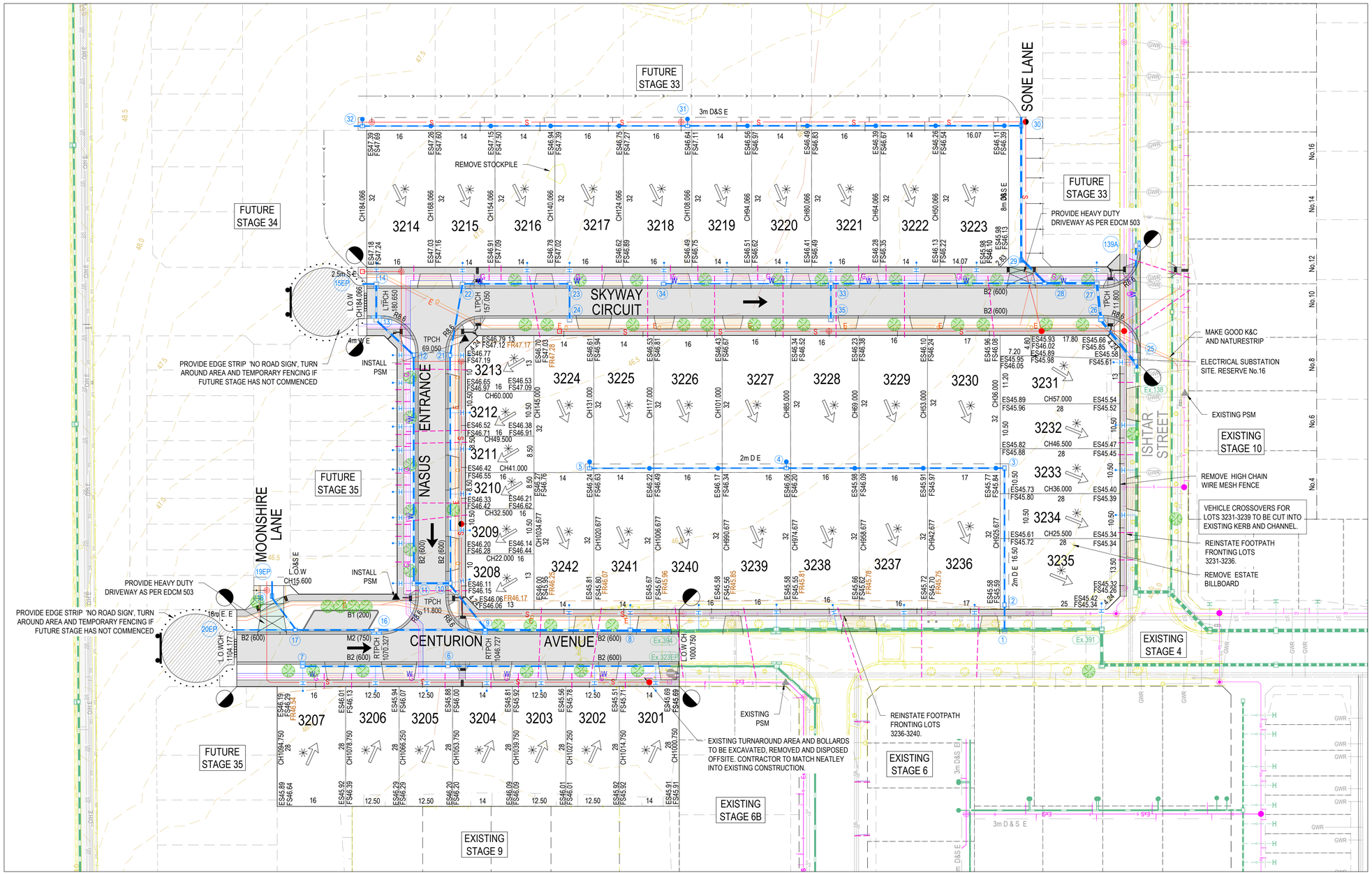
DRAWING TITLE: **ALAMORA - STAGE 32 EXISTING CONDITIONS & DEMOLITION**

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE @ A1 : 1:250 (5 0 5 10)

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R200	0



LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET PIT
- EXISTING STORMWATER DRAIN
- EXISTING HOUSE DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- EXISTING SEWER
- HOUSE DRAIN
- SERVICE CONDUITS
- PROPOSED ELECTRICITY (UNDERGROUND)
- PROPOSED GAS
- PROPOSED OPTIC FIBRE
- PROPOSED TELSTRA
- PROPOSED WATER
- PROPOSED RECYCLED WATER
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- ES141.34 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- 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
- EXISTING TREE TO REMAIN
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & CROSS OVER
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & HEAVY DUTY CROSS OVER
- RIDGE LINE
- EXISTING CONTOURS (200mm INCREMENT)
- TACTILE PAVERS

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 18/12/2025

NOTE:
CONTRACTOR IS TO VERIFY ALL CONNECTION LEVELS PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY CREO CIVIL IF THERE ARE DIFFERENCES

NOTE: STREET TREE LOCATIONS SHOWN ARE INDICATIVE ONLY. ULTIMATE LOCATION IS TO BE PROVIDED/CONFIRMED BY LANDSCAPE ARCHITECTS

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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
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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	27/11/25	ISSUED FOR CONSTRUCTION	M.P	A.W	E.S
D	30/09/25	UPDATED TENDER INFORMATION	M.P	A.W	E.S
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B	14/08/25	TGSI ADDED ON ISHTAR STREET - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

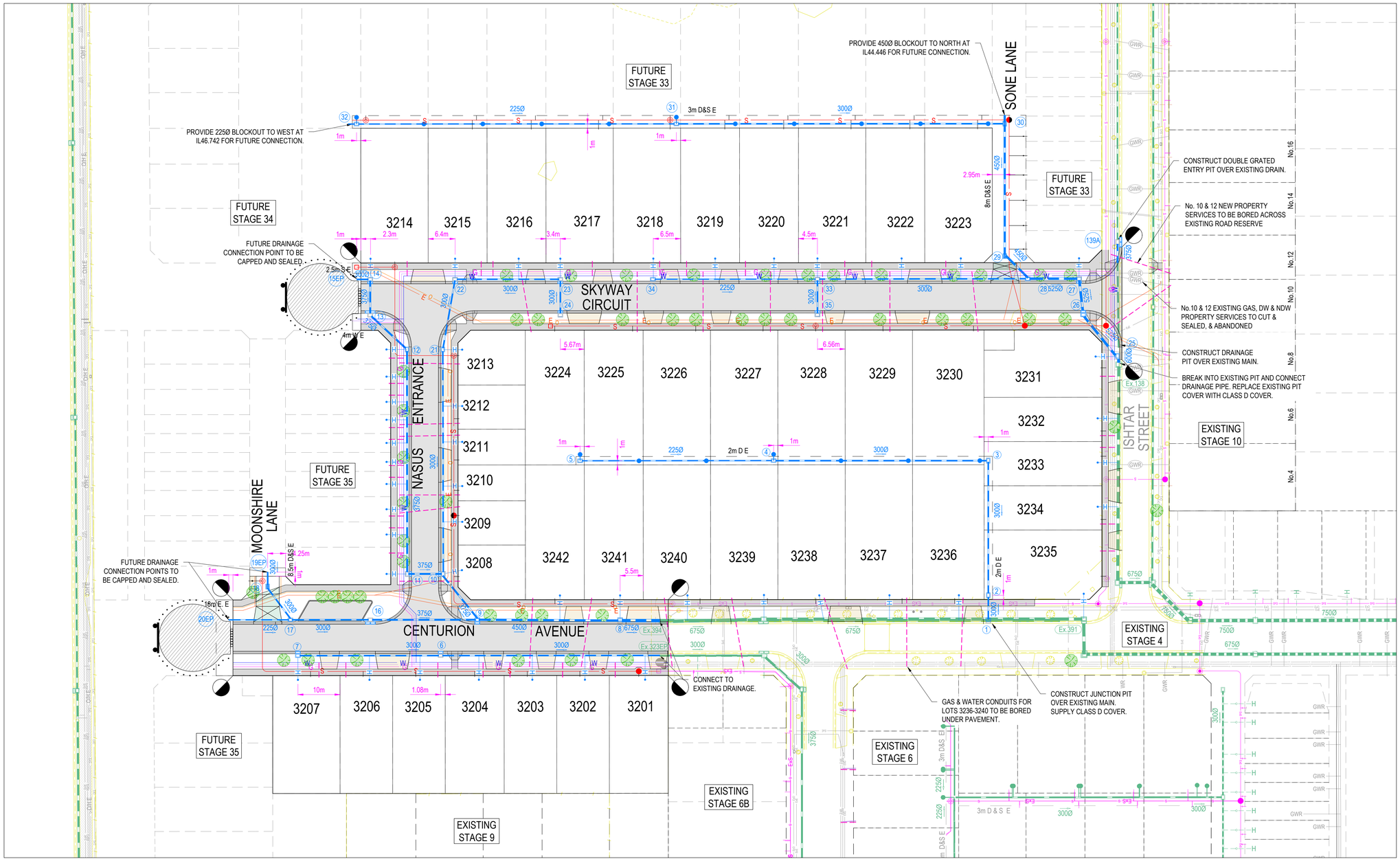
PROJECT: ALAMORA Tarneit

DRAWING TITLE: **ALAMORA - STAGE 32 LAYOUT PLAN**

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE @ A1 : 1:500 (0 5 10 20 30)

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE
PROJECT No. 200282.32	DRAWING No. R201 / REVISION 0



LEGEND - SERVICES PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- EXISTING STORMWATER DRAIN
- SEWER & MAINTENANCE STRUCTURES
- EXISTING SEWER
- HOUSE DRAIN
- SERVICE CONDUITS
- PROPOSED ELECTRICITY (UNDERGROUND)
- PROPOSED GAS
- PROPOSED OPTIC FIBRE
- PROPOSED TELSTRA
- PROPOSED WATER
- PROPOSED RECYCLED WATER
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & DRIVEWAY
- STORMWATER PIT SETOUT POINT

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 18/12/2025

SUPPLEMENTARY NOTES:
1. ENSURE PROPERTY CONNECTIONS HAVE MINIMUM 1m OFFSET FROM VEHICLE CROSSINGS.
2. LOTS 3231-3240 TO BE SUPPLIED FROM CONNECTIONS TO EXISTING SERVICES.
3. LOT 3235 PROPERTY CONNECTION TO BE CONSTRUCTED TO EX. PIT 391 IN ACCORDANCE WITH EDCM703.
4. WHERE DRAINAGE & SEWER PIPE ARE IN CLOSE PROXIMITY, COMPACTION TO BE IN ACCORDANCE WITH SD6-10. DRAIN LINE 30-31-32.

NOTE:
STREET TREE LOCATIONS SHOWN ARE INDICATIVE ONLY. ULTIMATE LOCATION IS TO BE PROVIDED & CONFIRMED BY LANDSCAPE ARCHITECTS

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
THE LOCATIONS OF UNDERGROUND & OVERHEAD SERVICES ARE APPROXIMATE ONLY & 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
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SERVICES OFFSET SCHEDULE

ROAD NAME	GAS		RECYCLED WATER		POTABLE WATER		OPTIC FIBRE		ELECTRICITY		PUBLIC LIGHTING	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
CENTURION AVENUE	S	2.10	S	2.60	S	3.10	N	1.80	N	2.50	N	1.00*
NASUS ENTRANCE	W	2.10	W	2.60	W	3.10	E	1.80	E	2.40	E	1.00*
SKYWAY CIRCUIT (LOT 3215-3223)	N	2.10	N	2.60	N	3.10	S	1.80	S	2.40	S	1.00*
SKYWAY CIRCUIT (LOT 3214)	S	1.85	S	2.25	S	2.70	N	1.80	N	2.40	N	1.00*
ISHTAR STREET	W	2.10	W	2.60	W	3.10	E	1.80	E	2.50	E	1.00*
MOONSHIRE LANE	-	-	-	-	-	-	E	1.10	W	1.20	-	-
SONE LANE	-	-	-	-	-	-	E	1.35	E	2.00	-	-

1. * DENOTES OFFSET FROM BACK OF KERB.

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	27/11/25	ISSUED FOR CONSTRUCTION	M.P	A.W	E.S
E	30/09/25	UPDATED TENDER INFORMATION	M.P	A.W	E.S
D	12/09/25	ISSUED FOR TENDER	A.W	A.W	M.T
C	27/08/25	SD6-10 NOTE ADDED - COUNCIL COMMENTS	A.W	A.W	M.T
B	14/08/25	WATER & GAS MOVED CLEAR OF VEHICLE CROSSOVER - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

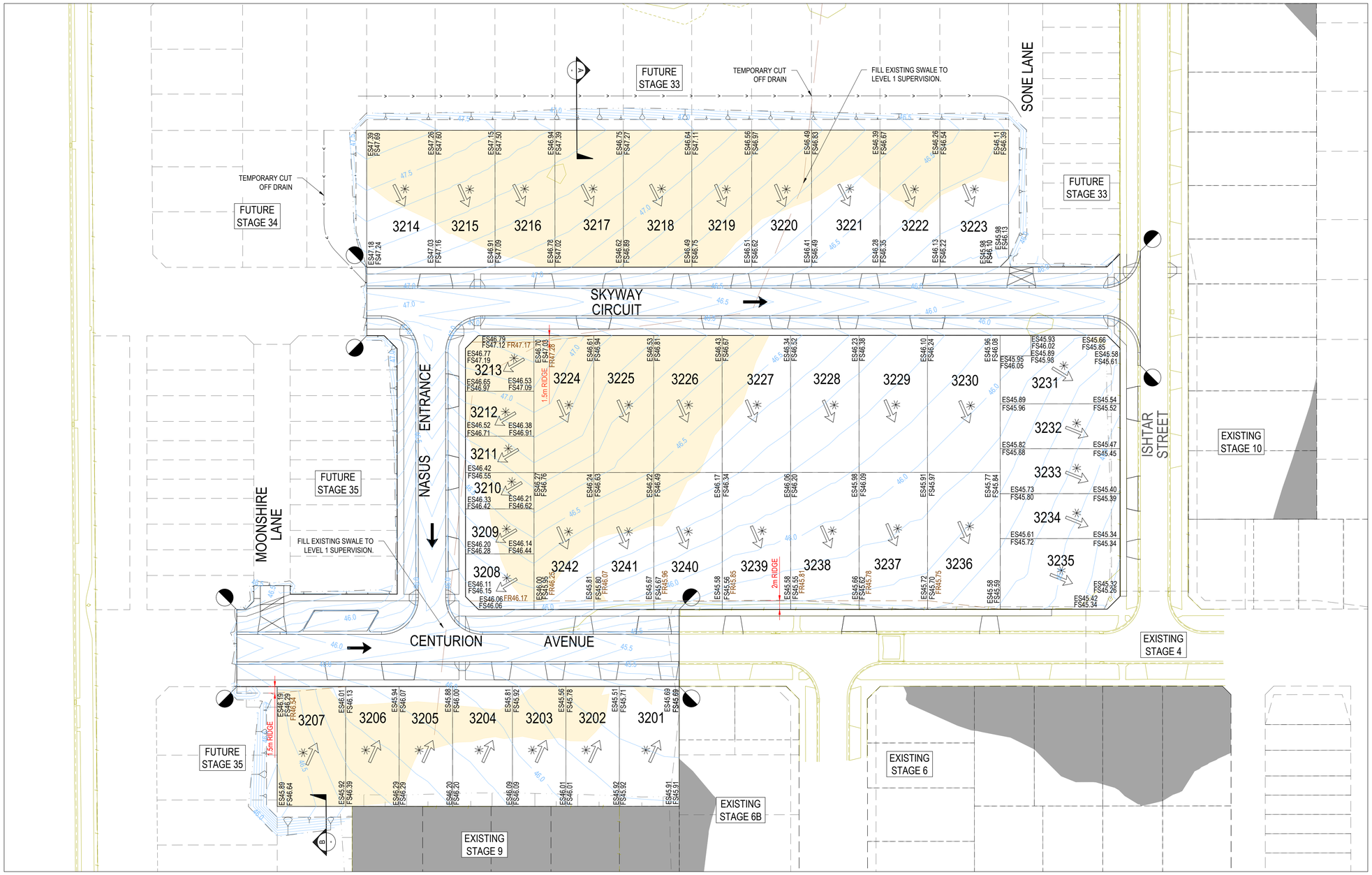
DRAWING TITLE: ALAMORA - STAGE 32 SERVICES PLAN

STATUS: ISSUED FOR CONSTRUCTION

SCALE @ A1 : 1:500 (0 5 10 20 30)

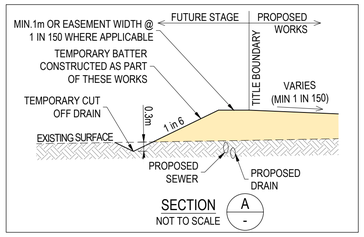
DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

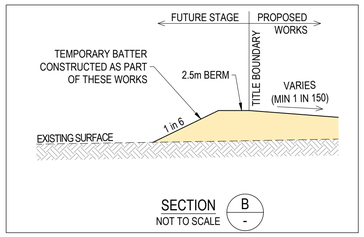
PROJECT No.	DRAWING No.	REVISION
200282.32	R202	0



LEGEND - EARTHWORKS PLAN

- RIDGE LINE
- TOE OF BATTER
- SWALE DRAIN
- ES141.34 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- TW159.30 TOP OF RETAINING WALL
- BW159.30 BOTTOM OF RETAINING WALL
- RETAINING WALL
- 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
- 0.10m CONTOUR





Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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
BEFORE YOU DIG
www.byda.com.au

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

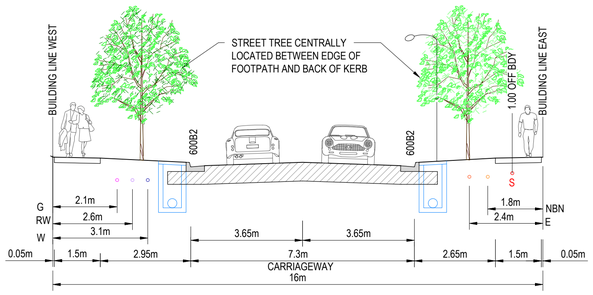
DRAWING TITLE: ALAMORA - STAGE 32 EARTHWORKS PLAN

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:500
0 5 10 20 30

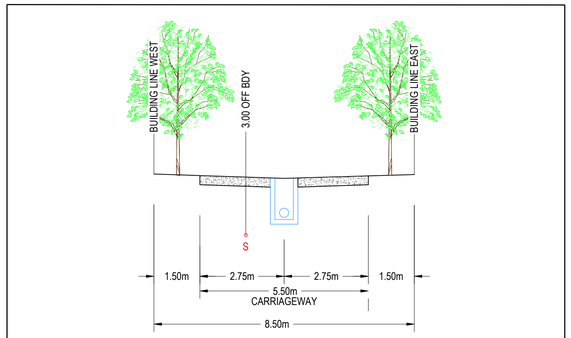
DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R203	A



16.0m ROAD RESERVE
TWO WAY CROSSFALL
NASUS ENTRANCE

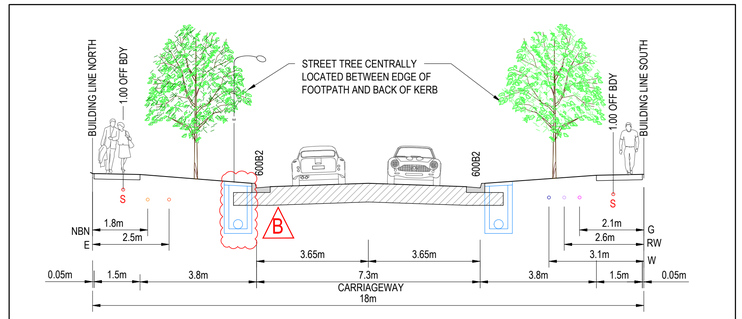
CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



8.5m ROAD RESERVE
CENTRAL INVERT LANEWAY
FUTURE MOONSHIRE LANE

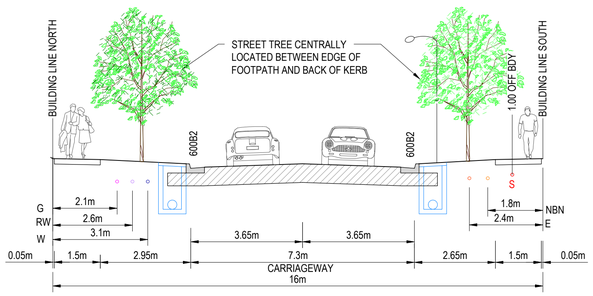
CROSS FALLS
PAVEMENT: 3.33%

NATURE STRIP: 2% -5%



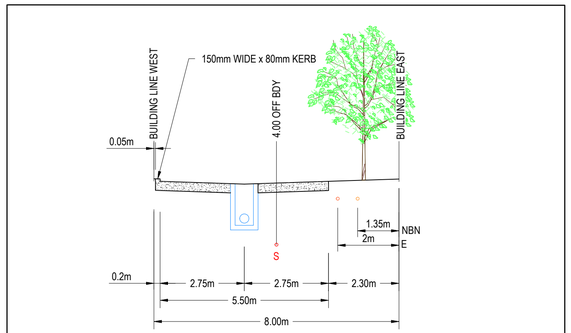
18.0m ROAD RESERVE
TWO WAY CROSSFALL
CENTURION AVENUE

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



16.0m ROAD RESERVE
TWO WAY CROSSFALL
SKYWAY CIRCUIT LOT 3215-3223

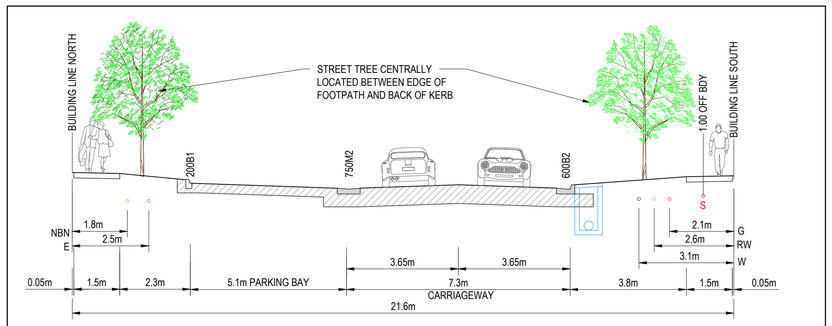
CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



8m ROAD RESERVE
CENTRAL INVERT LANEWAY
FUTURE SONE LANE

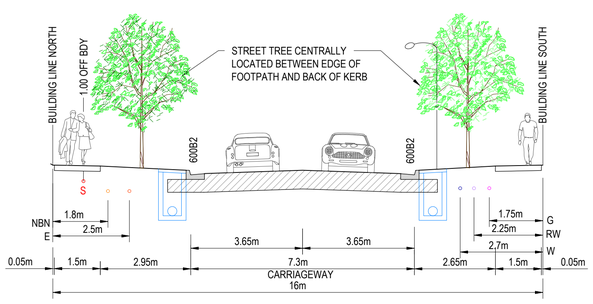
CROSS FALLS
PAVEMENT: 3.33%

NATURE STRIP: 2% -5%



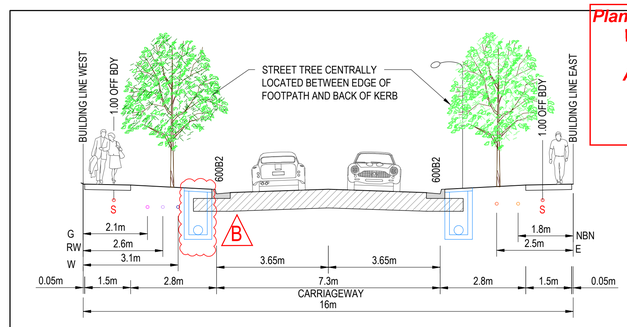
21.6m ROAD RESERVE
TWO WAY CROSSFALL (PARKING BAY)
CENTURION AVENUE

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



16.0m ROAD RESERVE
TWO WAY CROSSFALL
SKYWAY CIRCUIT LOT 3214

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%

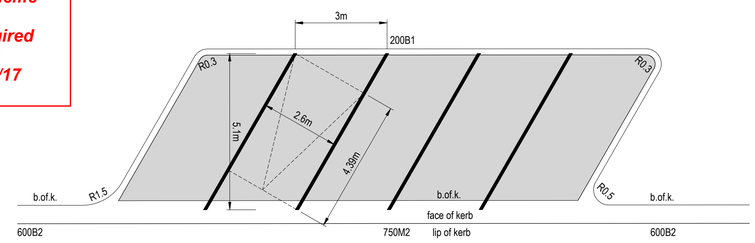


16.0m ROAD RESERVE
TWO WAY CROSSFALL
EXISTING ISHTAR STREET

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025



PARKING BAY SETOUT

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	HAUNCH REMOVED - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

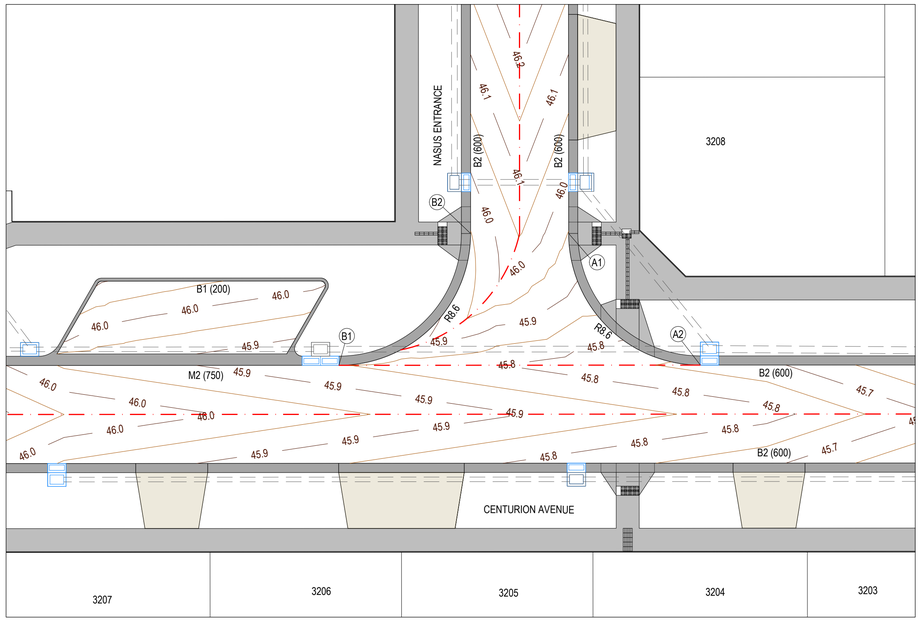
PROJECT: ALAMORA Tarneit

DRAWING TITLE: **ALAMORA - STAGE 32 TYPICAL CROSS SECTIONS**

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : AS SHOWN

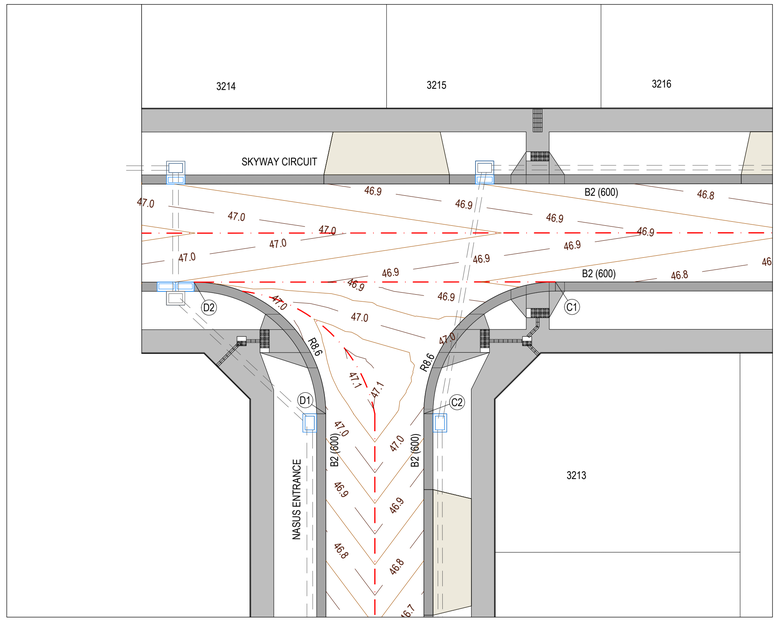
DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	R204	B



CENTURION AVEUNE NASUS ENTRANCE INTERSECTION

1:200

2 0 2 4 6 8 10



NASUS ENTRANCE & SKYWAY CIRCUIT INTERSECTION

1:200

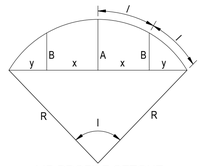
2 0 2 4 6 8 10

LEGEND - INTERSECTION PLAN

- STORMWATER DRAIN & PIT
- TACTILE PAVERS
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & DRIVEWAY
- CROWN/GRADELINE
- MINOR CONTOUR 0.05m INTERVAL
- 188.0 MAJOR CONTOUR 0.1m INTERVAL

LEGEND - SECTION

- EXISTING SURFACE
- DESIGN LINE



LIP PROFILE SETOUT

1:200 (H) 1:20 (V)

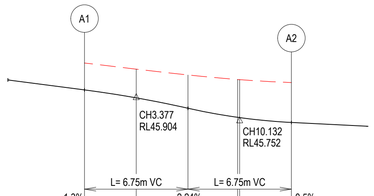
H 2 0 2 4 6 8 10

V 0.2 0 0.2 0.4 0.6 0.8 1

NOTE
FOR SIGNS & LINEMARKING PLAN REFER SHEETS R800.

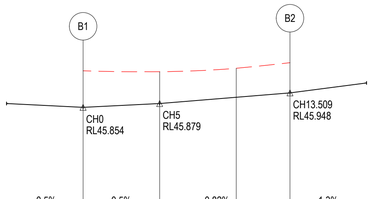
Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025



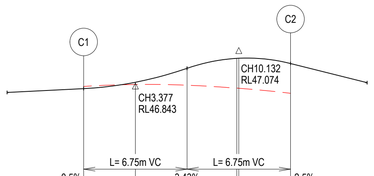
VERTICAL GEOMETRY						
DATUM RL45						
DESIGN LEVEL	45.948	45.896	45.828	45.769	45.767	45.736
EXISTING SURFACE	46.123	46.084	46.046	46.016	46.015	45.996
CHAINAGE	0.000	3.377	6.754	10.000	10.132	13.509

LIP LINE A



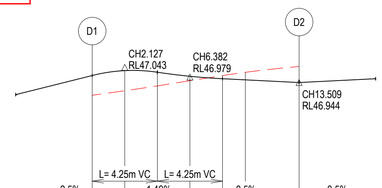
VERTICAL GEOMETRY				
DATUM RL45				
DESIGN LEVEL	45.854	45.879	45.919	45.948
EXISTING SURFACE	46.093	46.086	46.109	46.145
CHAINAGE	0.000	5.000	10.000	13.509

LIP LINE B



VERTICAL GEOMETRY						
DATUM RL46						
DESIGN LEVEL	46.826	46.867	46.958	47.023	47.024	46.990
EXISTING SURFACE	46.840	46.853	46.848	46.829	46.828	46.795
CHAINAGE	0.000	3.377	6.754	10.000	10.132	13.509

LIP LINE C



VERTICAL GEOMETRY							
DATUM RL46							
DESIGN LEVEL	46.990	47.022	47.011	46.985	46.969	46.961	46.944
EXISTING SURFACE	46.851	46.890	46.922	46.956	46.989	47.011	47.049
CHAINAGE	0.000	2.127	4.254	6.382	8.509	10.000	13.509

LIP LINE D

Alignment A

Point no	Easting	Northing	RL
A1	291783.318	5808779.620	45.948
A2	291790.643	5808769.911	45.736

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
A1 - A2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	45.828

Alignment B

Point no	Easting	Northing	RL
B1	291767.271	5808773.182	45.854
B2	291776.980	5808780.507	45.948

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
B1 - B2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	45.893

Alignment C

Point no	Easting	Northing	RL
C1	291800.963	5808843.642	46.826
C2	291791.254	5808836.318	46.990

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
C1 - C2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	46.958

Alignment D

Point no	Easting	Northing	RL
D1	291784.916	5808837.205	46.990
D2	291777.591	5808846.914	46.944

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
D1 - D2	89.999	8.600	13.509	2.519	1.864	3.291	2.790	3.377	46.981

WARNING
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BEFORE YOU DIG
www.byda.com.au

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

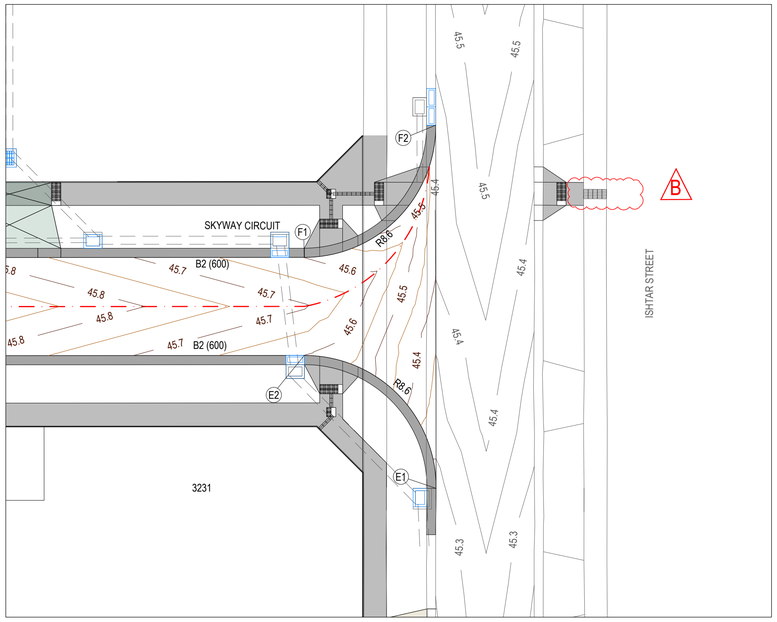
DRAWING TITLE: **ALAMORA - STAGE 32 INTERSECTION DETAILS - 1**

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : AS SHOWN

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R300	A



SKYWAY CIRCUIT & ISHTAR STREET INTERSECTION

1:200

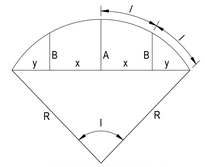
2 0 2 4 6 8 10

LEGEND - INTERSECTION PLAN

- STORMWATER DRAIN & PIT
- TACTILE PAVERS
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & DRIVEWAY
- CROWN/GRADELINE
- MINOR CONTOUR 0.05m INTERVAL
- 188.0 MAJOR CONTOUR 0.1m INTERVAL

LEGEND - SECTION

- EXISTING SURFACE
- DESIGN LINE



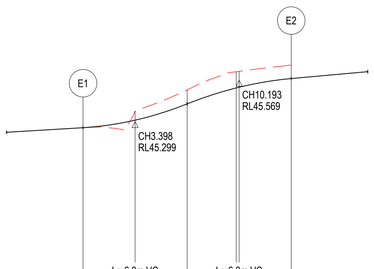
LIP PROFILE SETOUT

1:200 (H) 1:20 (V)

H 2 0 2 4 6 8 10

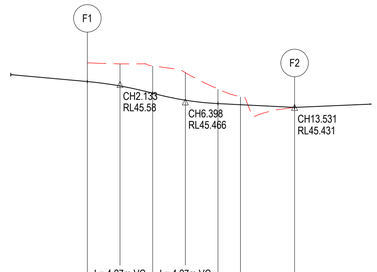
V 0.2 0 0.2 0.4 0.6 0.8 1

NOTE
FOR SIGNS & LINEMARKING PLAN
REFER SHEETS R800.



VERTICAL GEOMETRY						
DATUM RL44						
DESIGN LEVEL	45.279	45.328	45.434	45.538	45.543	45.600
EXISTING SURFACE	45.279	45.386	45.525	45.644	45.647	45.688
CHAINAGE	0.000	3.398	6.796	10.000	10.193	13.591

LIP LINE E



VERTICAL GEOMETRY							
DATUM RL44							
DESIGN LEVEL	45.600	45.571	45.523	45.478	45.456	45.448	45.431
EXISTING SURFACE	45.722	45.715	45.701	45.657	45.550	45.489	45.431
CHAINAGE	0.000	2.133	4.266	6.398	8.531	10.000	13.531

LIP LINE F

Alignment E

Point no	Easting	Northing	RL
E1	291952.118	5808813.719	45.279
E2	291944.805	5808823.509	45.600

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
E1 - E2	90.547	8.600	13.591	2.548	1.885	3.310	2.800	3.398	45.434

Alignment F

Point no	Easting	Northing	RL
F1	291945.685	5808829.848	45.600
F2	291955.398	5808837.195	45.431

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
F1 - F2	90.149	8.600	13.531	2.527	1.870	3.296	2.793	3.383	45.472

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required
under Condition 41
Permit No WYP10107/17
Date 20/11/2025

WARNING
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BEFORE YOU DIG
www.byda.com.au

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	TGSI ADDED ON ISHTAR STREET - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 INTERSECTION DETAILS - 2

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : AS SHOWN

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

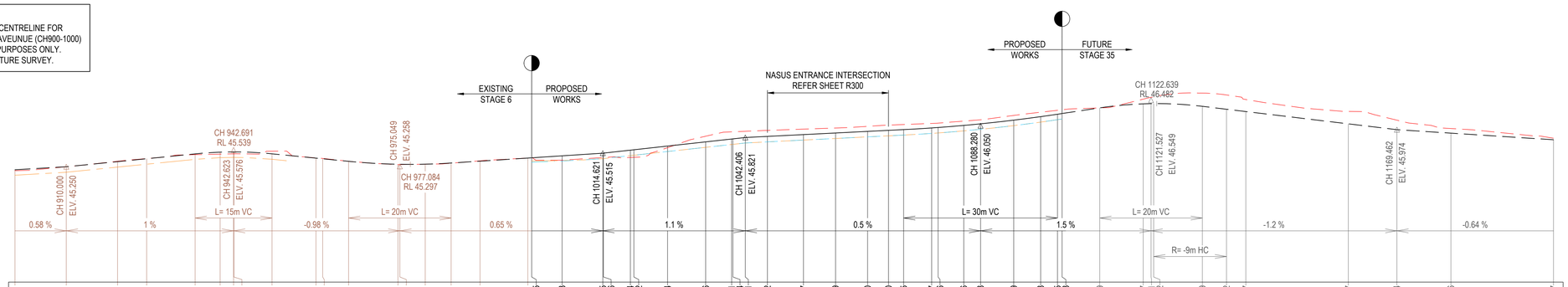
PROJECT No.	DRAWING No.	REVISION
200282.32	R301	B

LEGEND

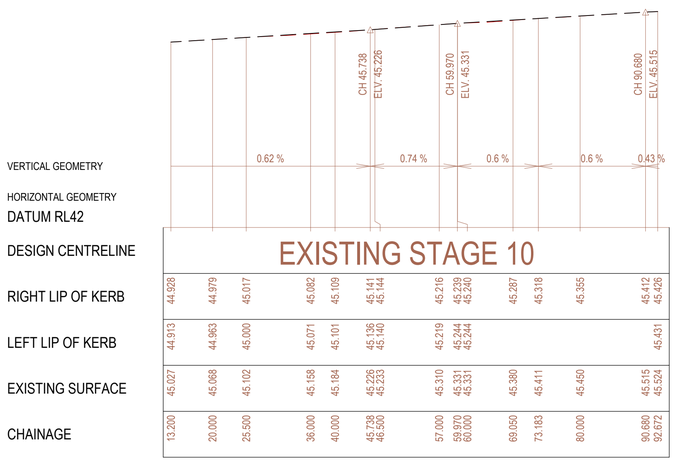
- EXISTING SURFACE
- DESIGN LINE
- FUTURE DESIGN LINE
- LEFT LIP OF KERB
- RIGHT LIP OF KERB

NOTE: REFER TO GENERAL NOTES REGARDING STRUCTURAL FILL

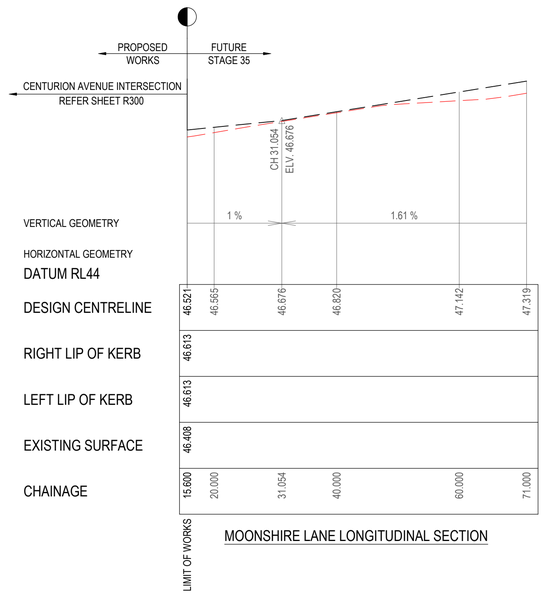
NOTE:
VERTICAL GEOMETRY AND DESIGN CENTRELINE FOR EXISTING SECTION OF CENTURION AVENUE (CH900-1000) & ISHTAR STREET FOR INDICATIVE PURPOSES ONLY. REFER EXISTING LEVELS FROM FEATURE SURVEY.



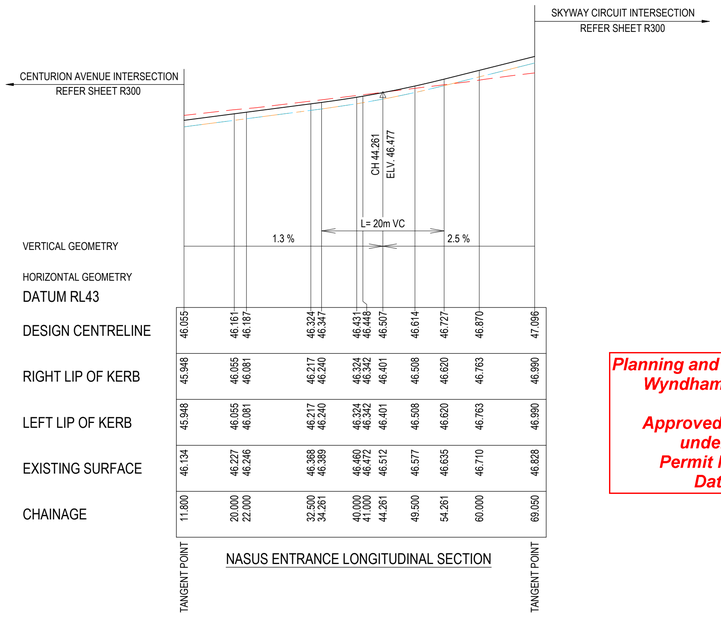
CENTURION AVENUE LONGITUDINAL SECTION



ISHTAR STREET LONGITUDINAL SECTION



MOONSHIRE LANE LONGITUDINAL SECTION



NASUS ENTRANCE LONGITUDINAL SECTION

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32
ROAD LONGITUDINAL SECTIONS - 1

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

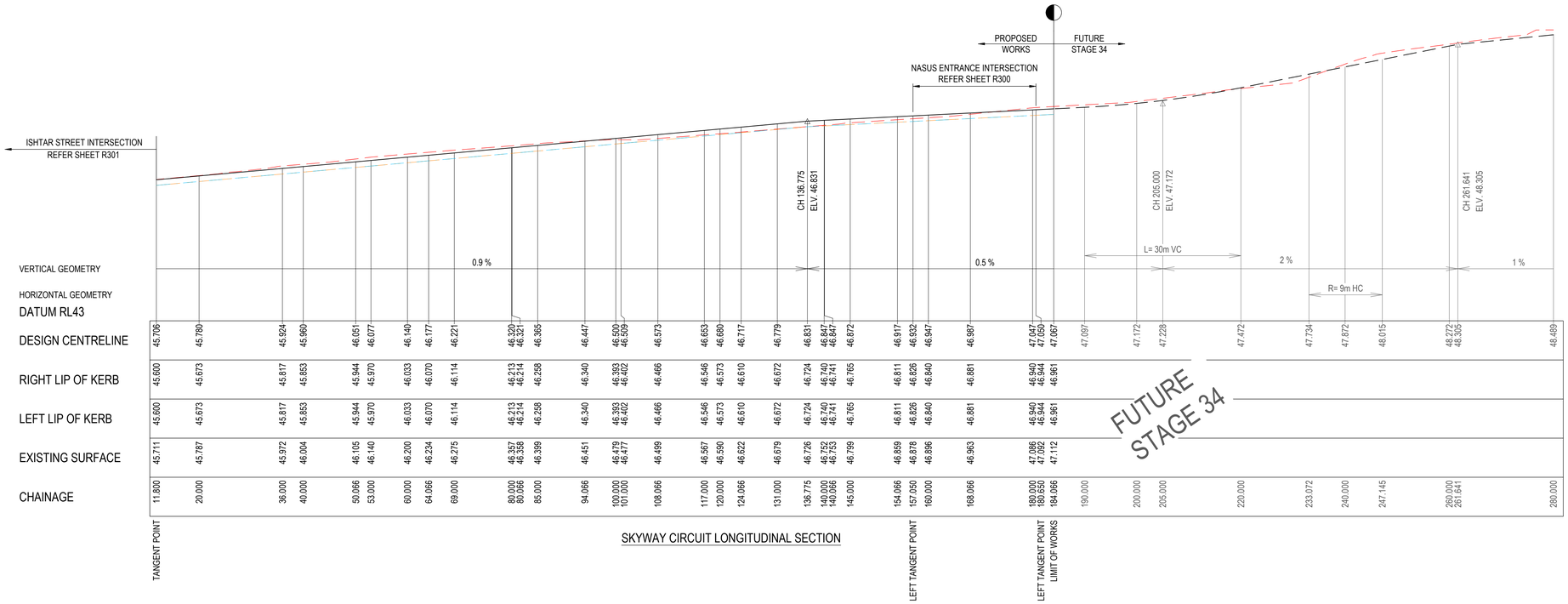
SCALE @ A1 : 1:500 (H) 1:50 (V)
H 10 5 0 10 20
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	R400	A

LEGEND

- EXISTING SURFACE
- DESIGN LINE
- FUTURE DESIGN LINE
- LEFT LIP OF KERB
- RIGHT LIP OF KERB

NOTE: REFER TO GENERAL NOTES REGARDING STRUCTURAL FILL



CHAINAGE	DESIGN CENTRELINE	RIGHT LIP OF KERB	LEFT LIP OF KERB	EXISTING SURFACE
11.800	45.706	45.600	45.600	45.711
20.000	45.780	45.673	45.673	45.787
36.000	45.924	45.817	45.817	45.972
40.000	45.960	45.853	45.853	46.004
50.066	46.051	45.944	45.944	46.105
53.000	46.077	45.970	45.970	46.140
60.000	46.140	46.033	46.033	46.200
64.066	46.177	46.070	46.070	46.234
69.000	46.221	46.114	46.114	46.275
80.000	46.320	46.213	46.213	46.357
80.066	46.321	46.214	46.214	46.358
85.000	46.365	46.258	46.258	46.399
94.066	46.447	46.340	46.340	46.451
100.000	46.500	46.393	46.393	46.479
101.000	46.509	46.402	46.402	46.477
108.066	46.573	46.466	46.466	46.499
117.000	46.653	46.546	46.546	46.567
120.000	46.680	46.573	46.573	46.590
124.066	46.717	46.610	46.610	46.622
131.000	46.779	46.672	46.672	46.679
136.775	46.831	46.724	46.724	46.726
140.000	46.847	46.740	46.740	46.752
140.066	46.847	46.741	46.741	46.753
145.000	46.872	46.765	46.765	46.799
154.066	46.917	46.811	46.811	46.859
157.950	46.932	46.826	46.826	46.878
160.000	46.947	46.840	46.840	46.896
168.066	46.987	46.881	46.881	46.963
180.000	47.047	46.940	46.940	47.086
180.850	47.050	46.944	46.944	47.092
184.066	47.067	46.961	46.961	47.112
190.000	47.097			
200.000	47.172			
205.000	47.228			
220.000	47.472			
233.072	47.734			
240.000	47.872			
247.145	48.015			
260.000	48.272			
261.641	48.305			
280.000	48.489			

SKYWAY CIRCUIT LONGITUDINAL SECTION

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: **ALAMORA - STAGE 32**
ROAD LONGITUDINAL SECTIONS - 2

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:500 (H) 1:50 (V)
H 10 5 0 10 20
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	R401	A

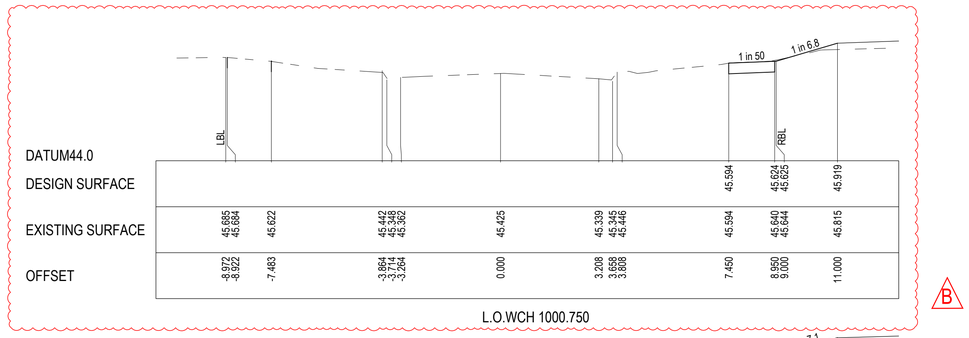
LEGEND

- EXISTING SURFACE
- DESIGN LINE
- SELECT STRUCTURAL FILL

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

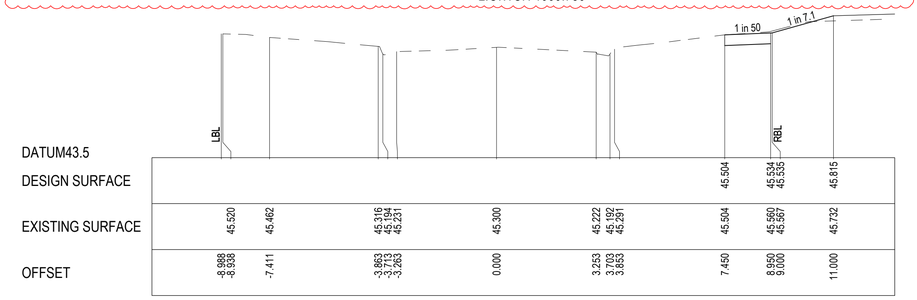
NOTE:
SELECT STRUCTURAL FILL IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS & REQUIREMENTS IS REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE EXISTING SURFACE.

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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

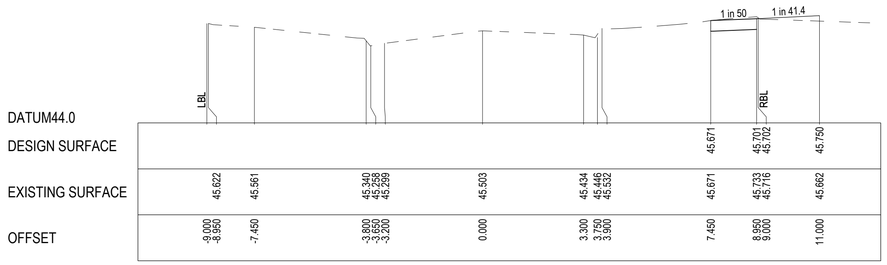


L.O.WCH 1000.750

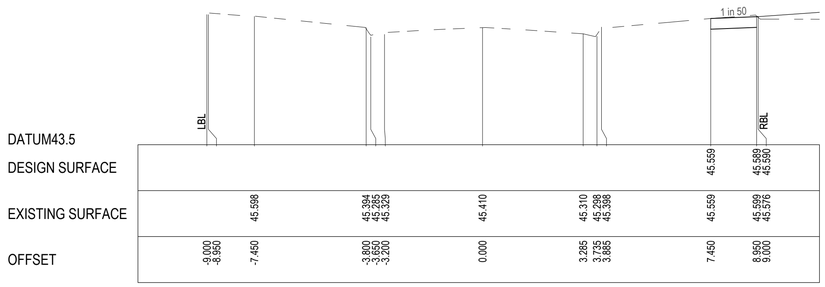
B



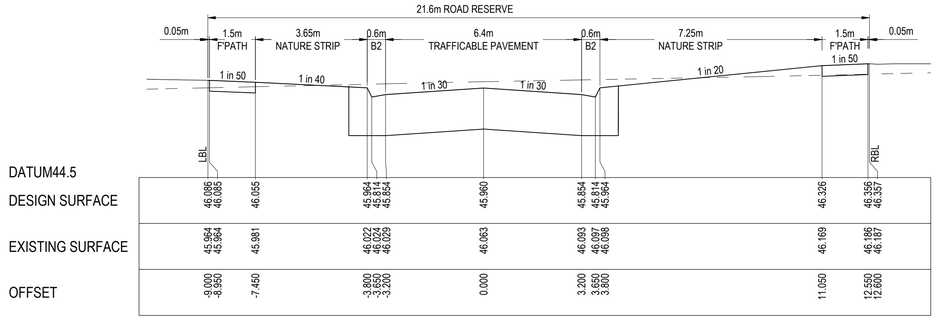
CH 980.000



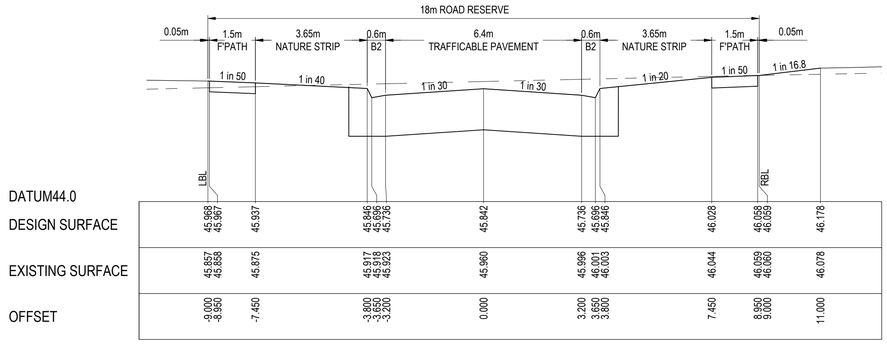
CH 942.677



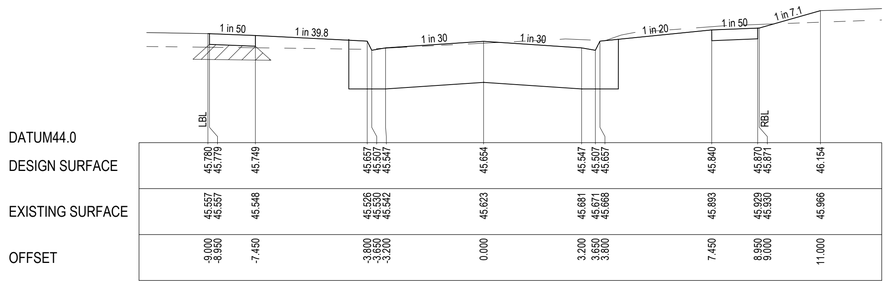
CH 925.677



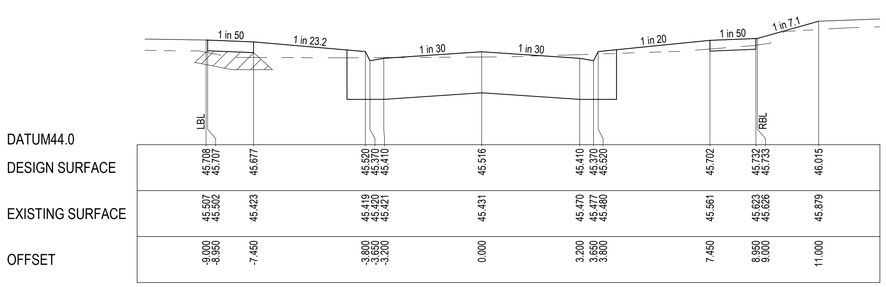
RTPCH 1070.327



RTPCH 1046.727



CH 1027.250



CH 1014.750

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	CH1000.750 UPDATE - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32
ROAD CROSS SECTIONS - 1
CENTURION AVENUE

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:100 (H) 1:50 (V)
H 2 1 0 2 4
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R500	B

E:\0200 ENERGY\TEMP\1200 ENERGY\1200 ENERGY\SERVER\SERVER\VICE\7496\EA\NEDBO-A69E-45D8-9833-9FF90C8A78E4\200282.32 - R500 - ROAD CROSS SECTIONS.DWG

LEGEND

- EXISTING SURFACE
- DESIGN LINE
- SELECT STRUCTURAL FILL

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

NOTE:
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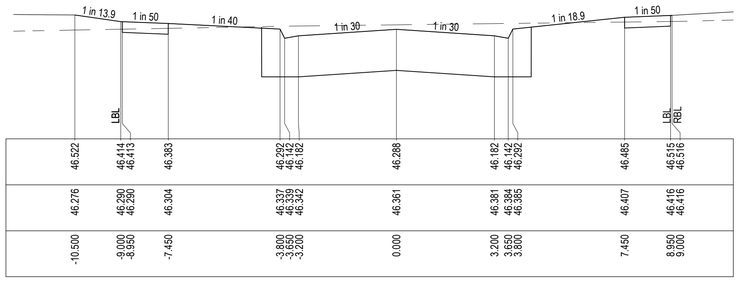
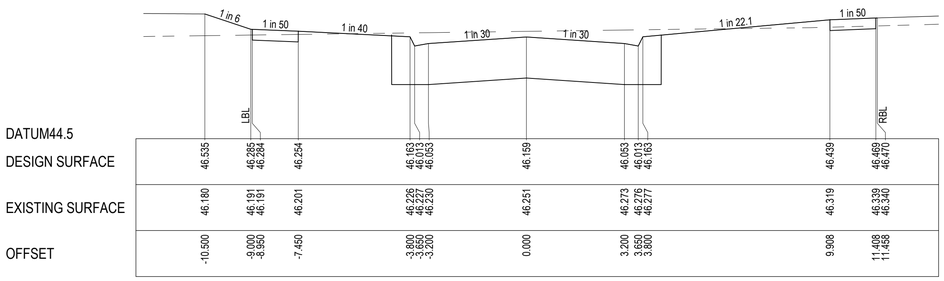
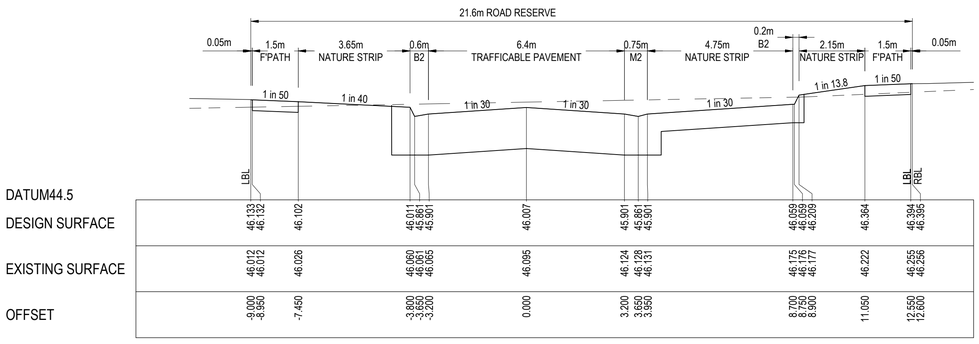
DIAL 1100 BEFORE YOU DIG
www.1100.com.au



L.O.W CH 1104.177

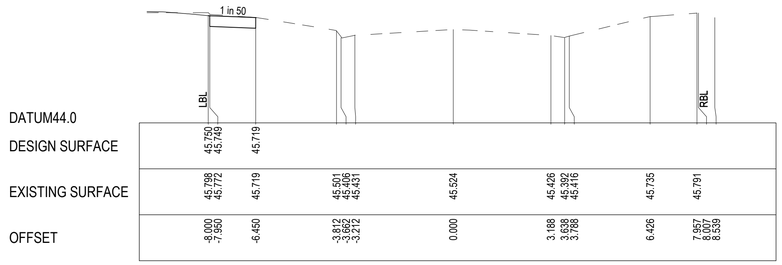


CH 1094.750

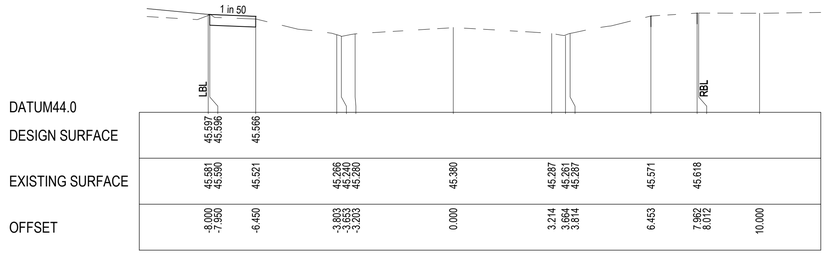


CH 1078.750

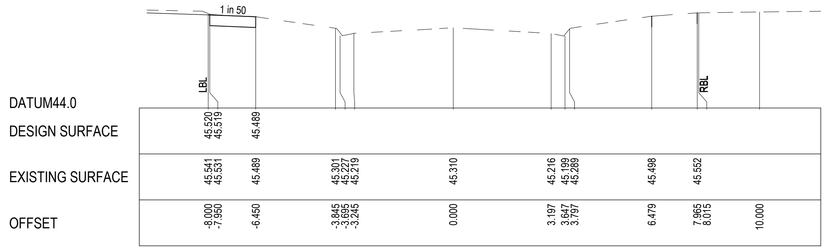
CENTURION AVENUE



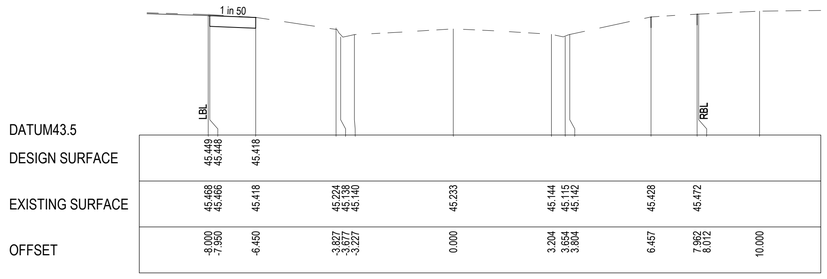
TPCH 92.672



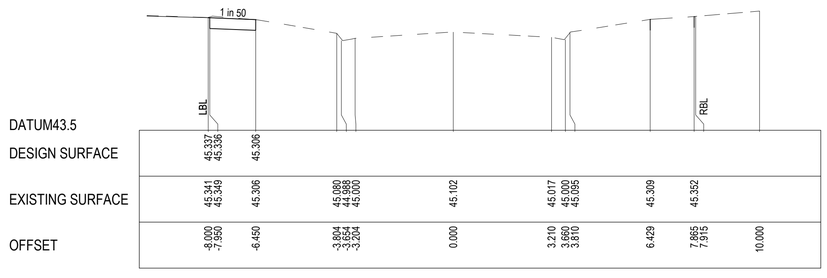
TPCH 69.050



CH 57.000



CH 46.500



CH 25.500

ISHTAR STREET

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32
ROAD CROSS SECTIONS - 2
CENTURION AVENUE & ISHTAR STREET

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:100 (H) 1:50 (V)
H 2 1 0 2 4
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	R501	A

E:\1020STNERG\TTEMP-1020STNERG\11020STNERG\SERVERSERVICE\FASREALATREEBD-ABBE-4509-8803-9F790C9A7BE4\200282.32_R500_ROAD CROSS SECTIONS.DWG

LEGEND

- EXISTING SURFACE
- DESIGN LINE
- SELECT STRUCTURAL FILL

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

NOTE:
SELECT STRUCTURAL FILL IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS & REQUIREMENTS IS REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE EXISTING SURFACE.

WARNING
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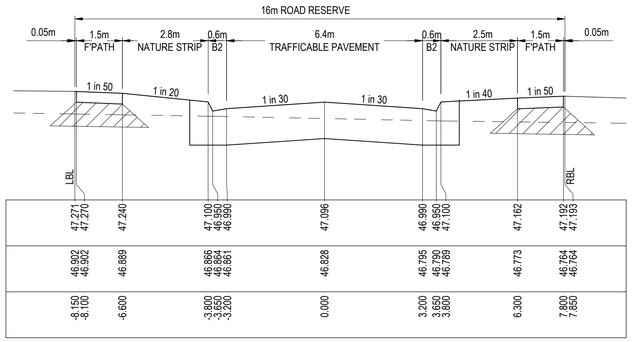
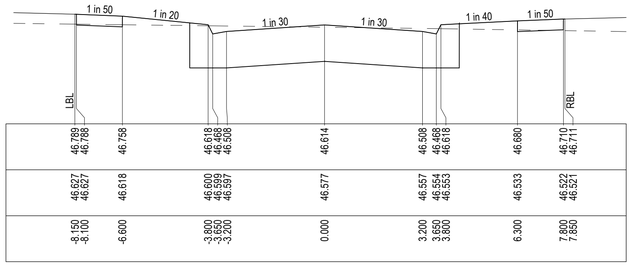
DIAL 1100 BEFORE YOU DIG
www.1100.com.au



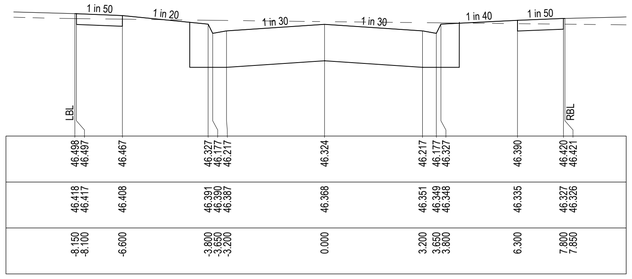
DATUM45.5							
DESIGN SURFACE	47.271 47.270	47.240	47.100 46.950 46.990	47.096	46.990 46.950 47.100	47.162	47.192 47.193
EXISTING SURFACE	46.922 46.902	46.889	46.866 46.864 46.861	46.828	46.795 46.790 46.789	46.773	46.764 46.764
OFFSET	-8.150 -8.100	-6.600	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.300	7.800 7.850

TPCH 69.050



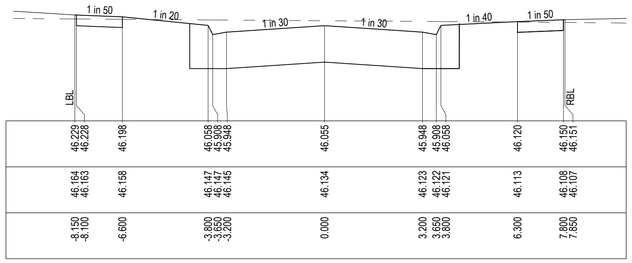
DATUM45.0							
DESIGN SURFACE	46.789 46.788	46.758	46.618 46.608 46.608	46.614	46.608 46.608 46.618	46.680	46.710 46.711
EXISTING SURFACE	46.627 46.627	46.618	46.600 46.599 46.597	46.577	46.557 46.554 46.553	46.533	46.522 46.521
OFFSET	-8.150 -8.100	-6.600	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.300	7.800 7.850

CH 49.500



DATUM44.5							
DESIGN SURFACE	46.498 46.497	46.467	46.327 46.177 46.217	46.324	46.217 46.177 46.327	46.390	46.420 46.421
EXISTING SURFACE	46.418 46.417	46.408	46.391 46.390 46.387	46.368	46.351 46.349 46.348	46.335	46.327 46.326
OFFSET	-8.150 -8.100	-6.600	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.300	7.800 7.850

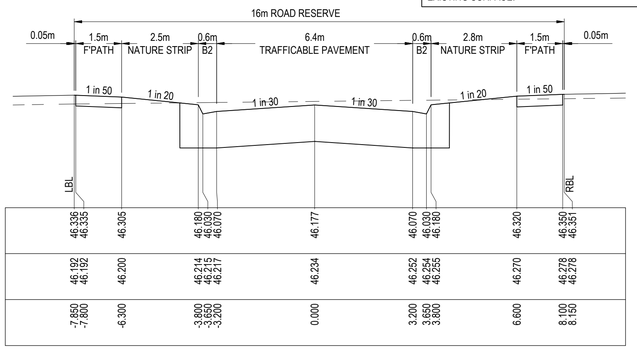
CH 32.500



DATUM44.5							
DESIGN SURFACE	46.229 46.228	46.198	46.058 45.908 45.948	46.055	45.948 45.908 46.058	46.120	46.150 46.151
EXISTING SURFACE	46.164 46.163	46.158	46.147 46.147 46.145	46.134	46.123 46.122 46.121	46.113	46.108 46.107
OFFSET	-8.150 -8.100	-6.600	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.300	7.800 7.850

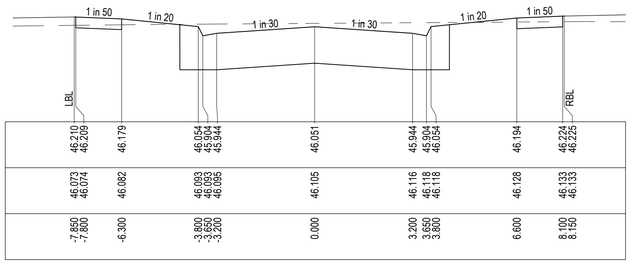
TPCH 11.800

NASUS ENTRANCE



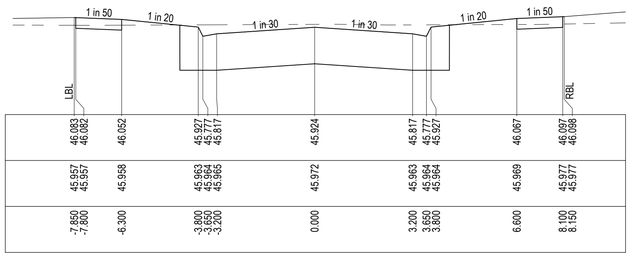
DATUM44.5							
DESIGN SURFACE	46.336 46.335	46.305	46.180 46.030 46.070	46.177	46.070 46.030 46.180	46.320	46.350 46.351
EXISTING SURFACE	46.192 46.192	46.200	46.214 46.215 46.217	46.234	46.252 46.254 46.255	46.270	46.278 46.278
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 64.066



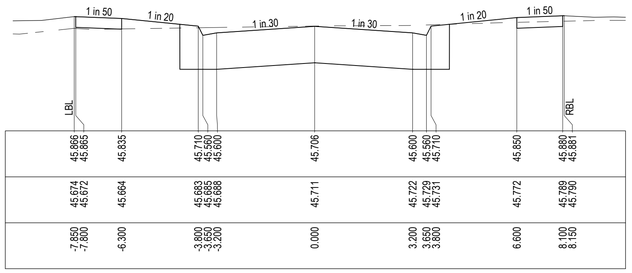
DATUM44.5							
DESIGN SURFACE	46.210 46.209	46.179	46.054 45.904 45.944	46.051	45.944 45.904 46.054	46.194	46.224 46.225
EXISTING SURFACE	46.073 46.074	46.082	46.093 46.093 46.095	46.105	46.116 46.118 46.118	46.128	46.133 46.133
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 50.066



DATUM44.5							
DESIGN SURFACE	46.083 46.082	46.052	45.927 45.777 45.817	45.924	45.817 45.777 45.927	46.067	46.097 46.098
EXISTING SURFACE	45.957 45.957	45.958	45.963 45.964 45.965	45.972	45.963 45.964 45.964	45.969	45.977 45.977
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 36.000



DATUM44.0							
DESIGN SURFACE	45.866 45.865	45.835	45.710 45.560 45.600	45.706	45.600 45.560 45.710	45.850	45.880 45.881
EXISTING SURFACE	45.674 45.672	45.664	45.683 45.685 45.688	45.711	45.722 45.729 45.731	45.772	45.789 45.790
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

TPCH 11.800

SKYWAY CIRCUIT

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE:
ALAMORA - STAGE 32
ROAD CROSS SECTIONS - 3
NASUS ENTRANCE & SKYWAY CIRCUIT

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:100 (H) 1:50 (V)
H 2 1 0 2 4
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	R502	A

E:\1200ENERGY\EMP\1200ENERGY\1200ENERGY\SERVER\SERVER\CET406\EA\REDBD-A68E-4608-8833-9F790C0A7BE4\200282.32 - R500 - ROAD CROSS SECTIONS.DWG

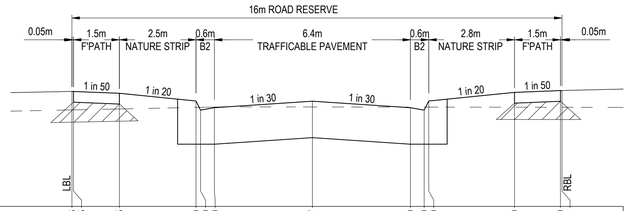
LEGEND

- EXISTING SURFACE
- DESIGN LINE
- SELECT STRUCTURAL FILL

NOTE:
CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES

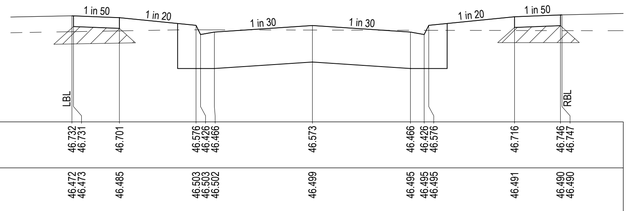
NOTE:
SELECT STRUCTURAL FILL IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS & REQUIREMENTS IS REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE EXISTING SURFACE.

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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



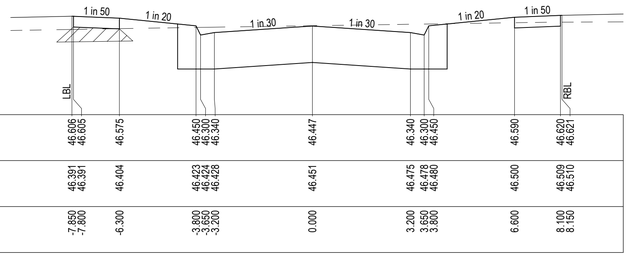
	LBL						RBL
DATUM45.0							
DESIGN SURFACE	46.876 46.875	46.845	46.720 46.570 46.610	46.717	46.610 46.570 46.720	46.860	46.890 46.891
EXISTING SURFACE	46.574 46.574	46.589	46.614 46.616 46.621	46.622	46.620 46.620 46.620	46.618	46.617 46.617
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 124.066



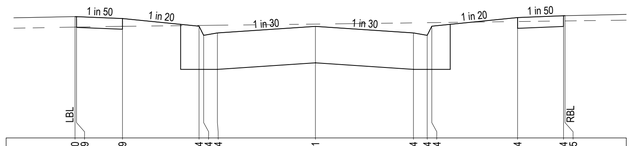
	LBL						RBL
DATUM45.0							
DESIGN SURFACE	46.732 46.731	46.701	46.576 46.426 46.466	46.573	46.466 46.426 46.576	46.716	46.746 46.747
EXISTING SURFACE	46.472 46.473	46.485	46.503 46.503 46.502	46.499	46.495 46.495 46.495	46.491	46.490 46.490
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 108.066



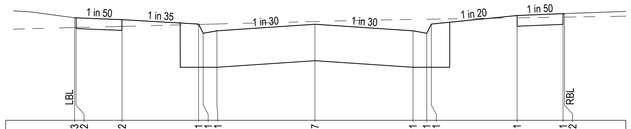
	LBL						RBL
DATUM45.0							
DESIGN SURFACE	46.606 46.605	46.575	46.450 46.300 46.340	46.447	46.340 46.300 46.450	46.590	46.620 46.621
EXISTING SURFACE	46.391 46.391	46.404	46.423 46.424 46.428	46.451	46.475 46.478 46.480	46.500	46.509 46.510
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 94.066



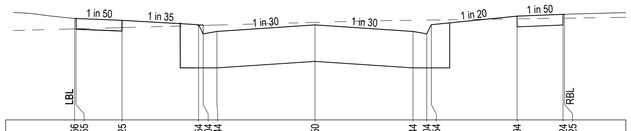
	LBL						RBL
DATUM44.5							
DESIGN SURFACE	46.480 46.479	46.449	46.324 46.214 46.214	46.321	46.214 46.174 46.324	46.464	46.494 46.495
EXISTING SURFACE	46.309 46.309	46.321	46.336 46.337 46.339	46.358	46.378 46.380 46.381	46.399	46.409 46.409
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 80.066



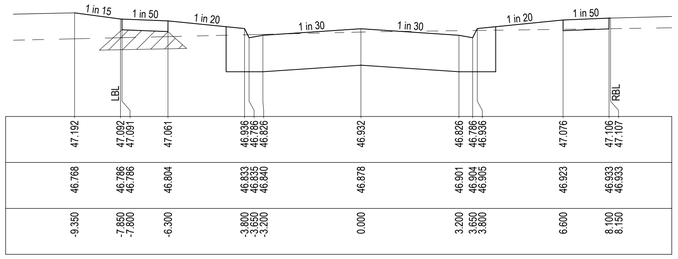
	LBL						RBL
DATUM45.5							
DESIGN SURFACE	47.173 47.172	47.142	47.071 47.071 46.961	47.067	46.961 46.921 47.071	47.211	47.241 47.242
EXISTING SURFACE	47.014 47.015	47.034	47.065 47.067 47.072	47.112	47.146 47.149 47.151	47.172	47.184 47.184
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

L.O.WCH 184.066



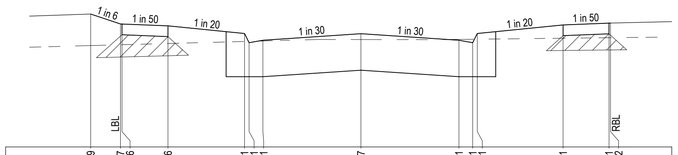
	LBL						RBL
DATUM45.5							
DESIGN SURFACE	47.156 47.155	47.125	47.054 47.054 46.944	47.050	46.944 46.904 47.054	47.194	47.224 47.225
EXISTING SURFACE	46.986 46.986	47.007	47.040 47.042 47.049	47.092	47.126 47.129 47.130	47.150	47.160 47.160
OFFSET	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

LTPCH 180.650



	LBL						RBL
DATUM45.5							
DESIGN SURFACE	47.192	47.092 47.091	47.061	46.936 46.786 46.826	46.932	46.826 46.786 46.936	47.076	47.106 47.107
EXISTING SURFACE	46.768	46.786 46.786	46.804	46.833 46.835 46.840	46.878	46.901 46.904 46.905	46.923	46.933 46.933
OFFSET	-9.350	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

LTPCH 157.050



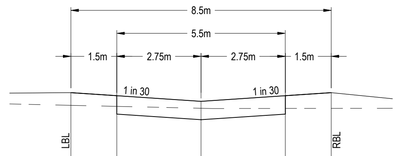
	LBL						RBL
DATUM45.0							
DESIGN SURFACE	47.169	47.007 47.006	46.976	46.851 46.701 46.741	46.847	46.741 46.701 46.851	46.991	47.021 47.022
EXISTING SURFACE	46.654	46.667 46.668	46.688	46.721 46.723 46.729	46.753	46.754 46.757 46.758	46.773	46.782 46.782
OFFSET	-8.821	-7.850 -7.800	-6.300	-3.800 -3.650 -3.200	0.000	3.200 3.650 3.800	6.600	8.100 8.150

CH 140.066

SKYWAY CIRCUIT

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025



	LBL				RBL
DATUM45.5					
DESIGN SURFACE	46.663	46.613	46.521	46.613	46.663
EXISTING SURFACE	46.456	46.439	46.408	46.406	46.406
OFFSET	-4.250	-2.750	0.000	2.750	4.250

L.O.W CH 15.600

MOONSHIRE LANE

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE:
ALAMORA - STAGE 32
ROAD CROSS SECTIONS - 4
SKYWAY CIRCUIT & MOONSHIRE LANE

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:100 (H) 1:50 (V)
H 2 1 0 2 4
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R503	A

E:\0263\ENERGY\TEMP\0263\ENERGY\0263\ENERGY\SERVER\SERVER\VDCET\59\EA7\DEDBD-A68E-45D8-8833-9F79\OCA\7BE4\200282.32 - R500 - ROAD CROSS SECTIONS.DWG

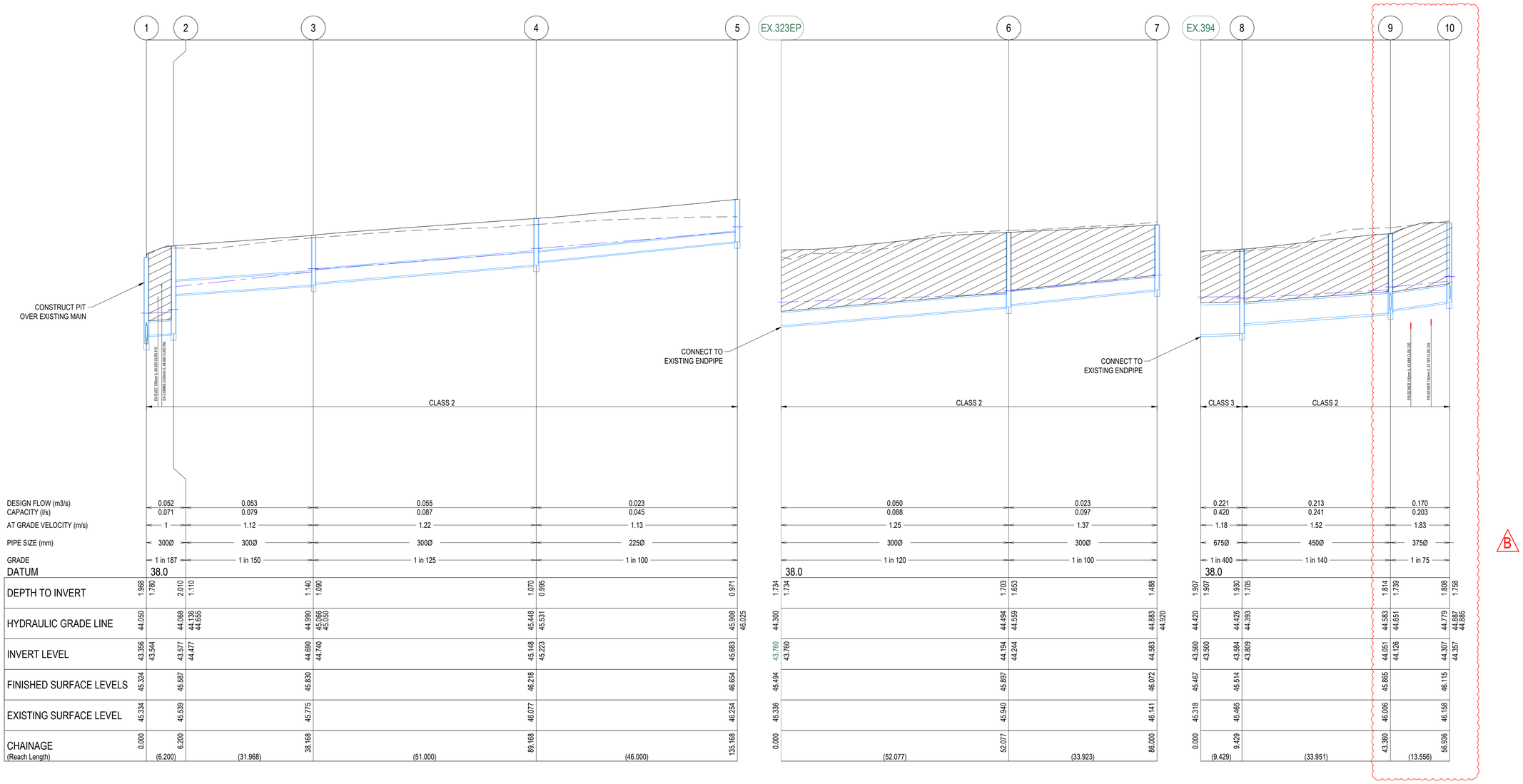
Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- INDICATIVE ELECTRICITY
- INDICATIVE GAS
- INDICATIVE OPTIC
- INDICATIVE RECYCLE WATER
- INDICATIVE WATER
- INDICATIVE SEWER
- EXISTING SERVICES
- CRUSHED ROCK BACKFILL

NOTE: ALL DRAINAGE PIPES ARE CLASS 2 RCP TYPE UNLESS OTHERWISE SHOWN



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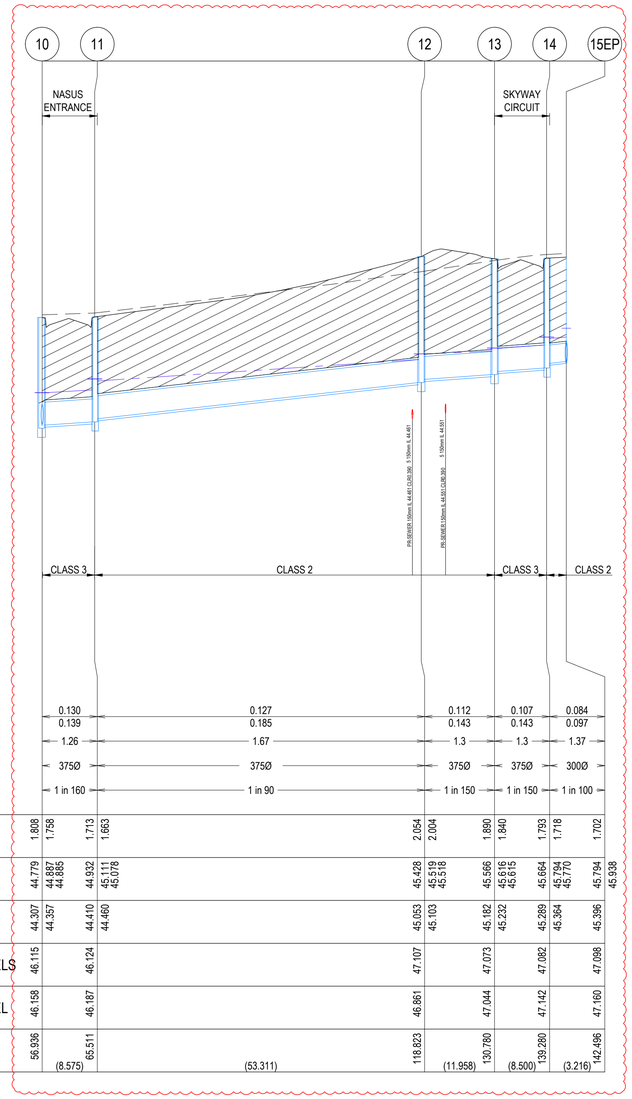
Planning and Environment Act 1987
Wyndham Planning Scheme

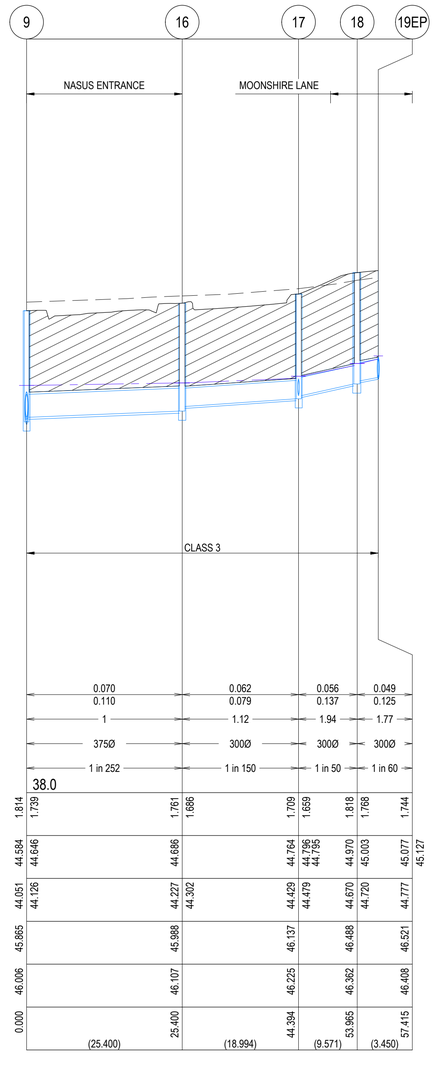
Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

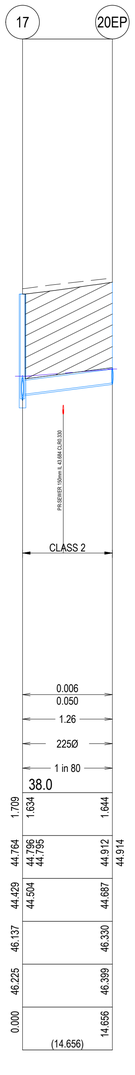
LEGEND

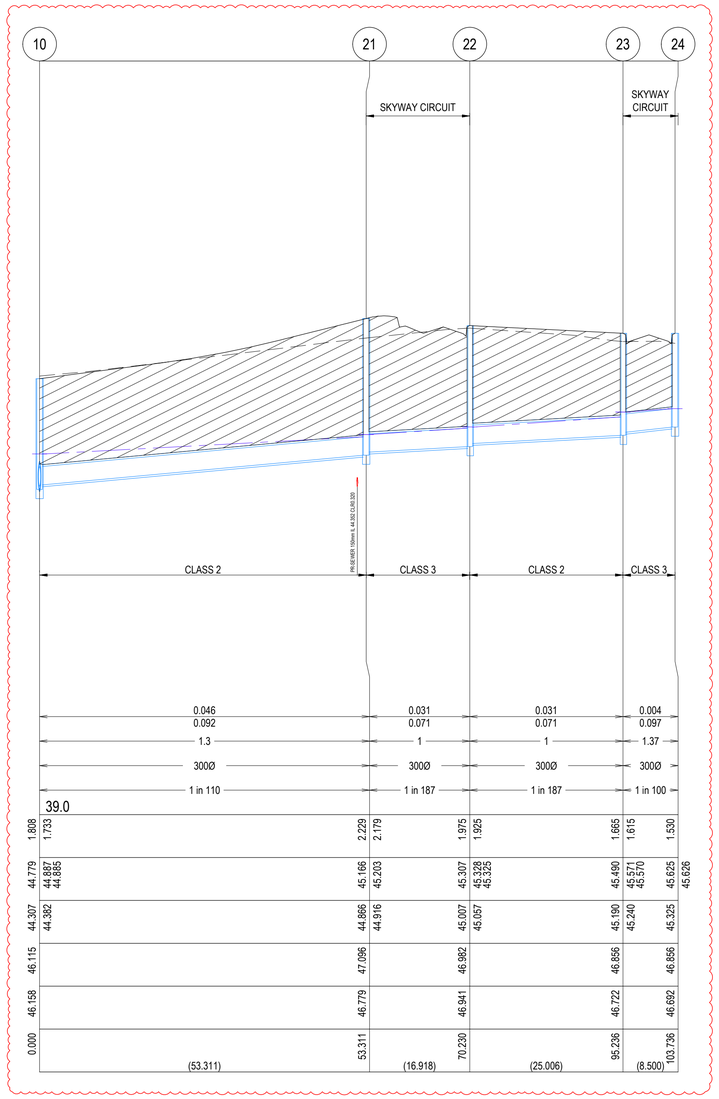
- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- INDICATIVE ELECTRICITY
- INDICATIVE GAS
- INDICATIVE OPTIC
- INDICATIVE RECYCLE WATER
- INDICATIVE WATER
- INDICATIVE SEWER
- EXISTING SERVICES
- CRUSHED ROCK BACKFILL

NOTE: ALL DRAINAGE PIPES ARE CLASS 2 RCP TYPE UNLESS OTHERWISE SHOWN









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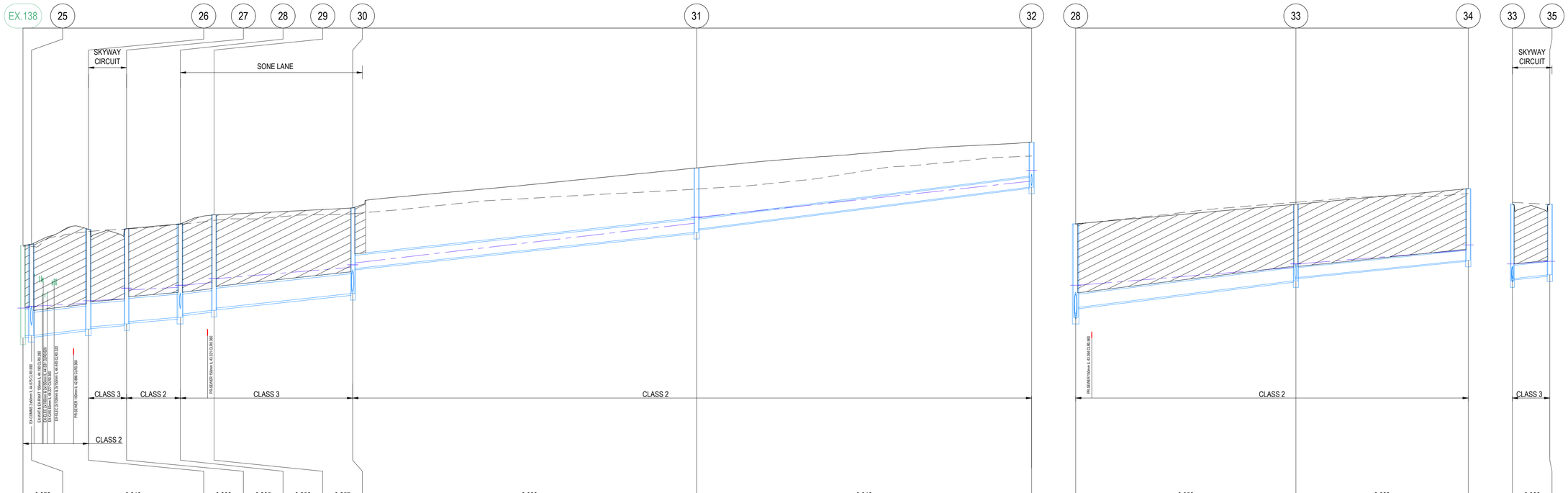
Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 18/12/2025

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- INDICATIVE ELECTRICITY
- INDICATIVE GAS
- INDICATIVE OPTIC
- INDICATIVE RECYCLE WATER
- INDICATIVE WATER
- INDICATIVE SEWER
- EXISTING SERVICES
- CRUSHED ROCK BACKFILL

NOTE: ALL DRAINAGE PIPES ARE CLASS 2 RCP TYPE UNLESS OTHERWISE SHOWN



| | | |

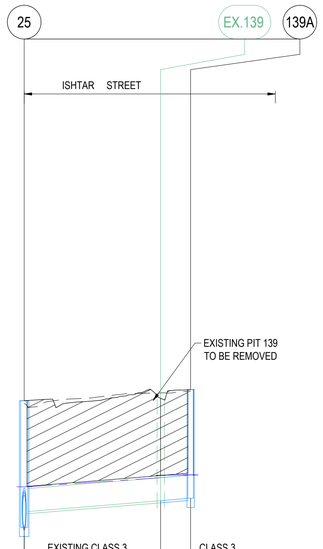
LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRUALIC GRADE LINE
- INDICATIVE ELECTRICITY
- INDICATIVE GAS
- INDICATIVE OPTIC
- INDICATIVE RECYCLE WATER
- INDICATIVE WATER
- INDICATIVE SEWER
- EXISTING SERVICES
- CRUSHED ROCK BACKFILL

NOTE: ALL DRAINAGE PIPES ARE CLASS 2 RCP TYPE UNLESS OTHERWISE SHOWN

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 18/12/2025

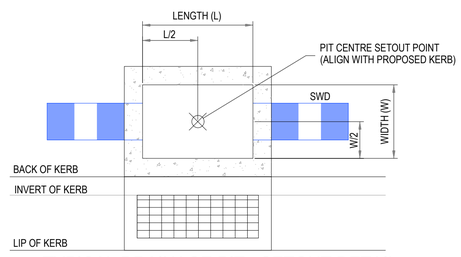


DESIGN FLOW (m3/s)	0.068		0.069
CAPACITY (l/s)	0.156		0.156
AT GRADE VELOCITY (m/s)	1.41		1.41
PIPE SIZE (mm)	375Ø		375Ø
GRADE	1 in 126		1 in 126
DATUM	39.0		
DEPTH TO INVERT	2.067, 1.809	1.671, 1.671	1.773, 1.727
HYDRAULIC GRADE LINE	43.957, 43.992	44.140, 44.179	44.186
INVERT LEVEL	43.330, 43.588	43.765, 43.765	43.804
FINISHED SURFACE LEVELS	45.397	45.436	45.577
EXISTING SURFACE LEVEL	45.350	45.522	45.551
CHAINAGE	0.000	22.273	27.173
(Reach Length)	(22.273)		(4.900)

PIT SCHEDULE

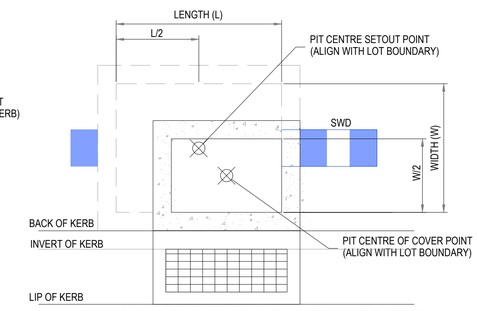
PIT NUMBER	TYPE	INTERNAL WIDTH (mm)	INTERNAL LENGTH (mm)	INLET DIA (mm)	INLET INVERT RL (mm)	OUTLET DIA (mm)	OUTLET INVERT RL (mm)	COVER LEVEL (m)	DEPTH (m)	STANDARD DRAWING	REMARKS
1	JUNCTION PIT	1050	900	300	43.544			45.324	1.968	EDCM 607	CONSTRUCT OVER EXISTING DRAIN. HAUNCHED TO 600x900 COVER**. SUPPLY CLASS D COVER
2	JUNCTION PIT	600	900	300	44.477	300	43.577	45.587	2.01	EDCM 605	
3	JUNCTION PIT	600	900	300	44.74	300	44.69	45.83	1.14	EDCM 605	
4	JUNCTION PIT	600	900	225	45.223	300	45.148	46.218	1.07	EDCM 605	
5	JUNCTION PIT	600	900			225	45.683	46.654	0.971	EDCM 605	
Ex.323EP	ENDPIPE			300	43.76			45.494	1.734		CONNECT TO EXISTING ENDPIPE
6	GRATED SIDE ENTRY PIT	600	900	300	44.244	300	44.194	45.897	1.703	EDCM 601	
7	GRATED SIDE ENTRY PIT	600	900			300	44.583	46.107	1.524	EDCM 601	
Ex.394	ENDPIPE			675	43.56			45.467	1.907		CONNECT TO EXISTING ENDPIPE
8	JUNCTION PIT	1050	900	450	43.809	675	43.584	45.514	1.93	EDCM 607	HAUNCHED TO 600x900 COVER**.
9	GRATED SIDE ENTRY PIT	600	900	375	44.126	450	44.051	45.865	1.814	EDCM 601	
				375	44.126						
10	GRATED SIDE ENTRY PIT	750	900	375	44.357	375	44.307	46.115	1.808	EDCM 601 & 607	HAUNCHED TO 600x900 COVER.
				300	44.382						
11	GRATED SIDE ENTRY PIT	600	900	375	44.46	375	44.41	46.124	1.713	EDCM 601	
12	JUNCTION PIT	600	900	375	45.103	375	45.053	47.107	2.054	EDCM 605	
13	DOUBLE SIDE ENTRY PIT GRATED	600	900	375	45.232	375	45.182	47.073	1.89	EDCM 602	
14	GRATED SIDE ENTRY PIT	600	900	300	45.364	375	45.289	47.082	1.793	EDCM 601	
15EP	ENDPIPE					300	45.396	47.098	1.702		ENDPIPE TO BE SEALED AND CAPPED FOR FUTURE CONNECTION
				300	45.396						
16	DOUBLE SIDE ENTRY PIT GRATED	600	900	300	44.302	375	44.227	45.972	1.745	EDCM 602	
17	JUNCTION PIT	600	900	300	44.479	300	44.429	46.109	1.681	EDCM 605	
				225	44.504						
18	GRATED PIT	600	900	300	44.72	300	44.67	46.488	1.818	EDCM 605	SUPPLY CLASS D BIKE SAFE GALVANISED GRATING COVER
19EP	ENDPIPE					300	44.777	46.521	1.744		ENDPIPE TO BE SEALED AND CAPPED FOR FUTURE CONNECTION
				300	44.777						
20EP	ENDPIPE					225	44.687	46.33	1.644		ENDPIPE TO BE SEALED AND CAPPED FOR FUTURE CONNECTION
				225	44.687						
21	JUNCTION PIT	600	900	300	44.916	300	44.866	47.096	2.229	EDCM 605	
22	GRATED SIDE ENTRY PIT	600	900	300	45.057	300	45.007	46.982	1.975	EDCM 601	
23	GRATED SIDE ENTRY PIT	600	900	300	45.24	300	45.19	46.856	1.665	EDCM 601	
24	GRATED SIDE ENTRY PIT	600	900			300	45.325	46.856	1.53	EDCM 601	
Ex.138	JUNCTION PIT	600	900	600	43.32			45.373	2.103		CONNECT TO EXISTING PIT
25	JUNCTION PIT	900	1200	525	43.33	600	43.33	45.397	2.067	EDCM 607	CONSTRUCT OVER EXISTING DRAIN AND HAUNCH TO 600x900 COVER.
				375	43.588						
26	GRATED SIDE ENTRY PIT	600	1050	525	43.523	525	43.473	45.737	2.264	EDCM 601 & 607	HAUNCHED TO 600x900 COVER.
27	GRATED SIDE ENTRY PIT	750	900	525	43.642	525	43.592	45.75	2.158	EDCM 601 & 607	HAUNCHED TO 600x900 COVER.
28	JUNCTION PIT	750	900	450	43.815	525	43.74	45.86	2.12	EDCM 607	HAUNCHED TO 600x900 COVER.
				300	43.965						
29	GRATED PIT	600	900	450	43.95	450	43.9	46.066	2.166	EDCM 605	CONSTRUCT PIT 100mm BELOW FUTURE DESIGN LEVEL AND SUPPLY TEMPORARY COVER.
30	GRATED PIT	600	900	300	44.846	450	44.281	46.222	1.941	EDCM 605	CONSTRUCT PIT 100mm BELOW FUTURE DESIGN LEVEL AND SUPPLY TEMPORARY COVER.
				450	44.331						PROVIDE 450Ø BLOCKOUT NORTH AT IL44.331 FOR FUTURE CONNECTION.
31	JUNCTION PIT	600	900	225	45.742	300	45.667	47.127	1.46	EDCM 605	
32	JUNCTION PIT	600	900			225	46.692	47.715	1.023	EDCM 605	
				225	46.742						PROVIDE 225Ø BLOCKOUT WEST AT IL46.742 FOR FUTURE CONNECTION.
33	GRATED SIDE ENTRY PIT	600	900	225	44.644	300	44.569	46.306	1.737	EDCM 601	
				300	44.619						
34	JUNCTION PIT	600	900			225	45.035	46.658	1.623	EDCM 605	
35	GRATED SIDE ENTRY PIT	600	900			300	44.704	46.306	1.602	EDCM 601	
139A	DOUBLE SIDE ENTRY PIT GRATED	600	900	300	43.85	375	43.804	45.577	1.773	EDCM 602	CONSTRUCT OVER EXISTING DRAIN

1) ** - DENOTES PIT IS HAUNCHED TOWARDS ROAD CENTRELINE (UNDER ROAD PAVEMENT/KERB)
2) ALL PIT COVERS TO BE PROVIDED IN ACCORDANCE WITH EDCM 605 - PIT COVER SCHEDULE.
3) PITS WITHIN ROAD RESERVES ARE TO BE BACKFILLED AND COMPACTED WITH CLASS 3 FCR IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS AND REQUIREMENTS.



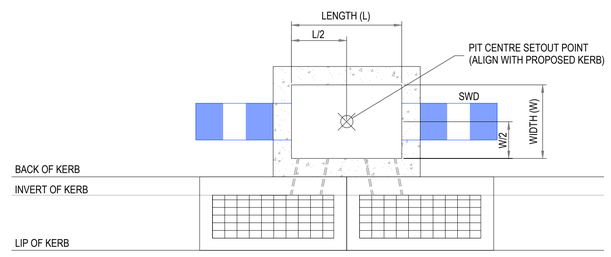
TYPICAL DRAINAGE PIT - SETOUT DETAIL

GRATED SIDE ENTRY PIT
REFER TO EDCM 601, 602 & 603
NOT TO SCALE



TYPICAL DRAINAGE PIT - SETOUT DETAIL

HAUNCHED GRATED SIDE ENTRY PIT
REFER TO EDCM 601, 603 & 607
NOT TO SCALE



TYPICAL DRAINAGE PIT - SETOUT DETAIL

DOUBLE GRATED SIDE ENTRY PIT
REFER TO EDCM 602 & 603
NOT TO SCALE

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	27/11/25	ISSUED FOR CONSTRUCTION	M.P	A.W	E.S
D	30/09/25	UPDATED TENDER INFORMATION	M.P	A.W	E.S
C	12/09/25	ISSUED FOR TENDER	A.W	A.W	M.T
B	14/08/25	PIT SCHEDULE UPDATED	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

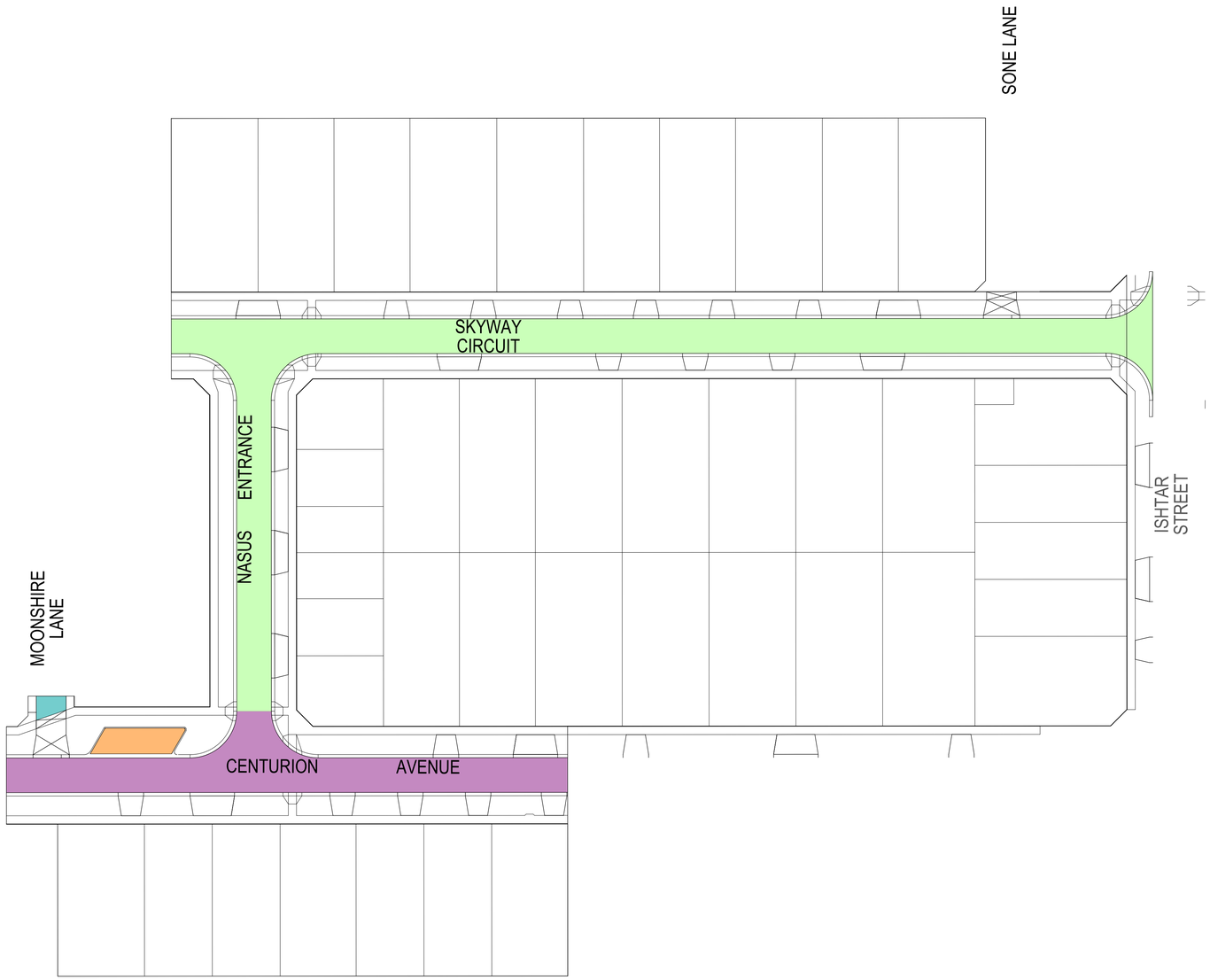
DRAWING TITLE: **ALAMORA - STAGE 32**
DRAINAGE LONG SECTIONS & PIT SCHEDULE

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE @ A1 : 1:500 (H) 1:50 (V)
H 10 5 0 10 20
V 1 0.5 0 1 2

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE
PROJECT No.	DRAWING No. / REVISION
200282.32	R603 / 0

E:\FOS\ENERGY\TEMP\FOS\ENERGY\1205\ENERGY\SERVER\SERVER\CE\398420\98449-1D60-4000-9671-1C8C75F115610\200282.32_R600_DRAINAGE LONG SECTIONS.DWG



PAVEMENT DESIGNS

ALL PAVEMENT DESIGNS HAVE BEEN PROVIDED BY TONKIN TAYLOR. CREO IS NOT RESPONSIBLE FOR GEOTECHNICAL OR PAVEMENT RELATED DESIGNS AND IS NOT RESPONSIBLE FOR THE ACCURACY, ADEQUACY OR APPROPRIATENESS OF THESE DESIGNS. THE PAVEMENT COMPOSITIONS SHOWN ON THIS DRAWING HAVE BEEN REPRODUCED FROM THE PAVEMENT REPORT FOR THIS DEVELOPMENT. THIS DOCUMENT SHOULD BE REVIEWED BY THE CONTRACTOR TO ENSURE DESIGN HAS BEEN INTERPRETED CORRECTLY. A COPY OF THIS DOCUMENT WILL BE MADE AVAILABLE UPON REQUEST.

WARNING

BEWARE OF UNDERGROUND & OVERHEAD SERVICES

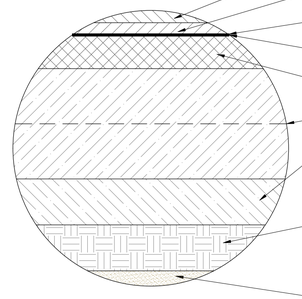
The locations of underground & overhead services are approximate only & their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works

DIAL 1100 BEFORE YOU DIG

www.1100.com.au

NOTE

PAVEMENT LAYERS ARE TO BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS AND REQUIREMENTS.



ASPHALT (WEARING) COURSE:
40mm COMPACTED DEPTH SIZE 14 TYPE N CLASS 320

ASPHALT (INTERMEDIATE) COURSE:
40mm COMPACTED DEPTH SIZE 14 TYPE HP CLASS A10E BINDER.

INTERLAYER:
5mm SIZE 10mm SAMI WITH CLASS S18R BINDER

B

PRIME (BONDING) COURSE:
BITUMINOUS PRIME OR SIZE 7mm PRIMESEAL

BASE COURSE:
110mm COMPACTED DEPTH 20mm CLASS 2 CRUSHED ROCK.
COMPACTED TO A MINIMUM DENSITY RATIO 98% (MODIFIED) AS1289, 5.2.1

SUBBASE COURSE:
360mm COMPACTED DEPTH 20mm CLASS 3 CRUSHED ROCK PLACED IN TWO LAYERS. COMPACTED TO A MINIMUM DENSITY RATIO 96% (MODIFIED) AS1289, 5.2.1

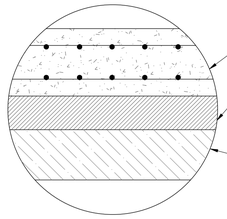
CAPPING:
150mm TYPE A FILL MATERIAL (MINIMUM CBR 7%, MAXIMUM SWELL 1.5%, PERMEABILITY $k \leq 5x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM CHARACTERISTICS DENSITY RATIO OF 98% STANDARD, MAXIMUM DRY DENSITY AS1289, 5.1.1.

CONSTRUCTION:
150mm TYPE A FILL MATERIAL (MINIMUM CBR 7%, MAXIMUM SWELL 1.5%, PERMEABILITY $k \leq 5x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM CHARACTERISTICS DENSITY RATIO OF 98% STANDARD, MAXIMUM DRY DENSITY AS1289, 5.1.1.

SUBGRADE:
MATERIAL AS FOUND (CLAY), CBR 1%. TOP 200mm SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO MINIMUM DENSITY OF 98% (STANDARD) AS1289, 5.1.1

PAVEMENT COMPOSITION

CENTURION AVENUE
850mm DEPTH
NTS



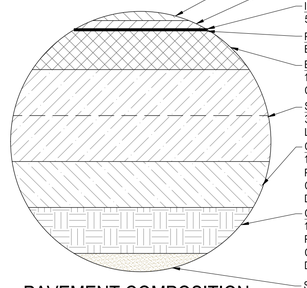
200mm THICK CONCRETE WITH SL82 MESH, TOP AND BOTTOM (50mm COVER).

BEDDING LAYER:
100mm SIZE 20mm CLASS 3 CRUSHED ROCK COMPACTED TO A MINIMUM DENSITY RATIO 98% (MODIFIED) AS1289, 5.2.1.

CAPPING LAYER:
150mm TYPE A FILL MATERIAL (MINIMUM CBR 7%, MAXIMUM SWELL 1.5%, PERMEABILITY $k \leq 1x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM CHARACTERISTICS DENSITY RATIO OF 98% STANDARD, MAXIMUM DRY DENSITY AS1289, 5.1.1.

PAVEMENT COMPOSITION

CENTURION AVENUE PARKING BAY
300mm DEPTH
NTS



ASPHALT (WEARING) COURSE:
30mm COMPACTED DEPTH SIZE 10 TYPE N CLASS 320

ASPHALT (BASE) COURSE:
30mm COMPACTED DEPTH SIZE 10 TYPE N CLASS 320

INTERLAYER:
5mm SIZE 10mm SAMI WITH CLASS S18R BINDER

PRIME (BONDING) COURSE:
BITUMINOUS PRIME OR SIZE 7mm PRIMESEAL

BASE COURSE:
130mm COMPACTED DEPTH 20mm CLASS 2 CRUSHED ROCK.
COMPACTED TO A MINIMUM DENSITY RATIO 98% (MODIFIED) AS1289, 5.2.1

SUBBASE COURSE:
300mm COMPACTED DEPTH 20mm CLASS 3 CRUSHED ROCK PLACED IN TWO LAYERS. COMPACTED TO A MINIMUM DENSITY RATIO 96% (MODIFIED) AS1289, 5.2.1

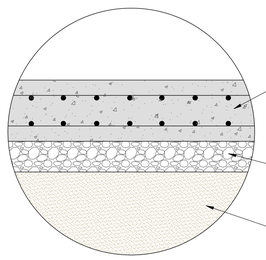
CAPPING:
150mm TYPE A FILL MATERIAL (MINIMUM CBR 7%, MAXIMUM SWELL 1.5%, PERMEABILITY $k \leq 5x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM CHARACTERISTICS DENSITY RATIO OF 98% STANDARD, MAXIMUM DRY DENSITY AS1289, 5.1.1.

CONSTRUCTION:
150mm TYPE A FILL MATERIAL (MINIMUM CBR 7%, MAXIMUM SWELL 1.5%, PERMEABILITY $k \leq 5x10^{-9}$m/s (5x 10^{-7}cm/s) COMPACTED TO A MINIMUM CHARACTERISTICS DENSITY RATIO OF 98% STANDARD, MAXIMUM DRY DENSITY AS1289, 5.1.1.

SUBGRADE:
MATERIAL AS FOUND (CLAY), CBR 1%. TOP 200mm SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO MINIMUM DENSITY OF 98% (STANDARD) AS1289, 5.1.1

PAVEMENT COMPOSITION

NASUS ENTRANCE & SKYWAY CIRCUIT
790mm DEPTH
NTS



200mm THICK 32MPa CONCRETE WITH 2 LAYERS OF SL82 MESH, 50mm TOP & BOTTOM COVER

100mm COMPACTED DEPTH 20mm NOM. SIZE CLASS 2 FINE CRUSHED ROCK

SUBGRADE IMPROVEMENT AS DIRECTED BY THE SUPERINTENDENT

PAVEMENT COMPOSITION

MOONSHIRE LANE
300mm DEPTH

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	SAMI LAYER ADDED & CTCR REMOVED FOR CENTURION - COUNCIL COMMENTS	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: **ALAMORA - STAGE 32 PAVEMENT PLAN**

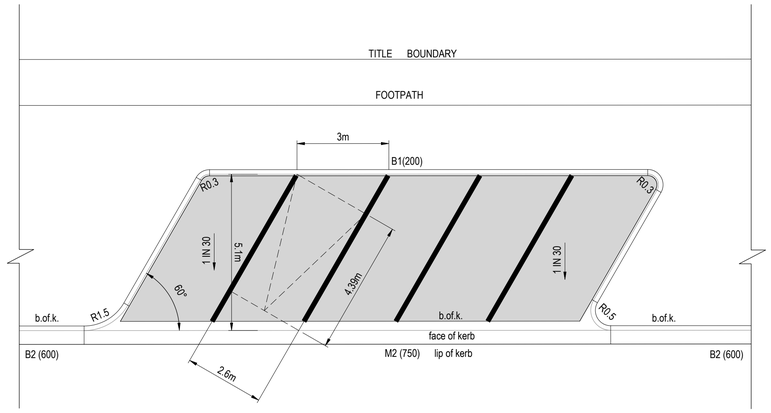
STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:500 (H) 1:50 (V)
H 10 5 0 10 20
V 1 0.5 0 1 2

N

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE
PROJECT No.	DRAWING No. / REVISION
200282.32	R700 / B

E:\20S\NERGY\TEMP\20S\NERGY\20S\NERGY\SERVER\SERVER\SERVER\CE\7456\EA\REDIB-A6BE-4D3B-9833-9F790C8A78E4\200282.32 - R700 - TYPICAL DETAILS.DWG

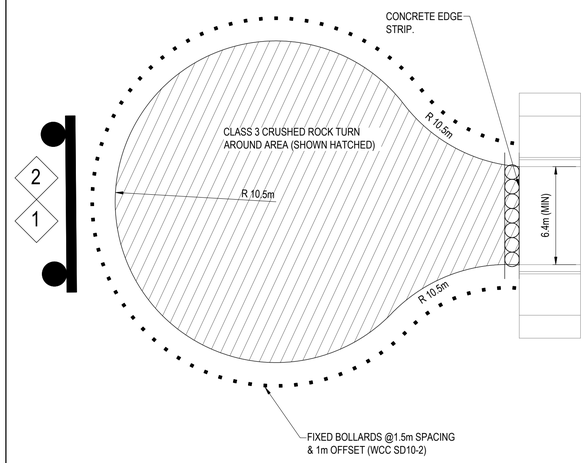


PARKING BAY DETAIL

NTS

NOTE:

1. INDENTED PARKING BAY PAVEMENT COMPOSITION, REFER PAVEMENT DETAIL SHEET R700.
2. RADII SHOWN ARE CORRECT UNLESS OTHERWISE SHOWN ON LAYOUT PLAN.
3. INDENTED PARKING BAY WIDTHS/LENGTHS TO CONFORM TO AS 2890.1, SECTION 2.4.1

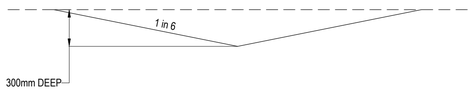


SIGN SCHEDULE

SIGN	REF
D4-5	1
ROAD CLOSED T2-4A	2

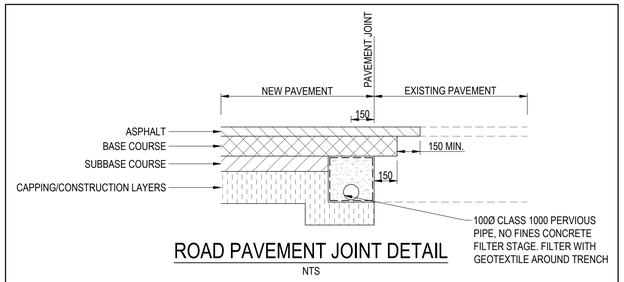
TYPICAL TEMPORARY TURN AREA TYPICAL DETAIL

NTS



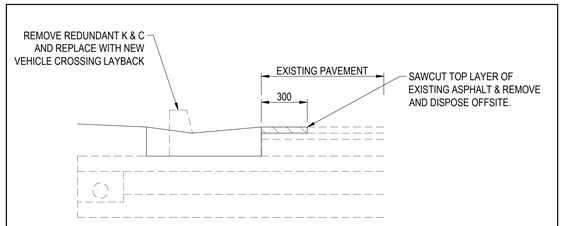
SWALE DRAIN TYPICAL SECTION

NOT TO SCALE



ROAD PAVEMENT JOINT DETAIL

NTS

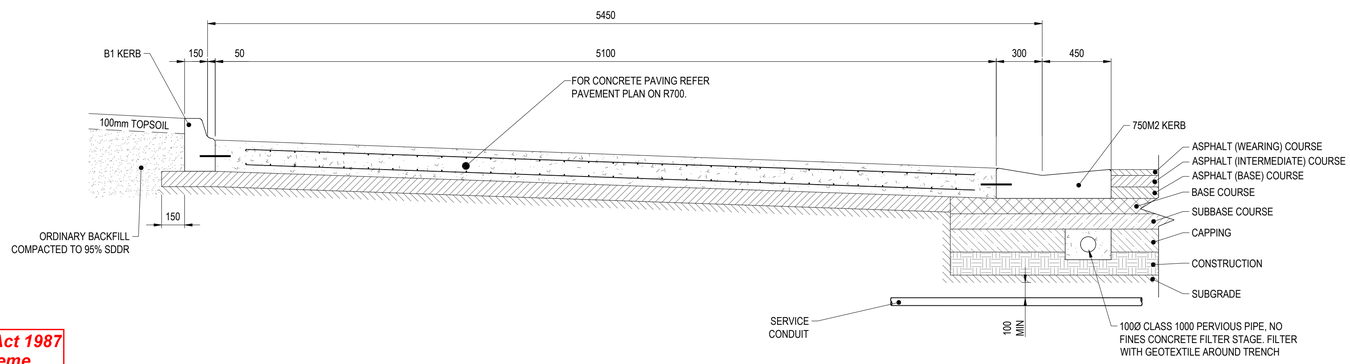


DRIVEWAY CUT-IN DETAIL

ISHTAR STREET & CENTRUION AVENUE

NTS

B



CENTURION AVENUE - SECTION THROUGH PARKING

(DIM. IN mm)
NOT TO SCALE

NOTES:
CONDUITS FOR GAS, WATER, ELECTRICITY AND TELECOM SERVICES TO BE LOCATED CLEAR OF PAVEMENT AND SUBSURFACE DRAIN

NOTE
PAVEMENT LAYERS ARE TO BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH WYNDHAM CITY COUNCIL SPECIFICATIONS AND REQUIREMENTS.

WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & 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

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 TYPICAL DETAILS

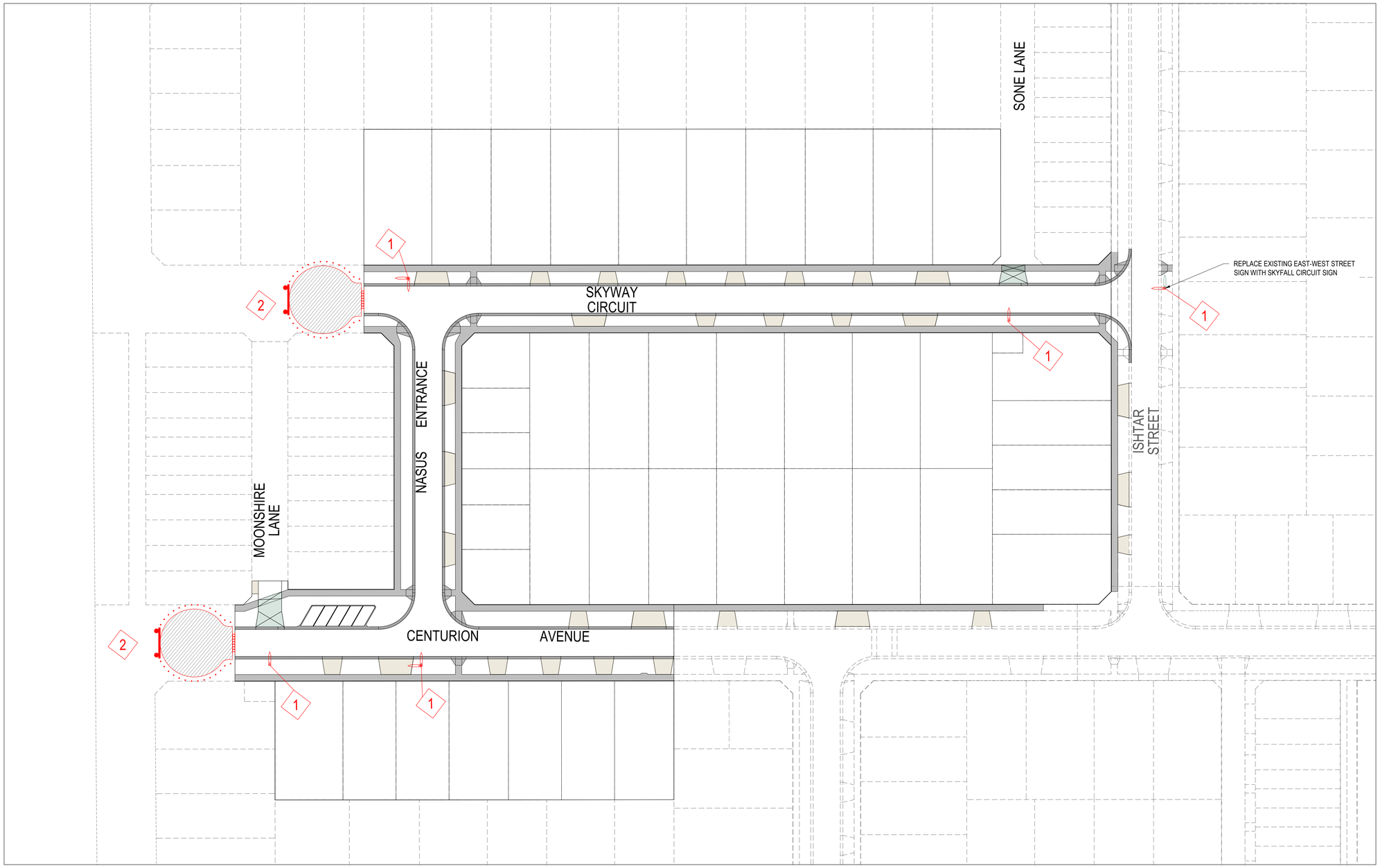
STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : AS SHOWN

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R701	A

E:\12DS\ENERGY\TEMP\12DS\ENERGY\12DS\ENERGY\SERVERSERVER\SERVER\VICE7456\EA76E0BD-A6BE-45DB-8833-9F790C0A17BE-\200282.32 - R700 - TYPICAL DETAILS.DWG



SIGN SCHEDULE

SIGN	REF	QUANTITY
STREET SIGN	1	REFER TABLE
ROAD CLOSED T2-4A D4-5	2	2No.

STREET SIGN SCHEDULE

SKYWAY CIRCUIT	2No.
NASUS ENTRANCE	2No.
CENTURION AV.	1No.
MOONSHIRE LANE	1No.
SONE LANE	1No.

LINEMARKING & SIGNAGE NOTES:

1. ALL LINE MARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742.1 AND AS 1742.2, UNLESS SPECIFICALLY SHOWN OTHERWISE.
2. LINEMARKING IS TO BE INSTALLED USING EXTRUDED LONG LIFE THERMOPLASTIC PAINT. TEMPORARY LINEMARKING USING ORDINARY PAINT IS TO BE APPLIED WHEN WEARING COURSE ASPHALT IS NOT APPLIED FOR A PERIOD OF TIME E.G. AT PRACTICAL COMPLETION.
3. ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AS 1742-3.
4. LINEMARKING SET OUT SHALL BE INSPECTED AND APPROVED BY COUNCIL BEFORE FINAL LINEMARKING IS CARRIED OUT.
5. HIGH FRICTION SURFACE TREATMENT COLOURED EMERALD GREEN MUST BE PROVIDED WITHIN THE BICYCLE LANES MARKED AS GREEN ON THE PLAN. INSTALLATION MUST COMPLY WITH VICROADS STANDARD SECTION 430 FOR HIGH FRICTION SURFACE TREATMENTS TO MANUFACTURER'S SPECIFICATIONS.

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	DRIVEWAY CUT-IN DETAIL ADDED	M.P	A.W	M.T
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

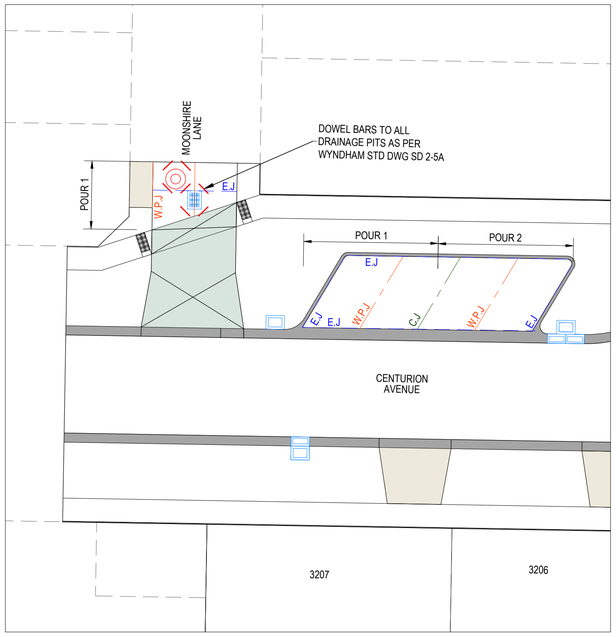
PROJECT: ALAMORA Tarneit

DRAWING TITLE: **ALAMORA - STAGE 32 SIGNAGE & LINEMARKING PLAN**

STATUS: **ISSUED FOR APPROVAL**
NOT FOR CONSTRUCTION

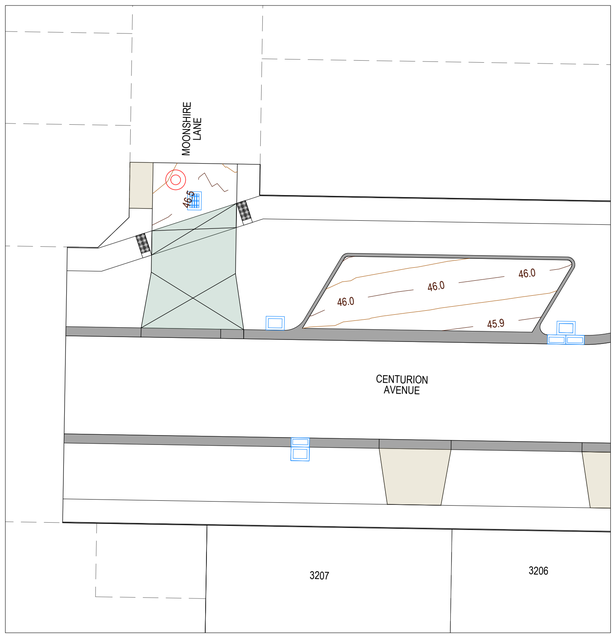
SCALE @ A1 : 1:500
0 5 10 20 30

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE
PROJECT No.	DRAWING No. / REVISION
200282.32	R800 / A



CONCRETE JOINTING LAYOUT PLAN

SCALE 1:200 @ A1



CONCRETE CONTOUR LAYOUT PLAN

SCALE 1:200 @ A1

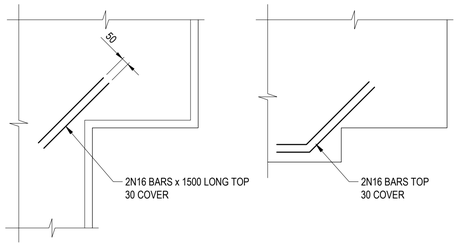
LEGEND - CONCRETE JOINTING PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- EXISTING STORMWATER DRAIN
- S — SEWER & MAINTENANCE STRUCTURES
- Ex S — EXISTING SEWER
- H — HOUSE DRAIN
- TACTILE PAVERS
- PROPOSED PAVEMENT, KERB & CHANNEL, FOOTPATH & DRIVEWAY

CONCRETE JOINT LEGEND

- I.J. — ISOLATION JOINT
- S.C. — SAWCUT JOINT
- E.J. — EXPANSION CONTROL JOINT (12m Max)
- C.J. — CONSTRUCTION JOINT

FOR JOINT DETAILS REFER STD DWG EDCM 401 & 402



TYPICAL RE-ENTRANT CORNER DETAIL

SCALE 1:NTS

Planning and Environment Act 1987
Wyndham Planning Scheme

Approved Plan As Required under Condition 41
Permit No WYP10107/17
Date 20/11/2025

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	14/08/25	SHEET ADDED - COUNCIL COMMENTS	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 CONCRETE JOINTING PLAN

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:100 — 1 0 1 2 3 4 5

N

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	R900	B

Project:	**ALAMORA - Stage 32 - 34**
Job No.:	**200282.32**
Council:	**WYNDHAM**
Region:	**SOUTH WEST / WEST REGION**
Design Standard:	**GAA**

Residential high: High densities. (Allotment size <450m2)
Road Zone Category 2: Secondary and local roads.
Public Park and Recreation Zone: Main zone for public open space, incl. golf courses.

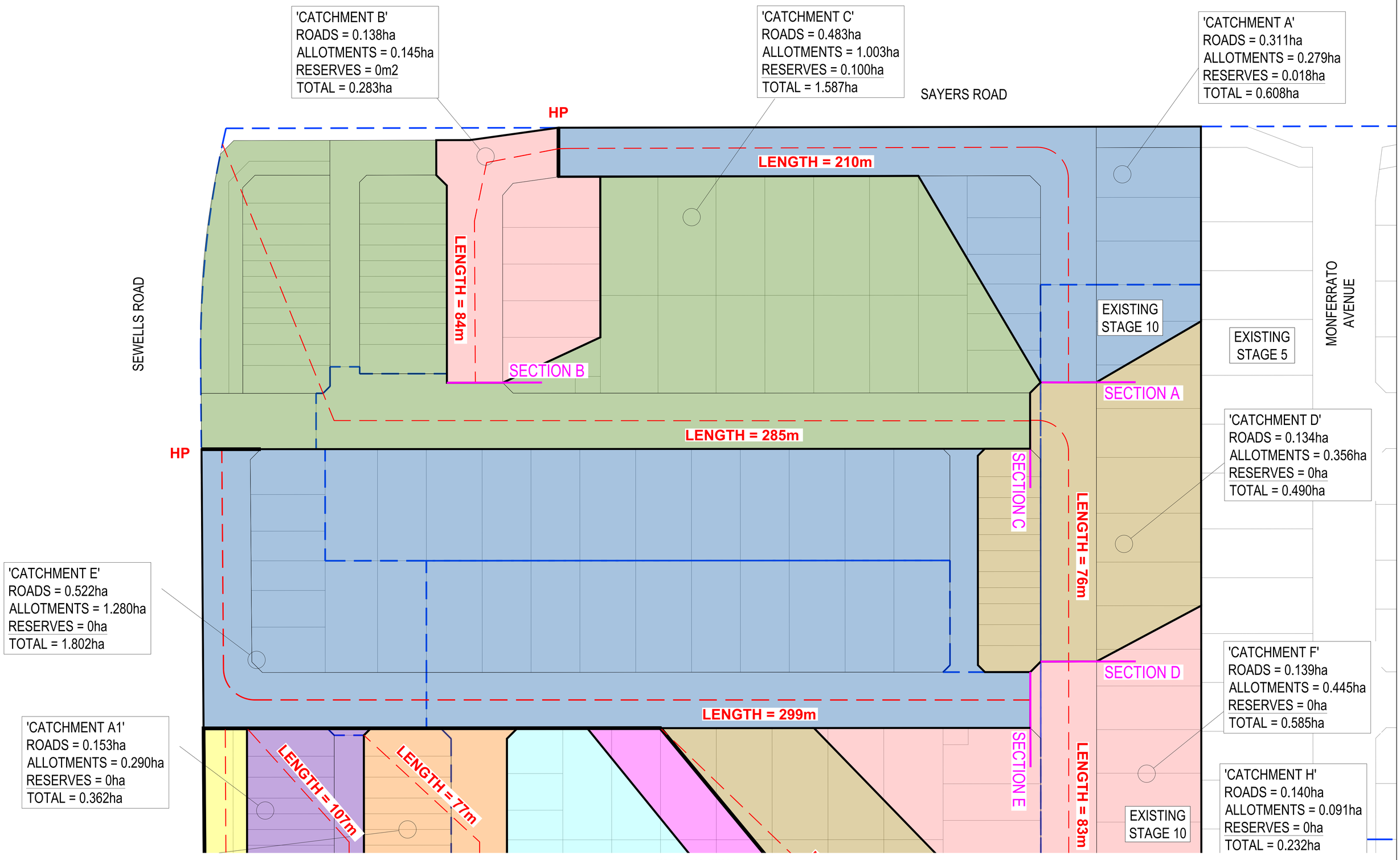
creo CIVIL

Prepared by:	M. Plant
Date:	23/07/25
Revision:	A

LAND USE	Residential high	Road Zone Category 2	Public Park and Recreation Zone
FREQUENCY FACTOR \ FRACTION IMPERVIOUS	0.80	0.60	0.25
C5	0.713	0.572	0.324
C10	0.751	0.602	0.341
C100	0.901	0.722	0.409

CATCHMENT AREAS	ha	ha	ha	Sub Area ha
A	0.279	0.311	0.018	0.608
B	0.145	0.138		0.283
C	1.003	0.483	0.100	1.587
D	0.356	0.134		0.490
E	1.280	0.522		1.802
F	0.445	0.139		0.585
G	0.311	0.096		0.406
H	0.091	0.140		0.232
TOTAL	3.911	1.963	0.118	5.992
A1	0.209	0.153		0.362
B1	0.136	0.106		0.241
C1	0.576	0.169		0.745
D1	0.250	0.137		0.387
E1	0.488	0.373	0.078	0.939
TOTAL	1.659	0.938	0.078	2.675

							CATCHMENTONAL ME		TIME OF CONCENTRATION			5 YEAR FLOW			100 YEAR FLOW				GAP FLOW
			Residential high	Road Zone Category 2	Public Park and Recreation Zone	Total Area	Length	Velocity	Critical Catchment	Calculated Tc	Adopted tc	A_e	I	Q	A_e	I	Q	PIPE ARI	EXCESS Q100 - QPIPE
NODE	DESCRIPTION	CONTRIBUTING CATCHMENTS	ha	ha	ha	ha	m	m/s		min	min	ha	mm/hr	m^3/s	ha	mm/hr	m^3/s		m^3/s
A	SECTION A	A	0.28	0.31	0.02	0.61	210	0.98	A	8.6	8.6	0.38	66.4	0.07	0.48	138.9	0.19	5 YEAR FLOW	0.116
B	SECTION B	B	0.14	0.14		0.28	81	0.57	B	7.4	7.4	0.18	70.9	0.04	0.23	147.8	0.09	5 YEAR FLOW	0.059
C	SECTION C	B C	1.15	0.62	0.10	1.87	285	0.78	C	11.1	11.1	1.21	58.8	0.20	1.52	123.5	0.52	5 YEAR FLOW	0.326
D	SECTION D	A B C D	1.78	1.07	0.12	2.97	76	0.88	C	12.5	12.5	1.92	55.3	0.29	2.42	116.3	0.78	5 YEAR FLOW	0.489
E	SECTION E	E	1.28	0.52		1.80	299	0.93	E	10.4	10.4	1.21	60.8	0.20	1.53	127.6	0.54	5 YEAR FLOW	0.338
F	SECTION F	A B C D E F	3.51	1.73	0.12	5.35	83	1.04	D	13.9	13.9	3.53	52.4	0.51	4.46	110.4	1.37	5 YEAR FLOW	0.853
G	SECTION G	G	0.31	0.10		0.41	135	0.56	G	9.0	9.0	0.28	64.9	0.05	0.35	135.8	0.13	5 YEAR FLOW	0.082
H	SECTION H	A B C D E F G H	3.91	1.96	0.12	5.99	72	0.94	F	15.1	15.1	3.95	50.0	0.55	4.99	105.3	1.46	5 YEAR FLOW	0.911
A1	SECTION A1	A1	0.21	0.15		0.36	107	0.56	A1	3.2	3.2	0.24	94.9	0.06	0.30	192.4	0.16	5 YEAR FLOW	0.097
B1	SECTION B1	B1	0.14	0.11		0.24	77	0.88	B1	1.5	1.5	0.16	115.8	0.05	0.20	234.2	0.13	5 YEAR FLOW	0.079
C1	SECTION C1	A1 B1 C1	0.92	0.43		1.35	94	0.77	A1	5.2	5.2	0.90	81.2	0.20	1.14	167.3	0.53	5 YEAR FLOW	0.326
D1	SECTION D1	A1 B1 C1 D1	1.17	0.56		1.74	77	0.94	C1	6.6	6.6	1.16	74.3	0.24	1.46	154.3	0.63	5 YEAR FLOW	0.388
E1	SECTION E1	E1	0.49	0.37	0.08	0.94	301	0.64	E1	7.8	7.8	0.59	69.1	0.11	0.74	144.1	0.30	5 YEAR FLOW	0.184



FOR CONTINUATION REFER C101

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

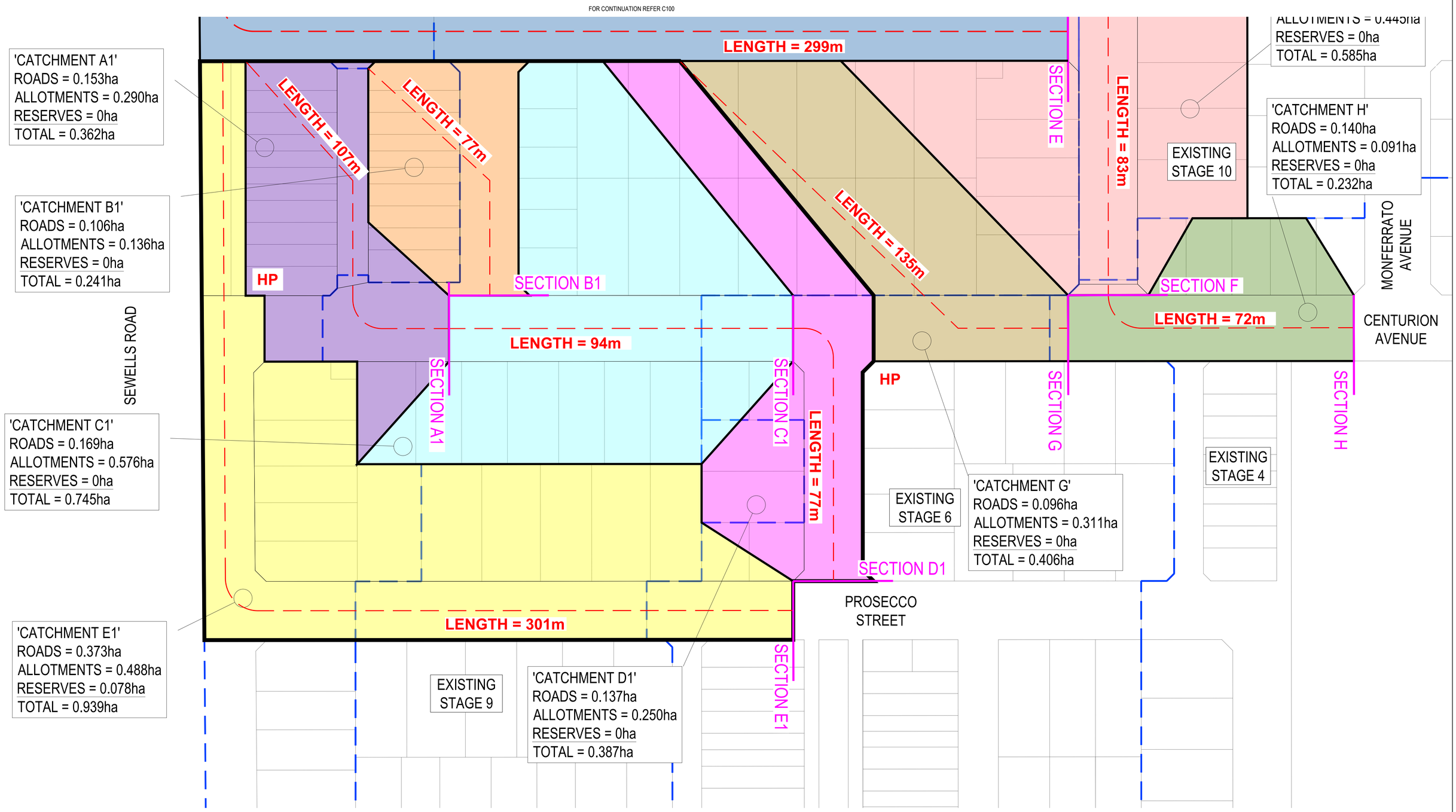
DRAWING TITLE: ALAMORA - STAGE 32 - 34
Q100 CATCHMENT PLAN - 1

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:500 (0 5 10 20 30)

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C100	B



REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 - 34
Q100 CATCHMENT PLAN - 2

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

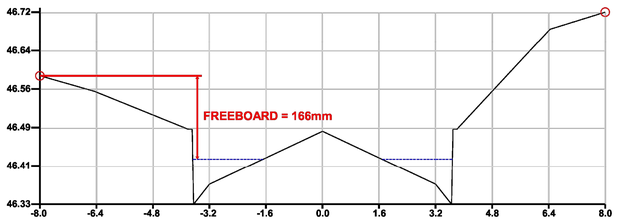
SCALE @ A1 : 1:500
0 5 10 20 30

N

DESIGNED	PROJECT ENGINEER	
M.PLANT	A.WALE	
DRAWN	PROJECT MANAGER	
M.PLANT	M.TROUNCE	
PROJECT No.	DRAWING No.	REVISION
200282.32	C101	B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION A
Print-out date: 13/03/2025 - Time: 9:11
Data File: D:\PC\STAGE 32 - SECTION A.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.116 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.116 cumecs

3. RESULTS: Water surface elevation = 46.423m

Main Waterway grade = 1 in 55, Main Channel / Low Flow Channel grade = 1 in 55.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.14	0.00	0.14
D(Max) = Max. Depth (m):	0.00	0.09	0.00	0.09
D(Ave) = Ave. Depth (m):	0.00	0.04	0.00	0.04
V = Ave. Velocity (m/s):	0.00	0.98	0.00	0.98
D(Max) x V (cumecs/m):	0.00	0.09	0.00	0.09
D(Ave) x V (cumecs/m):	0.00	0.03	0.00	0.03
Froude Number:	0.00	1.66	0.00	N/A
Area (m^2):	0.00	0.14	0.00	0.14
Wetted Perimeter (m):	0.00	4.11	0.00	4.11
Flow Width (m):	0.00	3.97	0.00	3.97
Hydraulic Radius (m):	0.00	0.03	0.00	0.03
Composite Manning's n:	0.000	0.014	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

SEGMENT NO.	LEFT HAND POINT CHAINAGE (m)	LEFT HAND POINT R.L. (m)	RIGHT HAND POINT CHAINAGE (m)	RIGHT HAND POINT R.L. (m)	MANNING'S N
1	-8.000	46.589	-7.950	46.588	0.013
2	-7.950	46.588	-6.450	46.558	0.013
3	-6.450	46.558	-3.800	46.483	0.020
4	-3.800	46.483	-3.690	46.483	0.013
5	-3.690	46.483	-3.650	46.333	0.013
6	-3.650	46.333	-3.200	46.373	0.013
7	-3.200	46.373	0.000	46.479	0.015
8	0.000	46.479	3.200	46.373	0.015
9	3.200	46.373	3.650	46.333	0.013
10	3.650	46.333	3.690	46.483	0.013
11	3.690	46.483	3.800	46.483	0.013
12	3.800	46.483	6.440	46.682	0.020

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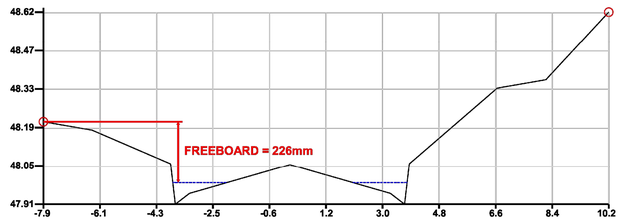
SECTION A

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION B
Print-out date: 29/05/2025 - Time: 7:06
Data File: D:\DESKTOP\PC SECTIONS\STAGE 32\STAGE 32 - SECTION B.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.059 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.059 cumecs

3. RESULTS: Water surface elevation = 47.986m

Main Waterway grade = 1 in 118, Main Channel / Low Flow Channel grade = 1 in 118.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.07	0.00	0.07
D(Max) = Max. Depth (m):	0.00	0.08	0.00	0.08
D(Ave) = Ave. Depth (m):	0.00	0.03	0.00	0.03
V = Ave. Velocity (m/s):	0.00	0.63	0.00	0.63
D(Max) x V (cumecs/m):	0.00	0.05	0.00	0.05
D(Ave) x V (cumecs/m):	0.00	0.02	0.00	0.02
Froude Number:	0.00	1.13	0.00	N/A
Area (m^2):	0.00	0.11	0.00	0.11
Wetted Perimeter (m):	0.00	3.52	0.00	3.52
Flow Width (m):	0.00	3.45	0.00	3.45
Hydraulic Radius (m):	0.00	0.03	0.00	0.03
Composite Manning's n:	0.000	0.014	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

SEGMENT NO.	LEFT HAND POINT CHAINAGE (m)	LEFT HAND POINT R.L. (m)	RIGHT HAND POINT CHAINAGE (m)	RIGHT HAND POINT R.L. (m)	MANNING'S N
1	-7.850	48.212	-7.800	48.211	0.013
2	-7.800	48.211	-6.300	48.181	0.013
3	-6.300	48.181	-3.800	48.056	0.020
4	-3.800	48.056	-3.650	47.906	0.013
5	-3.650	47.906	-3.200	47.946	0.013
6	-3.200	47.946	0.000	48.053	0.015
7	0.000	48.053	3.200	47.946	0.015
8	3.200	47.946	3.650	47.906	0.013
9	3.650	47.906	3.800	48.056	0.013
10	3.800	48.056	6.600	48.336	0.035
11	6.600	48.336	8.100	48.366	0.013
12	8.100	48.366	8.150	48.367	0.013

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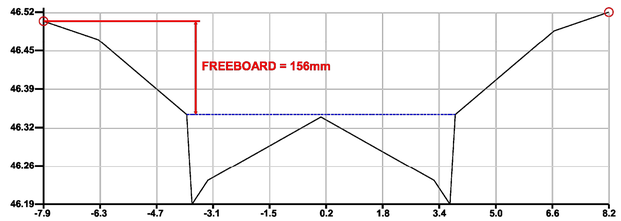
SECTION B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION C
Print-out date: 08/04/2025 - Time: 14:19
Data File: D:\DESKTOP\PC SECTIONS\STAGE 32\STAGE 32 - SECTION C.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.326 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.326 cumecs

3. RESULTS: Water surface elevation = 46.344m

Main Waterway grade = 1 in 200, Main Channel / Low Flow Channel grade = 1 in 200.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.39	0.00	0.39
D(Max) = Max. Depth (m):	0.00	0.15	0.00	0.15
D(Ave) = Ave. Depth (m):	0.00	0.07	0.00	0.07
V = Ave. Velocity (m/s):	0.00	0.78	0.00	0.78
D(Max) x V (cumecs/m):	0.00	0.12	0.00	0.12
D(Ave) x V (cumecs/m):	0.00	0.05	0.00	0.05
Froude Number:	0.00	0.97	0.00	0.97
Area (m^2):	0.00	0.50	0.00	0.50
Wetted Perimeter (m):	0.00	7.73	0.00	7.73
Flow Width (m):	0.00	7.60	0.00	7.60
Hydraulic Radius (m):	0.00	0.07	0.00	0.07
Composite Manning's n:	0.000	0.015	0.000	0.015
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

SEGMENT NO.	LEFT HAND POINT CHAINAGE (m)	LEFT HAND POINT R.L. (m)	RIGHT HAND POINT CHAINAGE (m)	RIGHT HAND POINT R.L. (m)	MANNING'S N
1	-7.850	46.500	-7.800	46.499	0.013
2	-7.800	46.499	-6.300	46.469	0.013
3	-6.300	46.469	-3.800	46.344	0.020
4	-3.800	46.344	-3.650	46.194	0.013
5	-3.650	46.194	-3.200	46.234	0.013
6	-3.200	46.234	0.000	46.340	0.015
7	0.000	46.340	3.200	46.234	0.015
8	3.200	46.234	3.650	46.194	0.013
9	3.650	46.194	3.800	46.344	0.013
10	3.800	46.344	6.600	46.484	0.020
11	6.600	46.484	8.100	46.514	0.013
12	8.100	46.514	8.150	46.515	0.013

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SECTION C

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 - 34
Q100 CROSS SECTIONS - 1

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

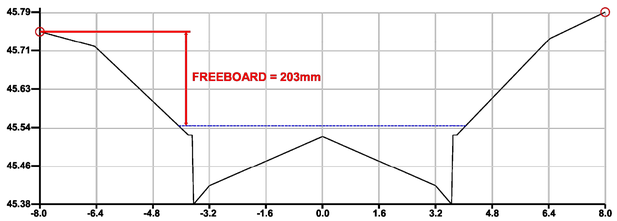
SCALE @ A1 :

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C102	B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION D
Print-out date: 13/03/2025 - Time: 12:50
Data File: D:\PC\STAGE 32 - SECTION D.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.489 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.489 cumecs

3. RESULTS: Water surface elevation = 45.547m

Main Waterway grade = 1 in 167, Main Channel / Low Flow Channel grade = 1 in 167.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.56	0.00	0.56
D(Max) = Max. Depth (m):	0.00	0.17	0.00	0.17
D(Ave) = Ave. Depth (m):	0.00	0.08	0.00	0.08
V = Ave. Velocity (m/s):	0.00	0.88	0.00	0.88
D(Max) x V (cumecs/m):	0.00	0.15	0.00	0.15
D(Ave) x V (cumecs/m):	0.00	0.07	0.00	0.07
Froude Number:	0.00	1.00	0.00	1.00
Area (m^2):	0.00	0.64	0.00	0.64
Wetted Perimeter (m):	0.00	8.37	0.00	8.37
Flow Width (m):	0.00	8.13	0.00	8.13
Hydraulic Radius (m):	0.00	0.08	0.00	0.08
Composite Manning's n:	0.000	0.016	0.000	0.016
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-8.000	45.750	-7.950	45.749	0.013
2	-7.950	45.749	-6.450	45.718	0.013
3	-6.450	45.718	-3.800	45.527	0.035
4	-3.800	45.527	-3.690	45.527	0.013
5	-3.690	45.527	-3.650	45.377	0.013
6	-3.650	45.377	-3.200	45.417	0.013
7	-3.200	45.417	0.000	45.524	0.015
8	0.000	45.524	3.200	45.417	0.015
9	3.200	45.417	3.650	45.377	0.013
10	3.650	45.377	3.690	45.527	0.013
11	3.690	45.527	3.800	45.527	0.013
12	3.800	45.527	6.430	45.735	0.020

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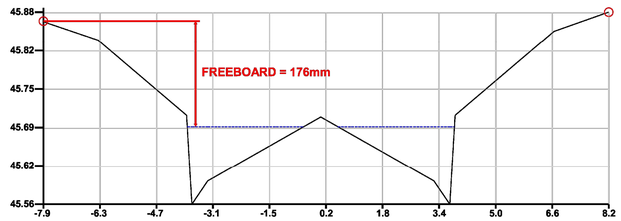
SECTION D

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION E
Print-out date: 13/03/2025 - Time: 12:52
Data File: D:\PC\STAGE 32 - SECTION E.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.338 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.338 cumecs

3. RESULTS: Water surface elevation = 45.690m

Main Waterway grade = 1 in 110, Main Channel / Low Flow Channel grade = 1 in 110.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.34	0.00	0.34
D(Max) = Max. Depth (m):	0.00	0.13	0.00	0.13
D(Ave) = Ave. Depth (m):	0.00	0.06	0.00	0.06
V = Ave. Velocity (m/s):	0.00	0.93	0.00	0.93
D(Max) x V (cumecs/m):	0.00	0.12	0.00	0.12
D(Ave) x V (cumecs/m):	0.00	0.05	0.00	0.05
Froude Number:	0.00	1.27	0.00	N/A
Area (m^2):	0.00	0.36	0.00	0.36
Wetted Perimeter (m):	0.00	6.72	0.00	6.72
Flow Width (m):	0.00	6.60	0.00	6.60
Hydraulic Radius (m):	0.00	0.05	0.00	0.05
Composite Manning's n:	0.000	0.015	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-7.850	45.866	-7.800	45.864	0.035
2	-7.800	45.864	-6.300	45.834	0.013
3	-6.300	45.834	-3.800	45.709	0.020
4	-3.800	45.709	-3.650	45.560	0.013
5	-3.650	45.560	-3.200	45.599	0.013
6	-3.200	45.599	0.000	45.706	0.015
7	0.000	45.706	3.200	45.599	0.015
8	3.200	45.599	3.650	45.560	0.013
9	3.650	45.560	3.800	45.709	0.013
10	3.800	45.709	6.600	45.849	0.020
11	6.600	45.849	8.100	45.880	0.013
12	8.100	45.880	8.150	45.881	0.035

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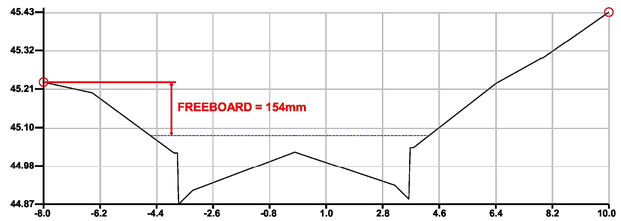
SECTION E

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION F
Print-out date: 08/04/2025 - Time: 14:23
Data File: D:\DESKTOP\PC SECTIONS\STAGE 32\STAGE 32 - SECTION F.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.853 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.853 cumecs

3. RESULTS: Water surface elevation = 45.073m

Main Waterway grade = 1 in 162, Main Channel / Low Flow Channel grade = 1 in 162.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.88	0.00	0.88
D(Max) = Max. Depth (m):	0.00	0.20	0.00	0.20
D(Ave) = Ave. Depth (m):	0.00	0.10	0.00	0.10
V = Ave. Velocity (m/s):	0.00	1.04	0.00	1.04
D(Max) x V (cumecs/m):	0.00	0.21	0.00	0.21
D(Ave) x V (cumecs/m):	0.00	0.10	0.00	0.10
Froude Number:	0.00	1.07	0.00	1.07
Area (m^2):	0.00	0.85	0.00	0.85
Wetted Perimeter (m):	0.00	9.12	0.00	9.12
Flow Width (m):	0.00	8.88	0.00	8.88
Hydraulic Radius (m):	0.00	0.09	0.00	0.09
Composite Manning's n:	0.000	0.015	0.000	0.015
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-8.000	45.227	-7.950	45.226	0.013
2	-7.950	45.226	-6.450	45.196	0.013
3	-6.450	45.196	-3.850	45.023	0.020
4	-3.850	45.023	-3.740	45.023	0.013
5	-3.740	45.023	-3.700	44.873	0.013
6	-3.700	44.873	-3.250	44.913	0.013
7	-3.250	44.913	0.000	45.025	0.015
8	0.000	45.025	3.180	44.928	0.015
9	3.180	44.928	3.630	44.888	0.013
10	3.630	44.888	3.670	45.038	0.013
11	3.670	45.038	3.780	45.038	0.013
12	3.780	45.038	6.410	45.224	0.020

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SECTION F

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 - 34
Q100 CROSS SECTIONS - 2

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

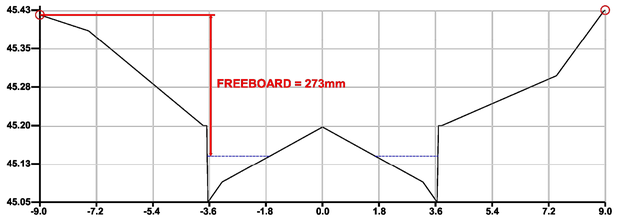
SCALE @ A1 :

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C103	B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION G
Print-out date: 08/04/2025 - Time: 14:26
Data File: D:\DESKTOP\PC SECTIONS\STAGE 32\STAGE 32 - SECTION G.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.082 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.082 cumecs

3. RESULTS: Water surface elevation = 45.144m

Main Waterway grade = 1 in 171, Main Channel / Low Flow Channel grade = 1 in 171.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.08	0.00	0.08
D(Max) = Max. Depth (m):	0.00	0.09	0.00	0.09
D(Ave) = Ave. Depth (m):	0.00	0.04	0.00	0.04
V = Ave. Velocity (m/s):	0.00	0.56	0.00	0.56
D(Max) x V (cumecs/m):	0.00	0.05	0.00	0.05
D(Ave) x V (cumecs/m):	0.00	0.02	0.00	0.02
Froude Number:	0.00	0.94	0.00	N/A
Area (m^2):	0.00	0.14	0.00	0.14
Wetted Perimeter (m):	0.00	4.14	0.00	4.14
Flow Width (m):	0.00	4.00	0.00	4.00
Hydraulic Radius (m):	0.00	0.03	0.00	0.03
Composite Manning's n:	0.000	0.015	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-9.000	45.417	-8.950	45.416	0.013
2	-8.950	45.416	-7.450	45.386	0.013
3	-7.450	45.386	-3.800	45.203	0.020
4	-3.800	45.203	-3.690	45.203	0.013
5	-3.690	45.203	-3.650	45.054	0.013
6	-3.650	45.054	-3.200	45.093	0.013
7	-3.200	45.093	0.000	45.200	0.015
8	0.000	45.200	3.200	45.093	0.015
9	3.200	45.093	3.650	45.054	0.013
10	3.650	45.054	3.690	45.203	0.013
11	3.690	45.203	3.800	45.203	0.013
12	3.800	45.203	7.450	45.299	0.020

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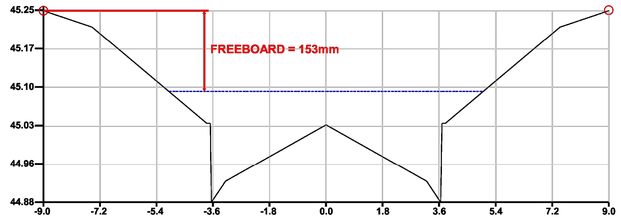
SECTION G

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION H
Print-out date: 08/04/2025 - Time: 14:28
Data File: D:\DESKTOP\PC SECTIONS\STAGE 32\STAGE 32 - SECTION H.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.911 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.911 cumecs

3. RESULTS: Water surface elevation = 45.093m

Main Waterway grade = 1 in 200, Main Channel / Low Flow Channel grade = 1 in 200.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.95	0.00	0.95
D(Max) = Max. Depth (m):	0.00	0.21	0.00	0.21
D(Ave) = Ave. Depth (m):	0.00	0.10	0.00	0.10
V = Ave. Velocity (m/s):	0.00	0.94	0.00	0.94
D(Max) x V (cumecs/m):	0.00	0.20	0.00	0.20
D(Ave) x V (cumecs/m):	0.00	0.10	0.00	0.10
Froude Number:	0.00	0.94	0.00	0.94
Area (m^2):	0.00	1.01	0.00	1.01
Wetted Perimeter (m):	0.00	10.25	0.00	10.25
Flow Width (m):	0.00	10.01	0.00	10.01
Hydraulic Radius (m):	0.00	0.10	0.00	0.10
Composite Manning's n:	0.000	0.016	0.000	0.016
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-9.000	45.246	-8.950	45.245	0.013
2	-8.950	45.245	-7.450	45.215	0.013
3	-7.450	45.215	-3.800	45.033	0.020
4	-3.800	45.033	-3.690	45.033	0.013
5	-3.690	45.033	-3.650	44.883	0.013
6	-3.650	44.883	-3.200	44.923	0.013
7	-3.200	44.923	0.000	45.030	0.015
8	0.000	45.030	3.200	44.923	0.015
9	3.200	44.923	3.650	44.883	0.013
10	3.650	44.883	3.690	45.033	0.013
11	3.690	45.033	3.800	45.033	0.013
12	3.800	45.033	7.450	45.215	0.020

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SECTION H

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32 - 34
Q100 CROSS SECTIONS - 3

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

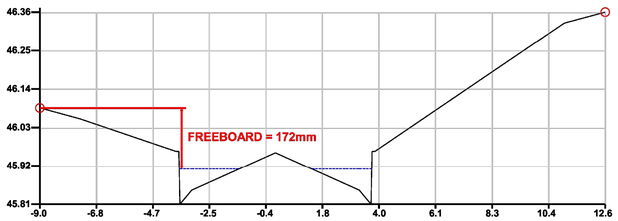
SCALE @ A1 :

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C104	B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION A1
Print-out date: 29/05/2025 - Time: 7:09
Data File: D:\STAGE 32 - SECTION A1.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.097 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.097 cumecs

3. RESULTS: Water surface elevation = 45.914m

Main Waterway grade = 1 in 200, Main Channel / Low Flow Channel grade = 1 in 200.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.10	0.00	0.10
D(Max) = Max. Depth (m):	0.00	0.10	0.00	0.10
D(Ave) = Ave. Depth (m):	0.00	0.04	0.00	0.04
V = Ave. Velocity (m/s):	0.00	0.56	0.00	0.56
D(Max) x V (cumecs/m):	0.00	0.06	0.00	0.06
D(Ave) x V (cumecs/m):	0.00	0.02	0.00	0.02
Froude Number:	0.00	0.89	0.00	N/A
Area (m^2):	0.00	0.18	0.00	0.18
Wetted Perimeter (m):	0.00	4.74	0.00	4.74
Flow Width (m):	0.00	4.58	0.00	4.58
Hydraulic Radius (m):	0.00	0.04	0.00	0.04
Composite Manning's n:	0.000	0.015	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-9.000	46.086	-8.950	46.085	0.013
2	-8.950	46.085	-7.450	46.055	0.013
3	-7.450	46.055	-3.800	45.964	0.020
4	-3.800	45.964	-3.690	45.964	0.013
5	-3.690	45.964	-3.650	45.814	0.013
6	-3.650	45.814	-3.200	45.854	0.013
7	-3.200	45.854	0.000	45.960	0.015
8	0.000	45.960	3.200	45.854	0.015
9	3.200	45.854	3.650	45.814	0.013
10	3.650	45.814	3.690	45.964	0.013
11	3.690	45.964	3.800	45.964	0.013
12	3.800	45.964	11.040	46.325	0.035

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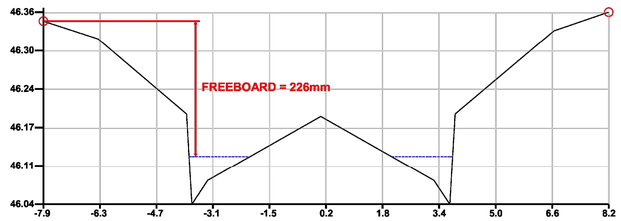
SECTION A1

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION B1
Print-out date: 05/02/2025 - Time: 12:00
Data File: D:\PC\STAGE 32 - SECTION B1.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.079 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.079 cumecs

3. RESULTS: Water surface elevation = 46.123m

Main Waterway grade = 1 in 60, Main Channel / Low Flow Channel grade = 1 in 60.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.10	0.00	0.10
D(Max) = Max. Depth (m):	0.00	0.08	0.00	0.08
D(Ave) = Ave. Depth (m):	0.00	0.03	0.00	0.03
V = Ave. Velocity (m/s):	0.00	0.88	0.00	0.88
D(Max) x V (cumecs/m):	0.00	0.07	0.00	0.07
D(Ave) x V (cumecs/m):	0.00	0.03	0.00	0.03
Froude Number:	0.00	1.59	0.00	N/A
Area (m^2):	0.00	0.11	0.00	0.11
Wetted Perimeter (m):	0.00	3.52	0.00	3.52
Flow Width (m):	0.00	3.45	0.00	3.45
Hydraulic Radius (m):	0.00	0.03	0.00	0.03
Composite Manning's n:	0.000	0.014	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-7.850	46.349	-7.800	46.348	0.013
2	-7.800	46.348	-6.300	46.319	0.013
3	-6.300	46.319	-3.800	46.194	0.020
4	-3.800	46.194	-3.650	46.043	0.013
5	-3.650	46.043	-3.200	46.083	0.013
6	-3.200	46.083	0.000	46.190	0.015
7	0.000	46.190	3.200	46.083	0.015
8	3.200	46.083	3.650	46.043	0.013
9	3.650	46.043	3.800	46.194	0.013
10	3.800	46.194	6.600	46.333	0.035
11	6.600	46.333	8.100	46.363	0.013
12	8.100	46.363	8.150	46.364	0.013

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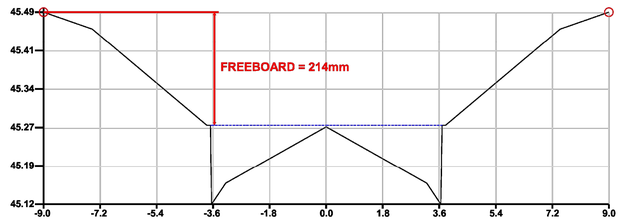
SECTION B1

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION C1
Print-out date: 05/02/2025 - Time: 12:03
Data File: D:\PC\STAGE 32 - SECTION C1.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.326 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.326 cumecs

3. RESULTS: Water surface elevation = 45.271m

Main Waterway grade = 1 in 200, Main Channel / Low Flow Channel grade = 1 in 200.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.37	0.00	0.37
D(Max) = Max. Depth (m):	0.00	0.15	0.00	0.15
D(Ave) = Ave. Depth (m):	0.00	0.07	0.00	0.07
V = Ave. Velocity (m/s):	0.00	0.77	0.00	0.77
D(Max) x V (cumecs/m):	0.00	0.11	0.00	0.11
D(Ave) x V (cumecs/m):	0.00	0.05	0.00	0.05
Froude Number:	0.00	0.96	0.00	0.96
Area (m^2):	0.00	0.48	0.00	0.48
Wetted Perimeter (m):	0.00	7.62	0.00	7.62
Flow Width (m):	0.00	7.38	0.00	7.38
Hydraulic Radius (m):	0.00	0.06	0.00	0.06
Composite Manning's n:	0.000	0.015	0.000	0.015
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-9.000	45.485	-8.950	45.484	0.013
2	-8.950	45.484	-7.450	45.453	0.013
3	-7.450	45.453	-3.800	45.271	0.020
4	-3.800	45.271	-3.690	45.271	0.013
5	-3.690	45.271	-3.650	45.121	0.013
6	-3.650	45.121	-3.200	45.161	0.013
7	-3.200	45.161	0.000	45.268	0.015
8	0.000	45.268	3.200	45.161	0.015
9	3.200	45.161	3.650	45.121	0.013
10	3.650	45.121	3.690	45.271	0.013
11	3.690	45.271	3.800	45.271	0.013
12	3.800	45.271	7.450	45.453	0.020

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SECTION C1

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32
Q100 CROSS SECTIONS - 4

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

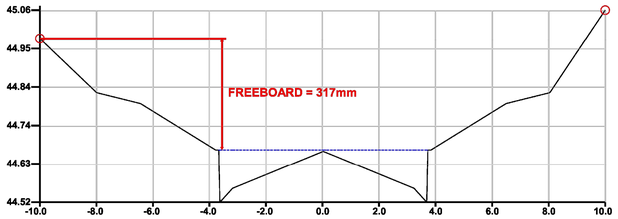
SCALE @ A1 :

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C105	B

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION D1
Print-out date: 05/02/2025 - Time: 17:17
Data File: D:\PC\STAGE 32 - SECTION D1.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.388 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.388 cumecs

3. RESULTS: Water surface elevation = 44.666m

Main Waterway grade = 1 in 133, Main Channel / Low Flow Channel grade = 1 in 133.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.46	0.00	0.46
D(Max) = Max. Depth (m):	0.00	0.15	0.00	0.15
D(Ave) = Ave. Depth (m):	0.00	0.07	0.00	0.07
V = Ave. Velocity (m/s):	0.00	0.94	0.00	0.94
D(Max) x V (cumecs/m):	0.00	0.14	0.00	0.14
D(Ave) x V (cumecs/m):	0.00	0.06	0.00	0.06
Froude Number:	0.00	1.17	0.00	1.17
Area (m^2):	0.00	0.49	0.00	0.49
Wetted Perimeter (m):	0.00	7.62	0.00	7.62
Flow Width (m):	0.00	7.38	0.00	7.38
Hydraulic Radius (m):	0.00	0.06	0.00	0.06
Composite Manning's n:	0.000	0.015	0.000	0.015
Split Flow?	-	-	-	No

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-10.000	44.983	-8.000	44.829	0.035
2	-8.000	44.829	-7.950	44.828	0.035
3	-7.950	44.828	-6.450	44.798	0.013
4	-6.450	44.798	-3.800	44.666	0.020
5	-3.800	44.666	-3.690	44.666	0.013
6	-3.690	44.666	-3.650	44.516	0.013
7	-3.650	44.516	-3.200	44.556	0.013
8	-3.200	44.556	0.000	44.662	0.015
9	0.000	44.662	3.200	44.556	0.015
10	3.200	44.556	3.650	44.516	0.013
11	3.650	44.516	3.690	44.666	0.013
12	3.690	44.666	3.800	44.666	0.013

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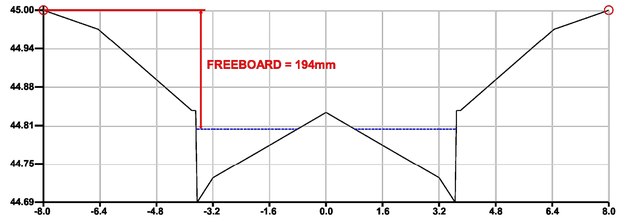
SECTION D1

PROJECT: 200282 Alamora Precinct B
STAGE 32 - SECTION E1
Print-out date: 05/02/2025 - Time: 17:20
Data File: D:\PC\STAGE 32 - SECTION E1.pcc

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.184 cumecs

There is no pipe discharge
Overland / Channel / Watercourse discharge = 0.184 cumecs

3. RESULTS: Water surface elevation = 44.808m

Main Waterway grade = 1 in 200, Main Channel / Low Flow Channel grade = 1 in 200.

	LEFT OVERBANK	MAIN CHANNEL	RIGHT OVERBANK	TOTAL CROSS-SECTION
Discharge (cumecs):	0.00	0.18	0.00	0.18
D(Max) = Max. Depth (m):	0.00	0.12	0.00	0.12
D(Ave) = Ave. Depth (m):	0.00	0.05	0.00	0.05
V = Ave. Velocity (m/s):	0.00	0.64	0.00	0.64
D(Max) x V (cumecs/m):	0.00	0.08	0.00	0.08
D(Ave) x V (cumecs/m):	0.00	0.03	0.00	0.03
Froude Number:	0.00	0.92	0.00	N/A
Area (m^2):	0.00	0.29	0.00	0.29
Wetted Perimeter (m):	0.00	5.94	0.00	5.94
Flow Width (m):	0.00	5.75	0.00	5.75
Hydraulic Radius (m):	0.00	0.05	0.00	0.05
Composite Manning's n:	0.000	0.015	0.000	N/A
Split Flow?	-	-	-	Yes

4. CROSS-SECTION DATA:

	LEFT HAND POINT		RIGHT HAND POINT		
SEGMENT NO.	CHAINAGE (m)	R.L. (m)	CHAINAGE (m)	R.L. (m)	MANNING'S N
1	-8.000	45.002	-7.950	45.001	0.013
2	-7.950	45.001	-6.450	44.971	0.013
3	-6.450	44.971	-3.800	44.838	0.020
4	-3.800	44.838	-3.690	44.838	0.013
5	-3.690	44.838	-3.650	44.688	0.013
6	-3.650	44.688	-3.200	44.728	0.013
7	-3.200	44.728	0.000	44.835	0.015
8	0.000	44.835	3.200	44.728	0.015
9	3.200	44.728	3.650	44.688	0.013
10	3.650	44.688	3.690	44.838	0.013
11	3.690	44.838	3.800	44.838	0.013
12	3.800	44.838	6.450	44.971	0.035

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SECTION E1

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
B	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T
A	29/05/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT: villawood properties — Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

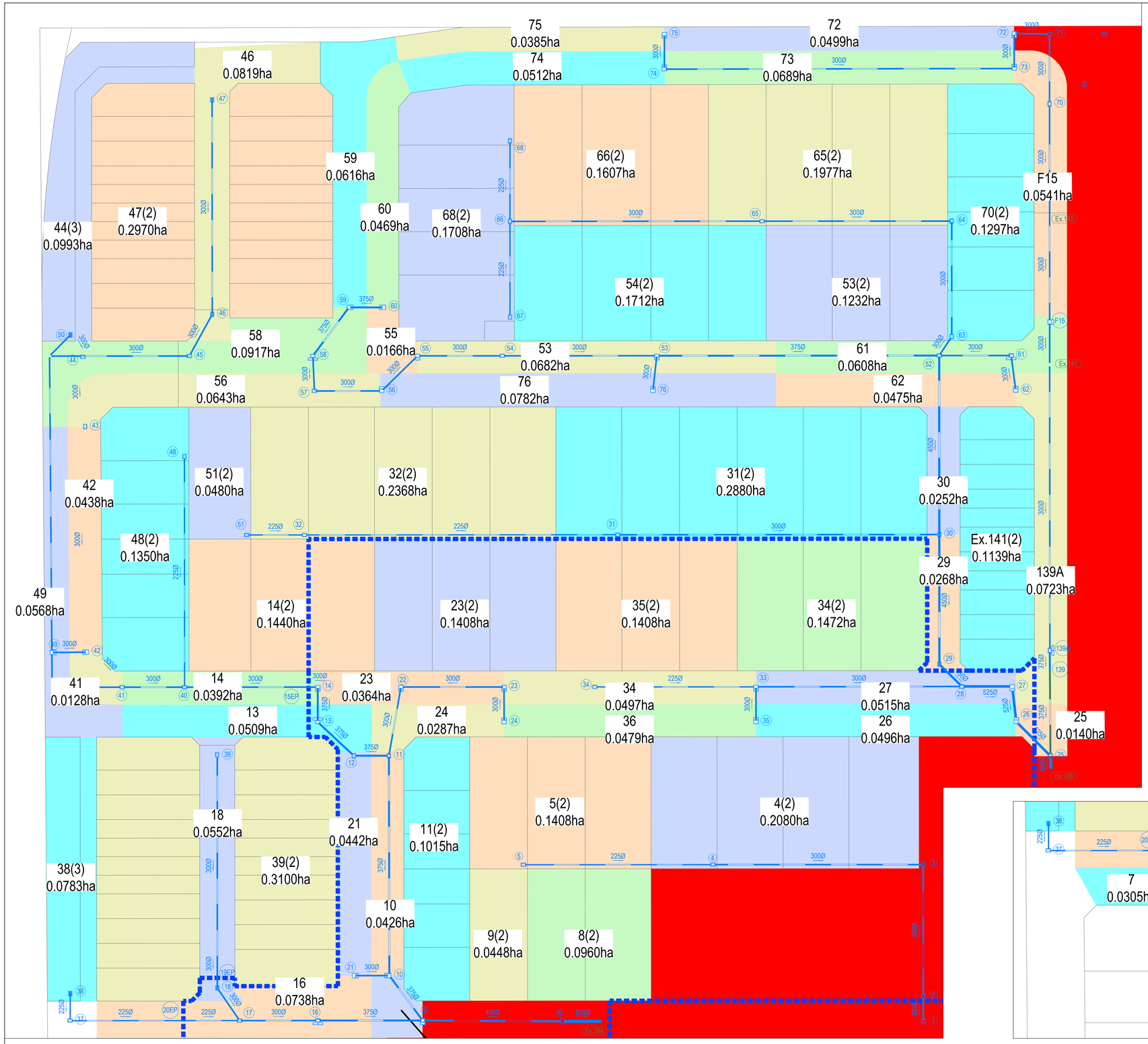
PROJECT: ALAMORA Tarneit

DRAWING TITLE: ALAMORA - STAGE 32
Q100 CROSS SECTIONS - 5

STATUS: ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

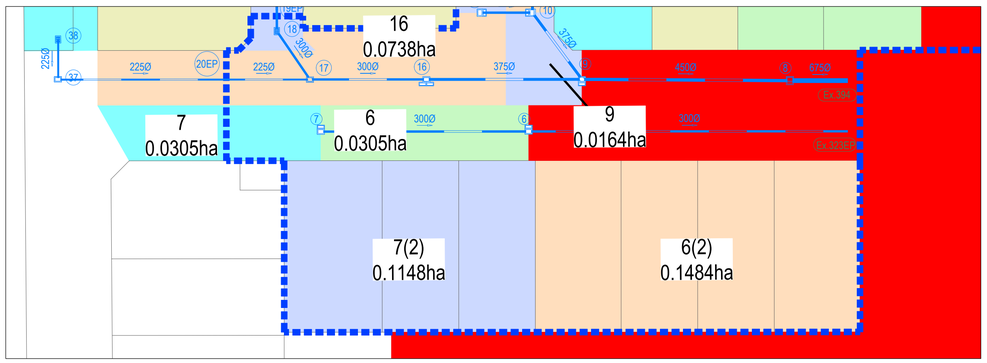
SCALE @ A1 :

DESIGNED: M.PLANT
PROJECT ENGINEER: A.WALE
DRAWN: M.PLANT
PROJECT MANAGER: M.TROUNCE
PROJECT No.: 200282.32
DRAWING No.: C106
REVISION: B



FOR CONTINUATION REFER RIGHT

FOR CONTINUATION REFER LEFT



REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
A	23/07/25	ISSUED FOR APPROVAL	M.P	A.W	M.T

CLIENT

villawood properties
Communities Designed for Living

creo CIVIL
Suite 1, 2 Bloomsbury Street
Newtown, VIC, Australia 3220

PROJECT

ALAMORA Tarneit

DRAWING TITLE

ALAMORA - STAGE 32
Q5 CATCHMENT PLAN

STATUS

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

SCALE @ A1 : 1:500
0 5 10 20 30

N

DESIGNED	PROJECT ENGINEER
M.PLANT	A.WALE
DRAWN	PROJECT MANAGER
M.PLANT	M.TROUNCE

PROJECT No.	DRAWING No.	REVISION
200282.32	C200	A

Project:	Alamora Stage 32
Job No:	200282.32

DATE:	23/07/2025
REVISION:	A

creo CIVIL

DRAINAGE COMPUTATIONS - HYDRAULICS - 1in 5 YEAR ARI -

Pipe US	Pipe DS	Pipe Length (m)	Pipe Size (mm)	Pipe Grade (1 in)	Tc (min)	Intensity (mm/hr)	Sum Ae (ha)	Pipe Flow (l/s)	Pipe Capacity (l/s)	Q/Qf	Capacity Velocity (m/s)	Cover Min (m)	US Pit Ku	Pipe V'head (m)	P'head Loss (m)	Pipe T'head Loss (m)	Pit WSE (m)	Pipe US HGL (m)	Pipe DS HGL (m)	HGL Slope (%)	HGL Grade (1 in)	Freeboard US (m)
2	1	6.2	300	187.2	6.85	74.78	0.2487	51.7	70.7	0.73	1	1.55	2.05	0.03	0.06	0.02	44.14	44.07	44.05	0.29	350.7	1.45
3	2	31.97	300	150	6.37	76.74	0.2487	53	79	0.67	1.12	0.78	2.09	0.03	0.06	0.29	45.07	44.99	44.66	1.05	95.6	0.76
4	3	51	300	125	5.68	79.6	0.2487	55	86.5	0.64	1.22	0.74	2.7	0.03	0.08	0.4	45.53	45.45	45.05	0.78	128.1	0.69
5	4	46	225	100	5	82.4	0.1004	23	44.9	0.51	1.13	0.71	6.9	0.02	0.12	0.38	46.03	45.91	45.53	0.82	122.1	0.63
6	Ex.323EP	52.08	300	120	5.41	80.7	0.2226	49.9	88.3	0.56	1.25	1.35	2.57	0.03	0.07	0.19	44.56	44.49	44.3	0.37	268.5	1.34
7	6	33.92	300	100	5	82.4	0.0993	22.7	96.7	0.23	1.37	1.19	7	0.01	0.04	0.32	44.92	44.88	44.56	0.95	104.8	1.19
8	Ex.394	9.43	675	400	10.13	61.51	1.2956	221.4	420.5	0.53	1.18	1.18	-1.72	0.02	-0.03	0.01	44.39	44.43	44.42	0.07	1443.2	1.12
9	8	33.95	450	140	9.75	62.82	1.2272	214.1	241.1	0.89	1.52	1.22	0.67	0.09	0.06	0.19	44.65	44.58	44.39	0.56	177.4	1.22
10	9	13.56	375	64	9.64	63.29	0.8657	152.2	219.3	0.69	1.99	1.35	0.65	0.1	0.06	0.1	44.81	44.75	44.65	0.75	132.8	1.3
11	10	53.31	375	110	9.05	65.71	0.8161	148.9	167.2	0.89	1.51	1.32	1.77	0.09	0.16	0.44	45.44	45.25	44.81	0.82	122	1.66
12	11	8.5	375	115	8.96	66.1	0.6061	111.3	163.6	0.68	1.48	1.53	0.56	0.05	0.03	0.03	45.48	45.45	45.41	0.4	248.4	1.63
13	12	11.96	375	150	8.8	66.73	0.6061	112.4	143.2	0.78	1.3	1.54	0.93	0.05	0.05	0.05	45.57	45.52	45.48	0.41	243.7	1.5
14	13	8.5	375	150	8.69	67.18	0.577	107.7	143.2	0.75	1.3	1.27	2.21	0.05	0.11	0.03	45.74	45.61	45.57	0.4	248.2	1.34
15EP	14	3.22	300	75	8.66	67.32	0.4519	84.5	111.7	0.76	1.58	1.42	2	0.07	0.15	0.02	45.89	45.74	45.71	0.76	131	1.21
16	9	25.4	375	252	5.93	78.58	0.3201	69.9	110.5	0.63	1	1.18	0.02	0.02		0.04	44.69	44.69	44.65	0.16	630	1.3
17	16	18.99	300	150	5.64	79.75	0.2779	61.6	79	0.78	1.12	1.23	0.82	0.04	0.03	0.08	44.8	44.76	44.69	0.41	246.9	1.34
18	17	9.57	300	50	5.51	80.3	0.2526	56.3	136.8	0.41	1.94	1.34	1.03	0.03	0.03	0.17	45	44.97	44.8	1.82	54.8	1.48
19EP	18	3.45	300	60	5.48	80.43	0.221	49.4	124.9	0.4	1.77	1.41	2	0.02	0.05	0.07	45.13	45.08	45	2.15	46.6	1.39
20EP	17	14.66	225	80	5.45	80.55	0.0254	5.7	50.2	0.11	1.26	1.38	2			0.12	44.91	44.91	44.8	0.79	125.9	1.42
21	10	8.57	300	100	5	82.4	0.0253	5.8	96.7	0.06	1.37	1	7			0.11	44.93	44.92	44.81	1.32	75.9	1.2
22	11	16.92	300	187.2	5.52	80.26	0.1376	30.7	70.7	0.43	1	1.44	1.83	0.01	0.02	0.02	45.45	45.43	45.41	0.1	994.4	1.53
23	22	25.01	300	187.2	5.1	81.97	0.1376	31.3	70.7	0.44	1	1.31	7.93	0.01	0.08	0.07	45.6	45.52	45.45	0.3	334.7	1.25
24	23	8.5	300	100	5	82.4	0.0164	3.8	96.7	0.04	1.37	1	7			0.06	45.66	45.66	45.6	0.65	153.3	1.2
25	Ex.138	3.55	600	200	8.89	66.39	2.0241	373.3	434.4	0.86	1.54	1.41	0.47	0.09	0.04	0.01	44.01	43.96	43.95	0.37	270.8	1.4
26	25	11.74	525	90	8.44	68.24	1.6509	312.9	453.5	0.69	2.09	1.52	0.6	0.11	0.06	0.06	44.13	44.07	44.01	0.53	189.1	1.61
27	26	8.63	525	70	8.38	68.49	1.6225	308.7	514.2	0.6	2.38	1.37	1.94	0.1	0.2	0.04	44.42	44.18	44.13	0.51	194.3	1.33
28	27	12.2	525	80	8.29	68.86	1.5931	304.7	481	0.63	2.22	1.45	0.47	0.1	0.05	0.06	44.48	44.44	44.38	0.5	199.3	1.38
29	28	7.65	450	80	8.22	69.13	1.3319	255.7	318.9	0.8	2.01	1.47	0.67	0.13	0.09	0.06	44.63	44.55	44.48	0.8	124.4	1.43
30	29	31.45	450	95	7.94	70.3	1.3165	257.1	292.6	0.88	1.84	1.33	0.43	0.13	0.06	0.26	44.95	44.89	44.63	0.81	123.1	1.27
31	30	78.02	300	95	6.19	77.48	0.4084	87.9	99.3	0.89	1.4	1.06	1.73	0.08	0.14	0.85	46.1	45.97	45.07	1.16	86.5	1.02
32	31	76	225	80	5.19	81.62	0.2031	46	50.2	0.92	1.26	0.77	3.61	0.07	0.25	0.81	47.16	46.92	46.1	1.07	93.4	0.55
33	28	49.96	300	100	5.58	80.02	0.2612	58.1	96.7	0.6	1.37	1.4	2.28	0.03	0.08	0.38	44.95	44.87	44.48	0.77	130.1	1.36
34	33	39.1	225	100	5	82.4	0.1004	23	44.9	0.51	1.13	1.37	6.9	0.02	0.12	0.31	45.38	45.26	44.95	0.8	125.1	1.28
35	33	8.5	300	100	5	82.4	0.0274	6.3	96.7	0.06	1.37	1.1	7			0.06	45.01	45	44.95	0.66	150.5	1.3
37	20EP	26.44	225	80	5.1	81.98	0.0254	5.8	50.2	0.12	1.26	1.34	2.09			0.33	45.25	45.24	44.91	1.24	80.5	1.44
38	37	6.84	225	100	5	82.4	0.0254	5.8	44.9	0.13	1.13	1.39	7		0.01	0.12	45.37	45.36	45.24	1.7	58.9	1.48
39	19EP	52.9	300	55	5	82.4	0.221	50.6	130.4	0.39	1.85	1.2	6.65	0.03	0.17	0.91	46.21	46.04	45.13	1.72	58	1.07
40	15EP	29.09	300	100	8.3	68.78	0.4519	86.3	96.7	0.89	1.37	1.36	0.27	0.08	0.02	0.23	46.14	46.12	45.89	0.8	125.5	1.25
41	40	15.14	300	110	8.11	69.58	0.3557	68.7	92.2	0.75	1.3	1.38	0.32	0.05	0.02	0.08	46.23	46.21	46.14	0.5	198	1.45
42	41	16.99	300	110	7.89	70.47	0.3483	68.2	92.2	0.74	1.3	1.36	2.12	0.05	0.1	0.1	46.46	46.33	46.23	0.62	162.5	1.57
43	42	8.43	300	160	7.76	71.01	0.3233	63.8	76.5	0.83	1.08	1.61	0.23	0.04	0.01	0.04	46.48	46.47	46.43	0.43	230.1	1.68
44	43	71.87	300	170	6.62	75.71	0.2908	61.2	74.2	0.82	1.05	1.65	2.15	0.04	0.08	0.43	47.01	46.91	46.48	0.6	167.8	2.02
45	44	33.92	300	187.2	6.06	78.04	0.2587	56.1	70.7	0.79	1	1.09	1.25	0.03	0.04	0.15	47.18	47.14	46.99	0.44	227.4	1.08
46	45	11.53	300	187.2	5.87	78.83	0.2587	56.6	70.7	0.8	1	1.06	1.19	0.03	0.04	0.07	47.29	47.25	47.18	0.62	161.5	1.18
47	46	52	300	187.2	5	82.4	0.2118	48.5	70.7	0.69	1	1.02	6.81	0.02	0.16	0.36	47.84	47.68	47.29	0.75	133.8	0.89
48	40	55.9	225	40	5	82.4	0.0962	22	71	0.31	1.79	0.85	7	0.02	0.11	1.2	47.45	47.34	46.14	2.15	46.5	0.77
49	43	8.5	300	100	5	82.4	0.0325	7.4	96.7	0.08	1.37	1.34	7			0.09	46.58	46.57	46.48	1.07	93.7	1.53
50	44	7.23	300	30					176.6		2.5	1.14				0.24	47.35	47.35	47.11	3.33	30	1.44
51	32	14	225	85	5	82.4	0.0342	7.8	48.7	0.16	1.23	0.67	7		0.01		47.18	47.17	47.16	0.03	3288.3	0.65
52	30	43.4	450	190	7.38	72.59	0.8937	180.2	206.9	0.87	1.3	1.13	1.47	0.07	0.1	0.18	45.23	45.12	44.95	0.41	245.4	1.24
53	52	68.5	375	100	6.66	75.55	0.4544	95.4	175.4	0.54	1.59	1.32	1.49	0.04	0.06	0.59	45.87	45.81	45.22	0.86	116.4	1.36
54	53	37.48	300	110	6.18	77.52	0.2828	60.9	92.2	0.66	1.3	1.39	1.89	0.04	0.07	0.28	46.22	46.15	45.87	0.76	131.9	1.44
55	54	20.56	300	120	5.91	78.65	0.1607	35.1	88.3	0.4	1.25	1.43	0.87	0.01	0.01	0.15	46.38	46.37	46.22	0.73	137.4	1.5
56	55	12.16	300	100	5.76	79.26	0.1512	33.3	96.7	0.34	1.37	1.2	1.63	0.01	0.02	0.16	46.56	46.54	46.38	1.32	75.7	1.38
57	56	16.32	300	187.2	5.49	80.38	0.1145	25.6	70.7	0.36	1	1.31	2.02	0.01	0.01	0.12	46.7	46.68	46.56	0.73	137.5	1.32
58	57	8.51	300	100	5.39	80.81	0.1145	25.7	96.7	0.27	1.37	1.01	2.25	0.01	0.02	0.12	46.83	46.82	46.69	1.43	70	1.2

Project:	Alamora Stage 32
Job No:	200282.32

DATE:	23/07/2025
REVISION:	A

creo CIVIL

DRAINAGE COMPUTATIONS - HYDRAULICS - 1in 5 YEAR ARI -

Pipe US	Pipe DS	Pipe Length (m)	Pipe Size (mm)	Pipe Grade (1 in)	Tc (min)	Intensity (mm/hr)	Sum Ae (ha)	Pipe Flow (l/s)	Pipe Capacity (l/s)	Q/Qf	Capacity Velocity (m/s)	Cover Min (m)	US Pit Ku	Pipe V'head (m)	P'head Loss (m)	Pipe T'head Loss (m)	Pit WSE (m)	Pipe US HGL (m)	Pipe DS HGL (m)	HGL Slope (%)	HGL Grade (1 in)	Freeboard US (m)
2	1	6.2	300	187.2	6.85	74.78	0.2487	51.7	70.7	0.73	1	1.55	2.05	0.03	0.06	0.02	44.14	44.07	44.05	0.29	350.7	1.45
59	58	14.65	375	252	5.14	81.82	0.062	14.1	110.5	0.13	1	1.07	3.29			0.17	47	47	46.83	1.15	87.2	1.13
60	59	8.5	375	252	5	82.4	0.0268	6.1	110.5	0.06	1	0.83	7			0.08	47.08	47.08	47	0.95	104.9	1.04
61	52	17.45	300	187.2	5.14	81.81	0.0619	14.1	70.7	0.2	1	1.13	3.14		0.01		45.23	45.22	45.22	0.02	4725.4	1.14
62	61	8.57	300	187.2	5	82.4	0.0272	6.2	70.7	0.09	1	0.85	7			0.08	45.32	45.31	45.23	0.96	103.6	1.05
63	52	5.52	300	30	6.95	74.38	0.3774	78	176.6	0.44	2.5	1.26	0.43	0.06	0.03	0.09	45.33	45.31	45.22	1.59	62.9	1.27
64	63	28	300	45	6.72	75.33	0.3774	79	144.2	0.55	2.04	1.2	2.08	0.06	0.13	0.64	46.15	45.98	45.33	2.31	43.4	1.07
65	64	46	300	120	6.1	77.85	0.3774	81.6	88.3	0.92	1.25	1.14	1.7	0.07	0.12	0.33	46.56	46.44	46.11	0.71	140.5	1.03
66	65	61.16	300	120	5.29	81.21	0.2364	53.3	88.3	0.6	1.25	1.08	2.29	0.03	0.07	0.42	47.05	46.97	46.56	0.68	146.6	1.12
67	66	23.2	225	100					44.9		1.13	0.69					47.04	47.04	47.04		1000000	0.88
68	66	19.5	225	100	5	82.4	0.1218	27.9	44.9	0.62	1.13	0.85	6.17	0.03	0.15	0.24	47.65	47.49	47.2	1.5	66.9	0.73
139	25	20.66	375	126	8.64	67.39	0.3652	68.4	156.3	0.44	1.41	1.25	2	0.02	0.04	0.13	44.18	44.14	44.01	0.65	154.6	1.26
139A	139	4.9	375	126	8.58	67.63	0.3652	68.6	156.3	0.44	1.41	1.23	-0.02	0.02		0.01	44.19	44.19	44.18	0.15	653.5	1.39
Ex.141	139A	69.32	300	128.4	7.63	71.57	0.3239	64.4	85.4	0.75	1.21	1.35	1.37	0.04	0.06	0.5	44.75	44.69	44.19	0.73	137.3	1.5
F15	Ex.141	10.38	300	50	7.54	71.94	0.2427	48.5	136.8	0.35	1.94	1.43	0.85	0.02	0.02	0.2	44.97	44.95	44.75	1.92	52	1.56
Ex.142	F15	27.45	300	50	7.3	72.91	0.2117	42.9	136.8	0.31	1.94	1.51	2	0.02	0.04	0.53	45.53	45.5	44.97	1.93	51.9	1.5
70	Ex.142	25.44	300	50	7.08	73.82	0.2117	43.4	136.8	0.32	1.94	1.44	1.94	0.02	0.04	0.47	46.05	46.01	45.53	1.87	53.6	1.44
71	70	16.92	300	187.2	6.8	74.98	0.1193	24.8	70.7	0.35	1	1.3	2.07	0.01	0.01	0.1	46.17	46.15	46.05	0.61	164.1	1.47
72	71	8.57	300	187.2	6.66	75.56	0.1193	25	70.7	0.35	1	1.34	2.21	0.01	0.01	0.08	46.26	46.25	46.16	0.97	103.6	1.46
73	72	8.5	300	187.2	6.52	76.15	0.0907	19.2	70.7	0.27	1	1.15	2.27		0.01	0.08	46.35	46.34	46.26	0.96	104.6	1.33
74	73	84.87	300	187.2	5.1	81.97	0.0513	11.7	70.7	0.17	1	1.27	3.34			0.49	46.85	46.84	46.35	0.58	171.5	1.34
75	74	8.5	300	100	5	82.4	0.022	5	96.7	0.05	1.37	1.01	7			0.13	46.98	46.98	46.85	1.53	65.2	1.22
76	53	8.55	300	100	5	82.4	0.0447	10.2	96.7	0.11	1.37	1.14	7		0.01	0.03	45.9	45.89	45.87	0.34	294.5	1.33

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Pit	Pit Type	Setout Easting (m)	Setout Northing (m)	Setout RL (m)	Catch ID	Tc (min)	Intensity (mm/hr)	CofR	Area (ha)	Ae (ha)	Sum Ae (ha)	Approach Flow l/s
1	JP	291911.6	5808753.59	45.32								
2	JP	291912.46	5808759.73	45.59								
3	JP	291916.89	5808791.39	45.83								
4	JP	291866.39	5808798.49	46.22	2P	5	82.4	0.71	0.208	0.1483	0.1483	33.9
5	JP	291820.83	5808804.86	46.65	2P	5	82.4	0.71	0.1408	0.1004	0.1004	23
Ex.323E	ENDPIPE	291833.16	5808756.44	45.49								
6	GSEP	291781.59	5808763.66	45.9	1P	5	82.4	0.57	0.0305	0.0175	0.1233	28.2
					2P	5	82.4	0.71	0.1484	0.1058		
7	GSEP	291747.99	5808768.36	46.11	1P	5	82.4	0.57	0.0305	0.0174	0.0993	22.7
					2P	5	82.4	0.71	0.1148	0.0819		
Ex.394	ENDPIPE	291834.31	5808764.63	45.47								
8	JP	291824.97	5808765.94	45.51	2P	5	82.4	0.71	0.096	0.0684	0.0684	15.7
9	GSEP	291791.38	5808770.87	45.87	1P	5	82.4	0.57	0.0164	0.0094	0.0413	9.5
					2P	5	82.4	0.71	0.0448	0.0319		
10	GSEP	291784.89	5808782.77	46.11	1P	5	82.4	0.57	0.0426	0.0243	0.0243	5.6
11	JP	291792.21	5808835.58	47.1	2P	5	82.4	0.71	0.1015	0.0724	0.0724	16.6
12	JP	291783.79	5808836.76	47.11								
13	DSEPG	291776.26	5808846.04	47.07	1P	5	82.4	0.57	0.0509	0.0291	0.0291	6.7
14	GSEP	291777.43	5808854.46	47.08	1P	5	82.4	0.57	0.0392	0.0224	0.1251	28.6
					2P	5	82.4	0.71	0.144	0.1027		
15EP	ENDPIPE	291774.25	5808854.9	47.1								
16	DSEPG	291766.23	5808774.39	45.99	1P	5	82.4	0.57	0.0738	0.0422	0.0422	9.7
17	JP	291747.42	5808777.02	46.14								
18	GJP	291743.16	5808785.59	46.49	1P	5	82.4	0.57	0.0552	0.0316	0.0316	7.2
19EP	ENDPIPE	291743.64	5808789.01	46.52								
20EP	ENDPIPE	291732.9	5808779.05	46.33								
21	GSEP	291776.4	5808783.96	46.12	1P	5	82.4	0.57	0.0442	0.0253	0.0253	5.8
22	GSEP	291797.43	5808851.67	46.98								
23	GSEP	291822.19	5808848.19	46.86	1P	5	82.4	0.57	0.0364	0.0208	0.1212	27.7
					2P	5	82.4	0.71	0.1408	0.1004		
24	GSEP	291821.01	5808839.78	46.86	1P	5	82.4	0.57	0.0287	0.0164	0.0164	3.8
Ex.138	JP	291950.8	5808809.64	45.37								
25	JP	291951.13	5808813.17	45.4	1P	5	82.4	0.57	0.014	0.008	0.008	1.8
26	GSEP	291944.07	5808822.55	45.74	1P	5	82.4	0.57	0.0496	0.0284	0.0284	6.5
27	GSEP	291944.27	5808831.18	45.75	1P	5	82.4	0.57	0.0515	0.0294	0.0294	6.7
28	JP	291932.18	5808832.87	45.86								
29	GJP	291927.53	5808838.95	46.07	1P	5	82.4	0.57	0.0268	0.0153	0.0153	3.5
30	GJP	291931.89	5808870.1	46.22	1P	5	82.4	0.57	0.0252	0.0144	0.0144	3.3
31	JP	291854.63	5808880.91	47.13	2P	5	82.4	0.71	0.288	0.2054	0.2054	47
32	JP	291779.36	5808891.45	47.71	2P	5	82.4	0.71	0.2368	0.1688	0.1688	38.6
33	GSEP	291882.7	5808839.72	46.31	1P	5	82.4	0.57	0.0497	0.0284	0.1334	30.5
					2P	5	82.4	0.71	0.1472	0.105		
34	JP	291843.98	5808845.14	46.66	2P	5	82.4	0.71	0.1408	0.1004	0.1004	23
35	GSEP	291881.52	5808831.31	46.31	1P	5	82.4	0.57	0.0479	0.0274	0.0274	6.3
37	GEP	291706.72	5808782.72	46.68								
38	GEP	291707.67	5808789.49	46.85	3P	5	82.4	0.32	0.0783	0.0254	0.0254	5.8
39	JP	291750.98	5808841.4	47.28	2P	5	82.4	0.71	0.31	0.221	0.221	50.6
40	JP	291745.44	5808858.94	47.39								
41	JP	291730.44	5808861.04	47.68	1P	5	82.4	0.57	0.0128	0.0073	0.0073	1.7
42	JP	291713.62	5808863.39	48.03	1P	5	82.4	0.57	0.0438	0.025	0.025	5.7
43	JP	291714.73	5808871.75	48.16								
44	JP	291724.18	5808943	49.04	3P	5	82.4	0.32	0.0993	0.0322	0.0322	7.4

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45	JP	291757.77	5808938.29	48.26								
46	JP	291764.67	5808947.53	48.47	1P	5	82.4	0.57	0.0819	0.0469	0.0469	10.7
47	GEP	291771.88	5808999.02	48.73	2P	5	82.4	0.71	0.297	0.2118	0.2118	48.5
48	JP	291753.19	5808914.3	48.22	2P	5	82.4	0.71	0.135	0.0962	0.0962	22
49	JP	291723.15	5808870.63	48.11	1P	5	82.4	0.57	0.0568	0.0325	0.0325	7.4
50	GEP	291729.92	5808947.37	48.79								
51	JP	291765.5	5808893.39	47.83	2P	5	82.4	0.71	0.048	0.0342	0.0342	7.8
52	JP	291937.91	5808913.08	46.47								
53	JP	291870.07	5808922.57	47.22	1P	5	82.4	0.57	0.0682	0.039	0.1269	29
					2P	5	82.4	0.71	0.1232	0.0878		
54	JP	291832.95	5808927.77	47.66	2P	5	82.4	0.71	0.1712	0.1221	0.1221	27.9
55	JP	291812.59	5808930.62	47.89	1P	5	82.4	0.57	0.0166	0.0095	0.0095	2.2
56	JP	291802.79	5808923.41	47.94	1P	5	82.4	0.57	0.0643	0.0368	0.0368	8.4
57	JP	291786.63	5808925.67	48.02								
58	GSEP	291787.43	5808934.14	48.03	1P	5	82.4	0.57	0.0917	0.0524	0.0524	12
59	GSEP	291797.73	5808944.57	48.13	1P	5	82.4	0.57	0.0616	0.0352	0.0352	8.1
60	JP	291806.15	5808943.39	48.12	1P	5	82.4	0.57	0.0469	0.0268	0.0268	6.1
61	JP	291955.19	5808910.66	46.38	1P	5	82.4	0.57	0.0608	0.0348	0.0348	8
62	JP	291955.12	5808902.09	46.37	1P	5	82.4	0.57	0.0475	0.0272	0.0272	6.2
63	JP	291941.57	5808917.21	46.6								
64	JP	291945.45	5808944.94	47.22								
65	JP	291899.89	5808951.32	47.59	2P	5	82.4	0.71	0.1977	0.141	0.141	32.3
66	GEP	291839.33	5808959.8	48.17	2P	5	82.4	0.71	0.1607	0.1146	0.1146	26.2
67	JP	291836.11	5808936.82	47.92								
68	JP	291842.04	5808979.11	48.38	2P	5	82.4	0.71	0.1708	0.1218	0.1218	27.9
139	ENDPIPE	291953.85	5808833.65	45.44								
139A	DSEPG	291954.53	5808838.51	45.58	1P	5	82.4	0.57	0.0723	0.0414	0.0414	9.5
Ex.141	JP	291964.14	5808907.15	46.25	2P	5	82.4	0.71	0.1139	0.0812	0.0812	18.6
F15	GEP	291965.58	5808917.44	46.53	1P	5	82.4	0.57	0.0541	0.031	0.031	7.1
Ex.142	ENDPIPE	291969.39	5808944.62	47.04								
70	JP	291972.91	5808969.81	47.48	2P	5	82.4	0.71	0.1297	0.0925	0.0925	21.2
71	GEP	291975.27	5808986.57	47.64								
72	GEP	291966.8	5808987.89	47.72	1P	5	82.4	0.57	0.0499	0.0285	0.0285	6.5
73	JP	291965.62	5808979.47	47.68	1P	5	82.4	0.57	0.0689	0.0394	0.0394	9
74	JP	291881.55	5808991.12	48.19	1P	5	82.4	0.57	0.0512	0.0293	0.0293	6.7
75	JP	291882.73	5808999.54	48.2	1P	5	82.4	0.57	0.0385	0.022	0.022	5
76	JP	291867.94	5808914.29	47.23	1P	5	82.4	0.57	0.0782	0.0447	0.0447	10.2