**STANDARD NOTES**

1. ALL WORKS IN THIS CONTRACT ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARD DRAWINGS AND SPECIFICATIONS OF THE RELEVANT RESPONSIBLE AUTHORITIES. ANY DISPUTE THAT ARISES AT ANY TIME UNTIL THE RESPONSIBLE AUTHORITIES ACCEPT THE WORKS FOR FUTURE CARE AND MAINTENANCE, THE STANDARD DRAWING AND SPECIFICATION WILL TAKE PRECEDENCE OVER THE CONSTRUCTION PLAN.

2. ALL ROADWORKS SIGNAGE IS TO BE IN ACCORDANCE WITH VICROADS WORKSITE TRAFFIC MANAGEMENT CODE OF PRACTICE INCORPORATING AS 1742.3.

**SITE MANAGEMENT**

3. ALL WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED CONSTRUCTION MANAGEMENT PLAN.

4. ALL TREES, SHRUBS ETC ARE TO BE RETAINED UNLESS OTHERWISE INDICATED.

5. DURING THE CONSTRUCTION AND MAINTENANCE PERIOD SILT FENCES ARE TO BE PLACED DOWNSTREAM OF ALL EXPOSED AREAS, AND SILT BARRIERS ARE TO BE PLACED UPSTREAM OF ALL PITS. THE SILT FENCES AND SILT BARRIERS ARE TO BE CHECKED AND MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD.

6. ALL AREAS OF THE SUBDIVISION EXPOSED OF VEGETATION, INCLUDING NATURESTRIPS, LOTS AND RESERVE ARE TO BE FULLY GRASSED BY HYDROMULCHING, WATERING AND MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD.

**GENERAL**

7. THE CONTRACTOR SHALL:

   a) GIVE 5 DAYS NOTICE IN WRITING TO COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORKS.
   b) NOTIFY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE 24 HOURS PRIOR TO WORKING ON ANY WEEKEND.
   c) BE FULLY AWARE OF ALL SITE CONDITIONS PRIOR TO TENDERING.
   d) BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE SERVICES.
   e) BE RESPONSIBLE FOR THE INSTALLATION OF ALL SERVICES REQUIRED FOR THE PROJECT.
   f) ENSURE THAT ALL SERVICES ARE INSTALLED TO THE SPECIFIED OFFSETS AND MEETS MINIMUM COVER REQUIREMENTS. ALL SURFACE FIXTURES, PITS, VALVES, FIREPLUGS, ETC. SHALL BE INSTALLED A MINIMUM OF 6.0m FROM ANY SIDE BOUNDARY IN THE ROAD RESERVE AND SHALL MATCH THE REQUIRED FINISHED SURFACE LEVEL. THIS APPLIES TO ALL SERVICES REQUIRED FOR THE PROJECT IRRESPECTIVE IF THEY ARE INSTALLED BY THE CONTRACTOR OR OTHERWISE.
   g) COMPLY WITH THE REQUIREMENTS OF THE MINES ACT 1958 AND RELEVANT REGULATIONS INCLUDING NOTIFICATION IN WRITING (CLAUSE 385) TO THE CHIEF MINING INSPECTOR OF THE INTENTION TO COMMENCE EXCAVATION OPERATIONS WHERE ANY TRENCH IS 1.5m OR MORE IN DEPTH.
   h) GIVE 24 HOURS NOTICE TO COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO BACKFILLING OF ANY PIPE TRENCHES OR LAYING OF ANY PAVEMENT OR CONCRETE WORKS SO THAT THE WORKS CAN BE CHECKED AND APPROVED.
   i) COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY (CONFINED SPACES) REGULATIONS AND CODE OF PRACTICE FOR CONFINED SPACES.
   j) BE RESPONSIBLE FOR THE COMPACTION AND/OR ANY OTHER REQUIRED TESTING OF THE PAVEMENT MATERIAL BY AN APPROVED GEOTECHNICAL CONSULTANT AS AND WHEN DIRECTED BY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

8. ANY WORKS WITHIN ROADWAYS SHALL SATISFY COUNCIL'S "REQUIREMENTS FOR OCCUPANCY OF ROAD RESERVE". CONTACT COGG TRAFFIC MANAGEMENT OFFICER ON TELEPHONE (03) 52724384 FOR FURTHER SPECIFIC DETAILS RELATING TO THIS PROJECT. A COPY OF THE TRAFFIC MANAGEMENT PLAN IS TO BE FORWARDED TO THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO WORKS COMMENCING.

9. ALL REASONABLE CARE SHALL BE TAKEN BY THE CONTRACTOR TO PRESERVE THE SURVEY PEGS. ANY REINSTATEMENT OF BOUNDARY PEGS FOR CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. BENCHMARK VALUES ARE VALID FOR 6 MONTHS FROM THE ISSUED DATE OF THE SURVEY AND ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORKS AND ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY.

10. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.)

11. ALL SEWER MANHOLES LOCATED UNDER NEW FOOTPATH TO HAVE OFFSET COVER ROTATED AND LEVELS ADJUSTED SO THAT THE COVERS ARE ENTIRELY LOCATED WITHIN THE FOOTPATH WITH APPROPRIATELY POSITIONED JOINTS IN PATH AND FLUSH WITH SURFACE.

**ROADWORKS**

12. SUBSOIL DRAINS ARE TO BE CONSTRUCTED BEHIND THE KERB AND CHANNEL OR AS DIRECTED BY THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

13. WHERE DRAINAGE LINES EXIST BEHIND THE KERB AND CHANNEL SUBSOIL DRAINAGE IS NOT REQUIRED HOWEVER A 1m LENGTH OF SUBSOIL DRAIN INCLUDING FILTER SOCK IS REQUIRED BOTH SIDES OF DRAINAGE PITS.

14. ALL FOOTPATHS ARE TO BE A MINIMUM OF 125mm THICK WITH SL72 REINFORCEMENT AND BEDDED ON A MINIMUM OF 50MM COMPACTED CLASS 3 FCR WITH THE BEDDING TO EXTEND 100mm BEYOND THE EDGES OF THE PROPOSED FOOTPATH PRIOR TO THE PLACEMENT OF THE TIMBERS AND BOARDS. CONTRACTION OR EXPANSION JOINTS ARE TO BE CONSTRUCTED BETWEEN 10 TO 15 METER INTERVALS

15. WHERE FILLING IS REQUIRED UNDER THE FOOTPATH BEDDING MATERIAL THEN CLASS 4 FCR IS TO BE USED UNLESS OTHERWISE APPROVED BY THE COGG SUBDIVISIONS ENGINEER.

16. CONCRETE FOR KERB AND CHANNEL USED IN EXTRUSION MACHINES SHALL HAVE A MINIMUM CEMENT CONTENT OF 320 KG/M3.

17. CONCRETE FOR STORMWATER PITS AND ANY OTHER STORMWATER RELATED STRUCTURE IS TO HAVE A MINIMUM STRENGTH OF 32 MPA AT 28 DAYS.

18. CONCRETE FOR ALL OTHER APPLICATIONS IS TO HAVE A MINIMUM STRENGTH OF 25 MPA AT 28 DAYS.

19. TO ALLOW FOR A CONTINUOUS CONCRETE KERB AND CHANNEL POUR THE STORMWATER PIT CONCRETE SURROUND IS TO BE IN PLACE PRIOR TO THE POUR COMMENCING. IF THE PIT SURROUNDS ARE NOT IN PLACE THEN THE INITIAL KERB AND CHANNEL POUR IS TO STOP ONE METRE EITHER SIDE OF EVERY PIT.

20. PRIOR TO ANY FILLING ON LOTS ALL TOPSOIL IS TO BE REMOVED AND STOCKPILED. THE FILL MUST BE APPROVED AND CONSOLIDATED IN 150mm COMPACTED LAYERS TO A DRY DENSITY OF 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289. THE TOPSOIL IS THEN TO BE UNIFORMLY REPLACED TO A COMPACTED DEPTH OF 100mm. COMPACTION TESTING WILL BE REQUIRED AT THE DISCRETION OF THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

21. ALLOTMENTS SHALL BE GRADED TO AN EVEN SURFACE AT THE COMPLETION OF ALL WORKS AND SHALL HAVE A MINIMUM GRADE OF 1 IN 200 (IDM) TO THEIR NOMINATED DRAINAGE CONNECTION POINTS. ALL SURPLUS SPOIL, BOXTHORN, FENCING, CONSTRUCTION WASTE AND OTHER RUBBISH SHALL BE REMOVED FROM SITE AT THE COMPLETION OF WORKS.

22. BATTER SLOPES ON LOTS SHALL BE A MAXIMUM OF 1 IN 6 FOR FILL AND 1 IN 3 FOR CUT UNLESS OTHERWISE SHOWN.

23. ROUNDED-TOPPED WHITE CYPRUS HARVESTED FROM SUSTAINABLE FOREST BOLLARDS (0.6m HIGH) OR AS APPROVED BY COUNCIL PARKS/RECREATION AND OPEN SPACE/ENVIRONMENT DEPARTMENTS ARE TO BE PLACED ACROSS THE RESERVE FRONTAGE AT 1.5M CENTRES, REFER TO COUNCIL STANDARD DRAWING COGG 701. A DEMOUNTABLE SECTION FOR VEHICLE ACCESS TO COUNCIL STANDARDS, REFER STANDARD DRAWING COGG702 & COGG703.

24. STREET SIGNS ARE TO BE LOCATED AS INDICATED ON THE PLANS AND INSTALLED IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOLUME 2. MOUNTING HEIGHT IS TO BE TO THE UNDERSIDE OF THE SIGN AND IS TO BE A MINIMUM OF 2.1m AND MAXIMUM OF 3.0m.

25. 'NO THROUGH ROAD' SIGN IS TO BE INSTALLED BELOW THE STREET SIGN WHERE APPLICABLE.

26. ALL REINFORCEMENT USED IN CONCRETE WORKS FOR FOOTPATH DRIVEWAYS AND ROADS IS TO BE ADEQUATELY SUPPORTED BY APPROPRIATE SIZED BAR CHAIRS PRIOR TO THE POURING/PLACEMENT OF CONCRETE.

27. AT THE TERMINATION OF STAGED PAVEMENT CONSTRUCTION, A CONCRETE EDGE STRIP 200mm X 200mm AND SUBSOIL DRAIN IS TO BE INSTALLED ACROSS THE WIDTH OF THE PAVEMENT AND A 'NO THROUGH ROAD' AND CHEVRON MARKER SIGNS ARE TO BE INSTALLED ACROSS THE FULL WIDTH OF THE ROAD RESERVE. APPROPRIATE RETAINING WALLS/FENCING IS TO BE PROVIDED AS DIRECTED BY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

28. WHERE LINE MARKING NEEDS TO BE REMOVED, THESE LINES ARE TO BE PERMANENTLY REMOVED EITHER BY GRINDING THE OLD LINES OFF OR BY PLACING A SEAL AND GRIT TREATMENT (USING THE 'FLOCON' SYSTEM) OVER THE UNWANTED LINES.

29. LOT NUMBERS SHALL BE STENCILED IN 50mm HIGH FIGURES WITH WHITE PAINT ON THE FACE OF THE KERB AND CHANNEL.

30. CIVIL CONTRACTOR TO CONTACT SUPERINTENDENT MINIMUM OF 7 DAYS PRIOR TO POURING ANY KERB & CHANNEL TO ENSURE THAT DRIVEWAY LOCATIONS HAVE NOT ALTERED.

**DRAINAGE**

31. PIPE DRAINAGE WITHIN ROADWAYS TO BE REINFORCED CONCRETE PIPES - CLASS 2 UNLESS OTHERWISE SHOWN.

32. ALL REINFORCED CONCRETE PIPES ARE TO BE RUBBER RING JOINTED.

33. PIPES IN EASEMENTS ARE TO BE RUBBER RING JOINTED OR UPVC SEWER CLASS PIPES WITH SOLVENT CEMENT JOINTS.

34. ALL DRAINAGE PITS IN COUNCIL ROAD RESERVES, DRAINAGE RESERVES AND RECREATION RESERVES ARE TO HAVE LIDS THAT ARE AT LEAST CLASS D (HEAVY DUTY) IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 3996.

35. ALL PITS ARE TO BE SET OUT FROM SURVEY CO-ORDINATES USING SET OUT POINTS DETAILED IN THE COGG STANDARD DRAWINGS.

36. ALL PIPES UNDER FOOTPATHS, DRIVEWAYS AND BEHIND BACK OF KERB SHALL BE BACKFILLED WITH 20mm NOM SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 95% MODIFIED COMPACTION IN 150mm MAXIMUM LAYERS.

37. CONTRACTOR TO USE 2% CEMENT STABILISED SAND FROM THE BOTTOM OF THE STORMWATER PIPE TO THE SPRINGLINE WHEN DRAINAGE IS CONSTRUCTED UNDER THE ROAD. CLASS 3 CRUSHED ROCK TO BE USED FOR BACKFILL FROM THE SPRINGLINE TO THE PAVEMENT SUB-BASE.

38. PIPEWORK AT ALL PITS TO BE WELL ALIGNED TO ENSURE FLOW IS GUIDED DIRECTLY TO OUTLET PIPE.

39. ALL PIPELINES ARE TO BE INSPECTED VIA CCTV AT PRACTICAL COMPLETION AT THE CONTRACTORS' EXPENSE AND UNDER THE SUPERVISION OF COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

40. PROPERTY INLET PITS TO BE LOCATED 1M FROM THE LOW CORNER UNLESS OTHERWISE SHOWN.

41. HOUSE DRAINS ARE TO BE 100mm DIAMETER SEWER CLASS PVC SOCKETED PIPES LOCATED 6.5m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN. OPTION "No. 1" IS TO CONNECT TO A PIT, "No.2' IS TO CONNECT TO THE UNDERGROUND DRAINAGE PIPE AND "No.3" IS TO KERB (MINIMUM 1.0m AWAY FROM EDGE OF VEHICLE LAYBACK).

42. HOUSE DRAINS ARE TO BE A MINIMUM OF 0.5m BELOW FINISHED SURFACE AT THE LOT BOUNDARY UNLESS OTHERWISE SHOWN.

43. EASEMENT DRAIN CONNECTION TO BE A MINIMUM OF 0.5m BELOW FINISHED SURFACE UNLESS OTHERWISE SHOWN.

44. WHEN USING 150mm DIAMETER UPVC SEWER CLASS PIPES IN EASEMENTS FOR PRIVATELY OWNED PROPERTIES, THE HOUSE DRAINS ARE TO BE CONNECTED USING STANDARD T-PIECE FITTINGS.

45. WHEN USING 225mm DIAMETER OR LARGER UPVC PIPES, HOUSE DRAINS ARE TO BE CONNECTED IN A SIMILAR WAY TO CONCRETE PIPES SUBJECT TO THE INLET BEING CORE DRILLED.

46. WATER AND GAS SERVICE CONDUITS SHALL BE LOCATED CLEAR OF ALL DRIVEWAY CROSSINGS AND SHALL EXTEND FROM THE POINT OF SUPPLY TO AT LEAST 500mm INSIDE THE HOUSE LOT TO BE SERVICED AND LEFT EXPOSED UNTIL INSPECTED BY COGG SUBDIVISIONS ENGINEER.
WATER CONDUITS ARE TO BE LOCATED AT LEAST 6.5m FROM SIDE BOUNDARY.
GAS CONDUITS ARE TO BE LOCATED 2m FROM "NON-DRIVEWAY" SIDE BOUNDARY OF LOT TO BE SERVICED. CONDUIT TRENCHES ARE TO BE BACKFILLED WITH CLASS 3 FCR. NEXT TO WATER CONDUIT IS PREFERRED.

47. THE LOCATION OF HOUSE DRAINS (H) AND SERVICE CONDUITS (W, G, T, AND E) ARE TO BE NEATLY ETCHED ON THE KERB FACE WITH 50mm HIGH LETTERS.

48. IN ROAD RESERVE EXISTING OPEN DRAINS ARE TO BE CLEANED OUT TO AN APPROVED BASE AND ANY SPOIL IS TO BE REMOVED FROM THE SITE. STRUCTURAL FILL (CLASS 4 MINIMUM) IS TO BE PLACED IN NOT MORE THAN 150mm LAYERS AND COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION. COMPACTION TESTS ARE TO BE PROVIDED TO THE SATISFACTION OF COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.

49. ALL SUMPS IN PRE-CAST CONCRETE PITS ARE TO BE INFILLED WITH CONCRETE FLUSH TO THE INVERT LEVEL OF THE OUTLET PIPE, UNLESS APPROVED OTHERWISE BY THE COUNCIL WORKS INSPECTOR.

50. ALL DRAINAGE PIT LIDS ARE TO BE 'TERRA-FIRMA' OR APPROVED EQUIVALENT.

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 | | | | | |
| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

| | | | |
|---|---|---|---|
| DESIGNED: | K.BOON | DATE: | DECMEBER 17 |
| DRAWN: | C.LEWIS | SCALE: | NTS |
| SURVEY: | TGM GEELONG | SHEET SIZE: | A1 |
| CHECKED: | | APPROVED: | |
| POS NO: | PS 740227S VERSION: 9 | PERMIT NO: | 1123/2004/A |

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

DRAWING TITLE: INDEX AND NOTES

TGM REF. No: 004108-206 | SHEET: 1 OF 28 | REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

TGM Engineering | Surveying | Planning

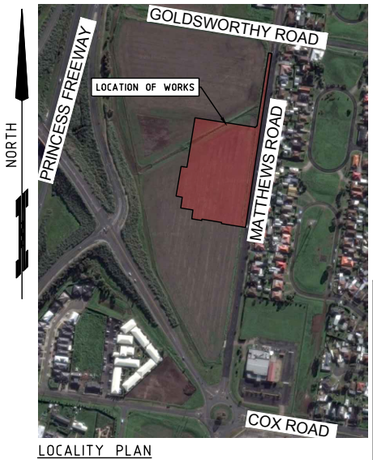
PHALARIS PARK PTY LTD

# PHALARIS PARK ESTATE

## STAGE 6
## LOVELY BANKS, Vic 3221.

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LOCALITY PLAN
MELWAYS REF: 431 G8




## ROAD LAYOUT PLAN
SCALE 1:500

NOTE:
ALL EXISTING OPEN DRAINS TO BE REMOVED.
STRUCTURAL FILL TO BE PLACED IN 150mm LAYERS AND COMPACTED TO 95% COMPACTION WITH GEOTECHNICAL TESTING AND. LEVELS TO BE RECORDED AND REPORTED TO THE SUPERINTENDENT AND FORWARDED TO COUNCIL.

## LEGEND

- FINISHED SURFACE LEVELS (F 8.88)
- EXISTING SURFACE LEVEL (E 9.98)
- TOP OF BATTER LEVELS (T 8.82)
- CENTERLINE CHAINAGES (187.81)
- PROPOSED KERB AND CHANNEL
- PROPOSED DRIVEWAY LAYBACK
- PROPOSED HOTMIX PAVEMENT
- PROPOSED RE-SHEET (DETAIL - SHEET 3)
- FOOTPATH PAVEMENT
- TEMPORARY TURN AROUND AREA
- PROPOSED STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING OPTIC CABLE
- EXISTING TELEPHONE
- EXISTING ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING GAS
- EXISTING POWER POLE (Ex.PP)
- PROPOSED SEWER
- PSM (BY OTHERS)
- LOT FALL ARROW
- TOP OF BATTER
- TOE OF BATTER
- INDICATES FILLING ON LOTS (BELOW 300mm)
- INDICATES FILLING ON LOTS (ABOVE 300mm)
- SAWCUT
- EXISTING OPEN DRAIN
- PROPOSED TEMP OPEN DRAIN
- HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE)

**WARNING**
OPTIC FIBRE
CABLE IN THE AREA
THE ACCURACY OR COMPLETENESS OF THE TELSTRA CABLE LOCATION SHOWN ON THIS PLAN CAN NOT BE GUARANTEED AND ACCORDINGLY ARE INTENDED TO BE READ AS INDICATIVE ONLY. PLEASE READ AND UNDERSTAND THE TELSTRA DUTY OF CARE STATEMENT.

**WARNING**
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

**WARNING**
BEWARE OF ABOVE GROUND SERVICES
ANY EXCAVATION IN THE VICINITY OF POWER POLES TO BE IN ACCORDANCE WITH THE ELECTRICAL SAFETY (NETWORK ASSETS) REGULATIONS 1999 - RULE 36 (d). NO GO ZONE RULES MAY ALSO APPLY

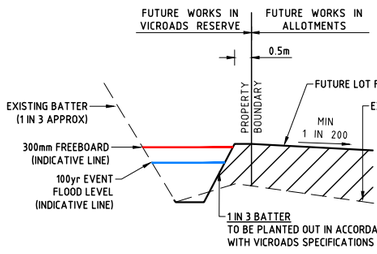
NOTE:
ALL SEWER MANHOLES LOCATED UNDER NEW FOOTPATH TO HAVE OFFSET COVER ROTATED AND LEVEL ADJUSTED SO THAT THE COVER IS ENTIRELY LOCATED WITHIN THE FOOTPATH WITH APPROPRIATELY POSITIONED JOINTS IN PATH AND FLUSH WITH SURFACE

### PERMANENT SURVEY MARKS (SMES)

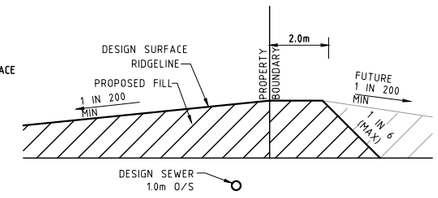
| DESCRIPTION | MGA94 ZONE 55 EASTING | MGA94 ZONE 55 NORTHING | AHD LEVEL |
|---|---|---|---|
| MOORPANYAL PM 23 | 266441.205 | 5781775.039 | 19.784 |
| MOORPANYAL PM 465 | 266261.91 | 5782387.14 | 18.71 |
| MORANGHURK PM 30 | 266675.688 | 5783709.253 | 22.241 |

### SURVEY CONTROL POINTS
DATE OF SURVEY: 28/07/2017

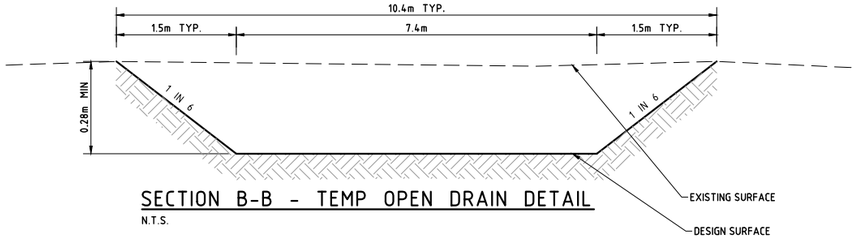
| DESCRIPTION | PLANE EASTING | PLANE NORTHING | AHD LEVEL |
|---|---|---|---|
| MOORPANYAL PM 446 | 266526.45 | 5782399.55 | 16.94 |
| TBM 1 - RIVET | 266277.57 | 5782436.05 | 19.13 |
| TBM 2 - STAR PICKET | 266490.53 | 5782198.91 | 16.63 |
| TBM 3 - STAR PICKET | 266467.81 | 5782011.76 | 17.87 |
| TBM 5 - STAR PICKET | 266344.68 | 5782015.80 | 18.61 |
| TBM 6 - ROD | 266305.46 | 5782196.32 | 17.86 |




## FUTURE FILLING AND OPEN DRAIN DETAIL (SECTION C-C)
NOT TO SCALE




## FILL AND RIDGELINE DETAIL (SECTION A-A)
NOT TO SCALE




## SECTION B-B - TEMP OPEN DRAIN DETAIL
N.T.S.

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
| 02 | FOR APPROVAL | 20/11/18 |

| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

| | | | |
|---|---|---|---|
| DESIGNED: | K.BOON | DATE: | DECMEBER 17 |
| DRAWN: | C.LEWIS | SCALE: | REFER SHEET |
| SURVEY: | TGM GEELONG | SHEET SIZE: | A1 |
| CHECKED: | | APPROVED: | |
| POS NO: | PS 740227S | VERSION: | 9 |
| PERMIT NO: | 1123/2004/A | | |

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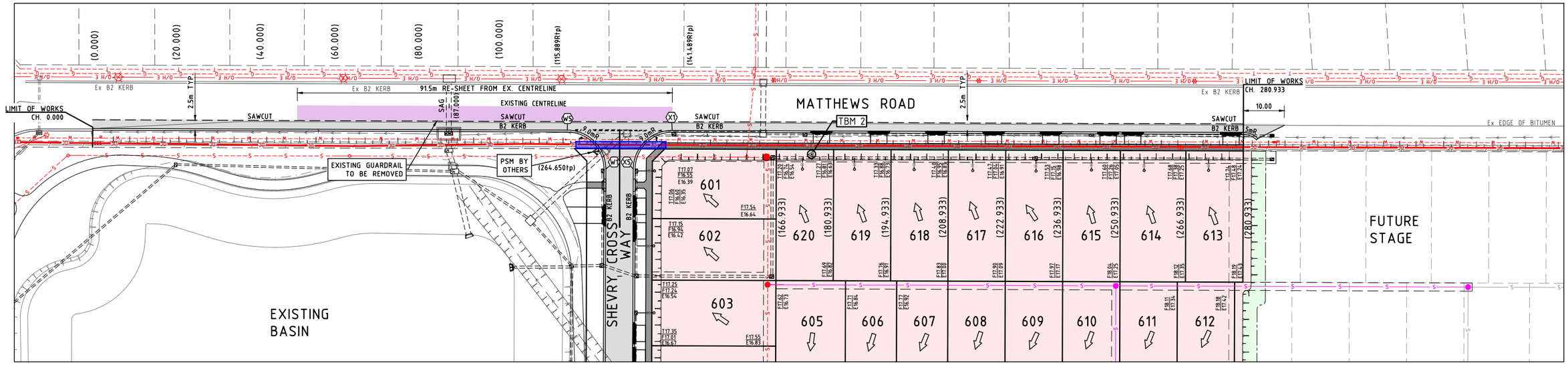
PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING
DRAWING TITLE:
ROAD LAYOUT PLAN
SHEET 1 OF 2

TGM REF. No: 004108-206 | SHEET: 2 OF 28 | REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

NORTH

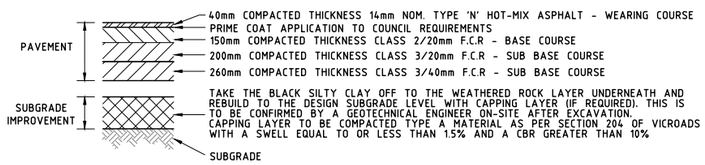



## ROAD LAYOUT PLAN

SCALE 1:500

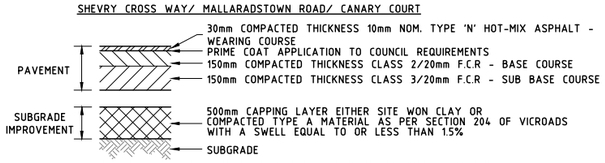
## PAVEMENT CONSTRUCTION DETAIL

MATTHEWS ROAD

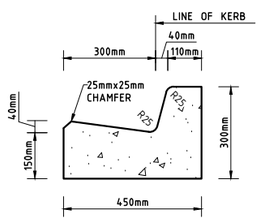



**PAVEMENT MATERIAL TO BE PLACED IN LAYERS OF NO MORE THAN 150mm**

SHEVRY CROSS WAY/ MALLARADSTOWN ROAD/ CANARY COURT



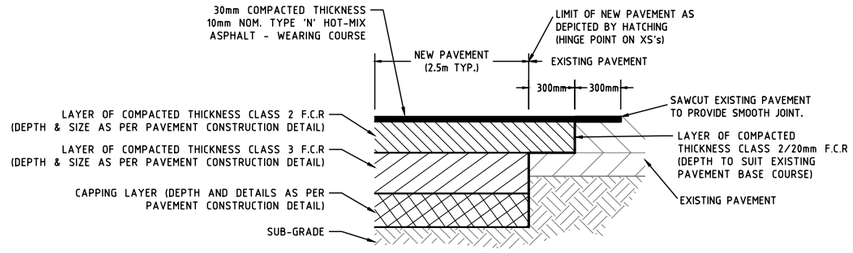

**PAVEMENT MATERIAL TO BE PLACED IN LAYERS OF NO MORE THAN 150mm**




## 'B2' KERB DETAIL

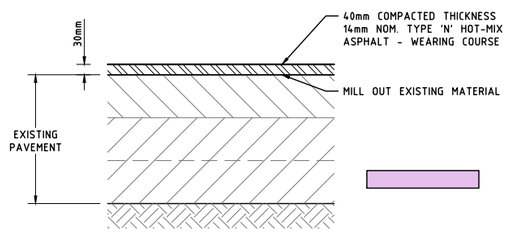
SCALE NTS

REFER SD 100




## MATTHEWS ROAD PAVEMENT CONNECTION DETAIL

SCALE NTS




## MATTHEWS ROAD ASPHALT RE-SHEET PAVEMENT COMPOSITION

SCALE NTS

## WARNING

OPTIC FIBRE

CABLE IN THE AREA

THE ACCURACY OR COMPLETENESS OF THE TELSTRA CABLE LOCATION SHOWN ON THIS PLAN CAN NOT BE GUARANTEED AND ACCORDINGLY ARE INTENDED TO BE READ AS INDICATIVE ONLY. PLEASE READ AND UNDERSTAND THE TELSTRA DUTY OF CARE STATEMENT.

## WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

## WARNING

BEWARE OF ABOVE GROUND SERVICES

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## LEGEND

| | |
|---|---|
| FINISHED SURFACE LEVELS | F 8.08 |
| EXISTING SURFACE LEVEL | E 9.98 |
| TOP OF BATTER LEVELS | T 9.82 |
| CENTERLINE CHAINAGES | (187.81) |
| PROPOSED KERB AND CHANNEL | |
| PROPOSED DRIVEWAY LAYBACK | |
| PROPOSED HOTMIX PAVEMENT | |
| PROPOSED RE-SHEET (DETAIL - SHEET 3) | |
| FOOTPATH PAVEMENT | |
| TEMPORARY TURN AROUND AREA | |
| PROPOSED STORMWATER DRAINAGE | |
| EXISTING STORMWATER DRAINAGE | |
| EXISTING SEWER | S |
| EXISTING WATER | W |
| EXISTING OPTIC CABLE | OC |
| EXISTING TELEPHONE | T |
| EXISTING ELECTRICAL | E |
| EXISTING OVERHEAD ELECTRICAL | O/H E |
| EXISTING GAS | G |
| EXISTING POWER POLE | Ex.PP |
| PROPOSED SEWER | S |
| PSM (BY OTHERS) | |
| LOT FALL ARROW | |
| TOP OF BATTER | |
| TOE OF BATTER | |
| INDICATES FILLING ON LOTS (BELOW 300mm) | |
| INDICATES FILLING ON LOTS (ABOVE 300mm) | |
| SAWCUT | |
| EXISTING OPEN DRAIN | |
| HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE) | |

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
| 02 | FOR APPROVAL | 20/11/18 |

| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

DESIGNED: K.BOON | DATE: DECMEBER 17
DRAWN: C.LEWIS | SCALE: REFER SHEET
SURVEY: TGM GEELONG | SHEET SIZE: A1
CHECKED: | APPROVED:
POS NO: PS 740227S VERSION: 9 | PERMIT NO: 1123/2004/A

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CLIENT: Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

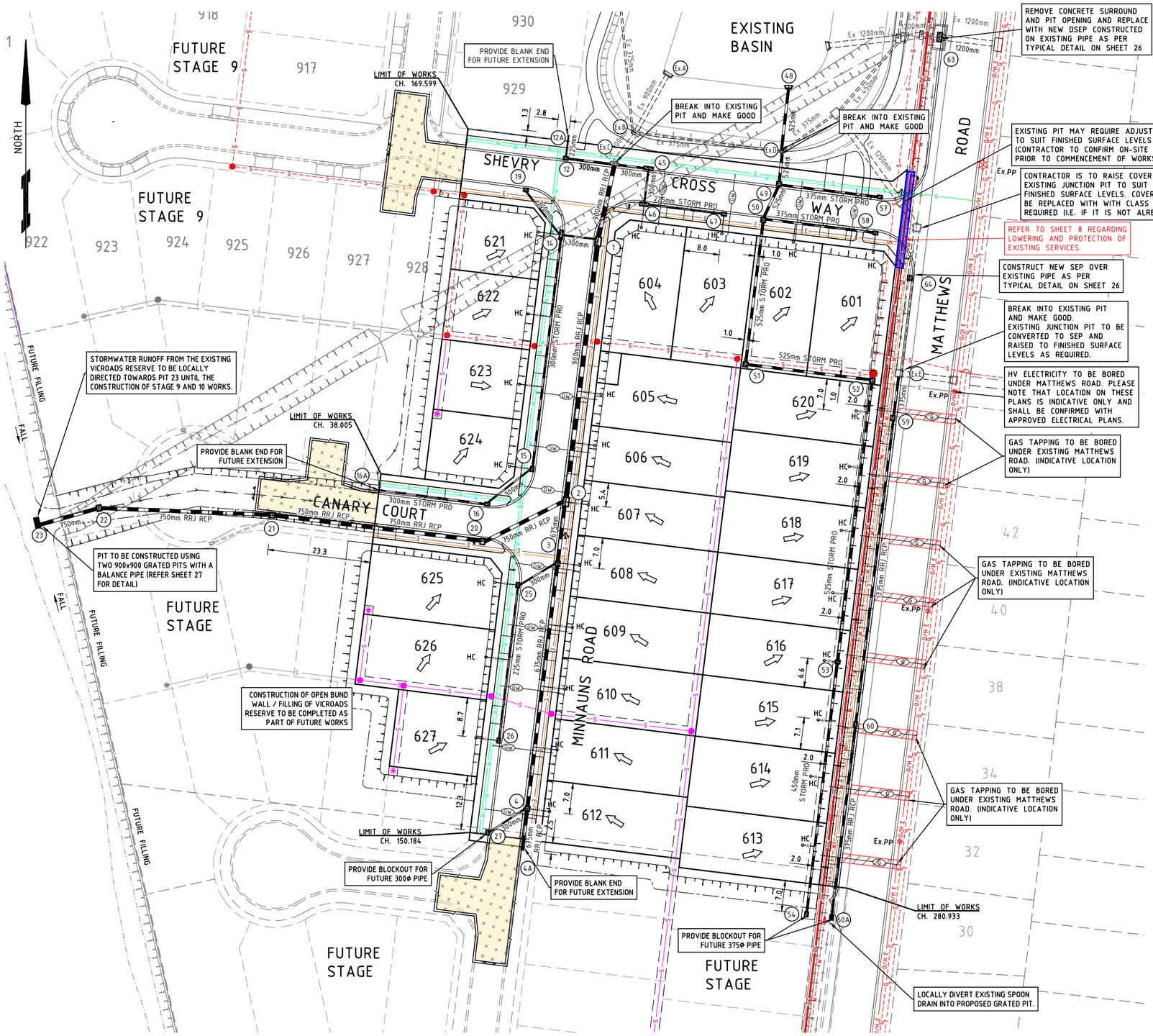
CIVIL DRAWING

DRAWING TITLE:
ROAD LAYOUT PLAN
SHEET 2 OF 2

TGM REF. No: 004108-206 | SHEET: 3 OF 28 | REV: 02

TGM REF. No: 004108-206
SHEET: 3 OF 28
REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




## LEGEND

- PROPOSED KERB AND CHANNEL
- PROPOSED DRIVEWAY LAYBACK
- PROPOSED STORMWATER DRAINAGE — 300ø RCP
- EXISTING STORMWATER DRAINAGE — 300ø RCP
- DRAINAGE PIT NUMBER — 08
- DRAINAGE HOUSE CONNECTION — H — HC
- EXISTING SEWER — S
- EXISTING WATER — W
- EXISTING TELEPHONE — T
- EXISTING ELECTRICAL — E
- EXISTING GAS — G
- EXISTING OPTIC CABLE — OC
- EXISTING OVER HEAD ELECTRICAL — O/H E
- EXISTING POWER POLE — Ex.PP
- PROPOSED SEWER — S
- PROPOSED WATER — W
- PROPOSED TELEPHONE — T
- PROPOSED ELECTRICAL — E
- PROPOSED GAS — G
- GAS/WATER/RECYLED CONDUIT — GW
- LOT FALL ARROW
- TOP OF BATTER
- EXISTING OPEN DRAIN
- PROPOSED TEMP OPEN DRAIN
- HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE)

**WARNING**

OPTIC FIBRE

CABLE IN THE AREA

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NOTE:
ALL SEWER MANHOLES LOCATED UNDER NEW FOOTPATH TO HAVE OFFSET COVER ROTATED AND LEVEL ADJUSTED SO THAT THE COVER IS ENTIRELY LOCATED WITHIN THE FOOTPATH WITH APPROPRIATELY POSITIONED JOINTS IN PATH AND FLUSH WITH SURFACE

## MASTER SERVICES LAYOUT PLAN

SCALE 1:500

**PROPOSED SERVICE LOCATIONS**

| STREET | WATER | GAS | TELEPHONE | LV. ELEC. | HV. ELEC. |
|---|---|---|---|---|---|
| SHEVRY CROSS WAY | 2.7 N | 2.1 N | 1.9 S | 2.5 S | 2.5 S |
| MINNAUNS ROAD | 2.7 W | 2.1 W | 1.9 E | 2.4 E | 2.4 E |
| CANARY COURT | 2.7 N | 2.1 N | 1.9 S | 2.5 S | - |
| MATTHEWS ROAD | - | - | 2.6 W | 0.5W/3.0W | 0.5W |

**EXISTING SERVICE LOCATIONS**

| | WATER | GAS | OPTIC FIBRE | COMMS | OH. ELEC. | SEWER |
|---|---|---|---|---|---|---|
| MATTHEWS ROAD | Ex2.08 - 2.21 W | TBC ON-SITE (E) | Ex0.48 - 1.26 W | TBC ON-SITE (E) | Ex3.2 E (APPROX) | Ex (-1.9)-(-2.1) W |

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
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| 02 | FOR APPROVAL | 20/11/18 | | | | | |

DESIGNED: K.BOON — DATE: DECMEBER 17
DRAWN: C.LEWIS — SCALE: 1:500
SURVEY: TGM GEELONG — SHEET SIZE: A1
CHECKED: — APPROVED:
POS NO: PS 740227S — VERSION: 9 — PERMIT NO: 1123/2004/A

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

DRAWING TITLE:
MASTER SERVICES LAYOUT PLAN
SHEET 1 OF 2

TGM REF. No. 004108-206 — SHEET: 4 OF 28 — REV. 02

TGM REF. No. 004108-206 — SHEET 4 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

NORTH

REMOVE CONCRETE SURROUND AND PIT OPENING AND REPLACE WITH NEW DSEP CONSTRUCTED ON EXISTING PIPE AS PER TYPICAL DETAIL ON SHEET 26

REFER SHEET 8 REGARDING LOWERING AND PROTECTION OF EXISTING SERVICES.

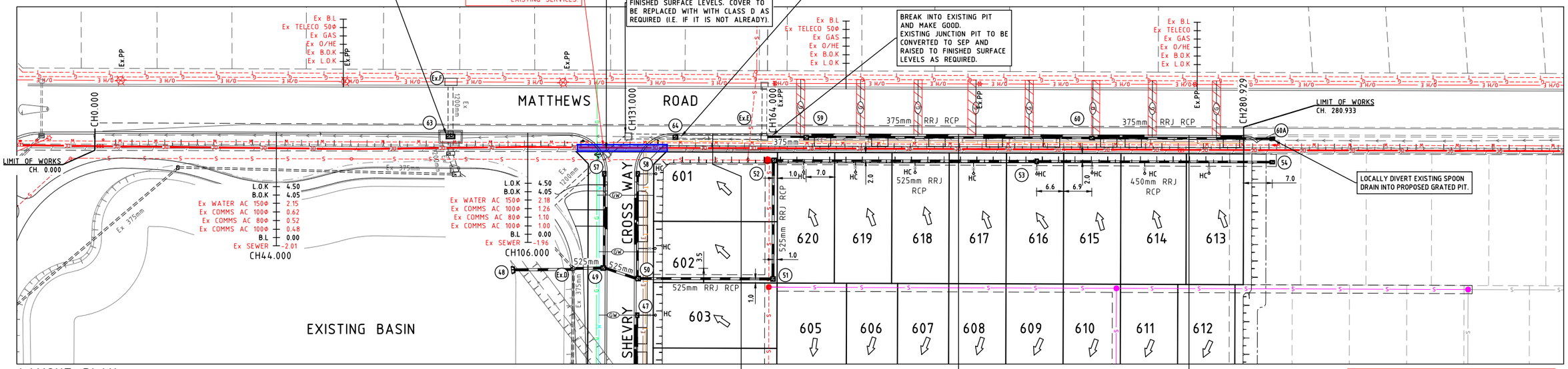
EXISTING PIT MAY REQUIRE ADJUSTMENT TO SUIT FINISHED SURFACE LEVELS (CONTRACTOR TO CONFIRM ON-SITE PRIOR TO COMMENCEMENT OF WORKS.

CONTRACTOR IS TO RAISE COVER OF EXISTING JUNCTION PIT TO SUIT FINISHED SURFACE LEVELS. COVER TO BE REPLACED WITH WITH CLASS D AS REQUIRED (I.E. IF IT IS NOT ALREADY).

CONSTRUCT NEW SEP OVER EXISTING PIPE AS PER TYPICAL DETAIL ON SHEET 26

BREAK INTO EXISTING PIT AND MAKE GOOD. EXISTING JUNCTION PIT TO BE CONVERTED TO SEP AND RAISED TO FINISHED SURFACE LEVELS AS REQUIRED.

LOCALLY DIVERT EXISTING SPOON DRAIN INTO PROPOSED GRATED PIT.




## LAYOUT PLAN
SCALE 1:500

## LEGEND

| | | | |
|---|---|---|---|
| PROPOSED KERB AND CHANNEL | | EXISTING OVER HEAD ELECTRICAL | O/H E |
| PROPOSED DRIVEWAY LAYBACK | | EXISTING POWER POLE | Ex.PP |
| PROPOSED STORMWATER DRAINAGE | 300Φ RCP | PROPOSED SEWER | S |
| EXISTING STORMWATER DRAINAGE | 300Φ RCP | PROPOSED WATER | W |
| DRAINAGE PIT NUMBER | 08 | PROPOSED TELEPHONE | T |
| DRAINAGE HOUSE CONNECTION | H HC | PROPOSED ELECTRICAL | E |
| EXISTING SEWER | S | PROPOSED GAS | G |
| EXISTING WATER | W | GAS/WATER/RECYLED CONDUIT | GW |
| EXISTING TELEPHONE | T | LOT FALL ARROW | |
| EXISTING ELECTRICAL | E | TOP OF BATTER | |
| EXISTING GAS | G | EXISTING OPEN DRAIN | |
| EXISTING OPTIC FIBRE | OC | HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE) | |

## WARNING
**OPTIC FIBRE**

CABLE IN THE AREA

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## WARNING
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## WARNING
**BEWARE OF UNDERGROUND SERVICES**

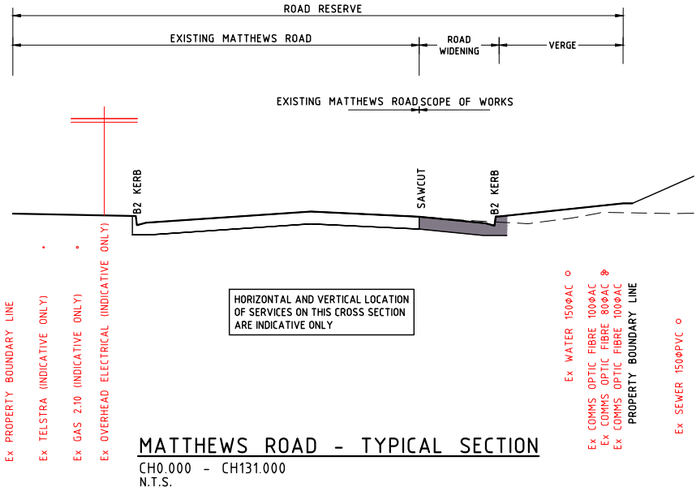
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### PROPOSED SERVICE LOCATIONS

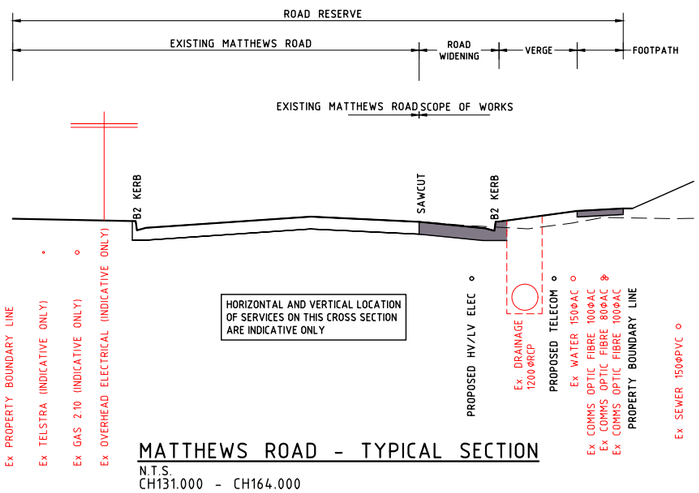
| STREET | WATER | GAS | TELEPHONE | LV. ELEC. | HV. ELEC. |
|---|---|---|---|---|---|
| SHEVRY CROSS WAY | 2.7 N | 2.1 N | 1.9 S | 2.5 S | 2.5 S |
| MINNAUNS ROAD | 2.7 W | 2.1 W | 1.9 E | 2.4 E | 2.4 E |
| CANARY COURT | 2.7 N | 2.1 N | 1.9 S | 2.5 S | - |
| MATTHEWS ROAD | - | - | 2.6 W | 0.5W/3.0W | 0.5W |

### EXISTING SERVICE LOCATIONS

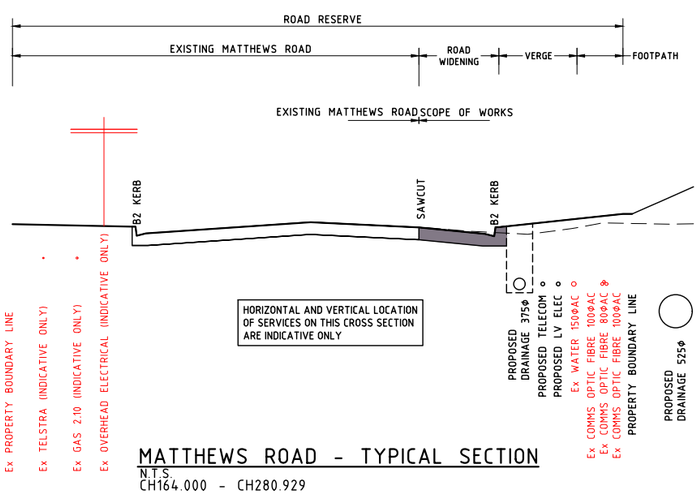
| | WATER | GAS | OPTIC FIBRE | COMMS | OH. ELEC. | SEWER |
|---|---|---|---|---|---|---|
| MATTHEWS ROAD | Ex2.08 - 2.21 W | TBC ON-SITE (E) | Ex0.48 - 1.26 W | TBC ON-SITE (E) | Ex3.2 E (APPROX) | Ex (-1.9)-(-2.1) W |




## MATTHEWS ROAD - TYPICAL SECTION
CH0.000 - CH131.000
N.T.S.




## MATTHEWS ROAD - TYPICAL SECTION
N.T.S.
CH131.000 - CH164.000




## MATTHEWS ROAD - TYPICAL SECTION
N.T.S.
CH164.000 - CH280.929

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DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: 1:500
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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PROJECT:
# PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

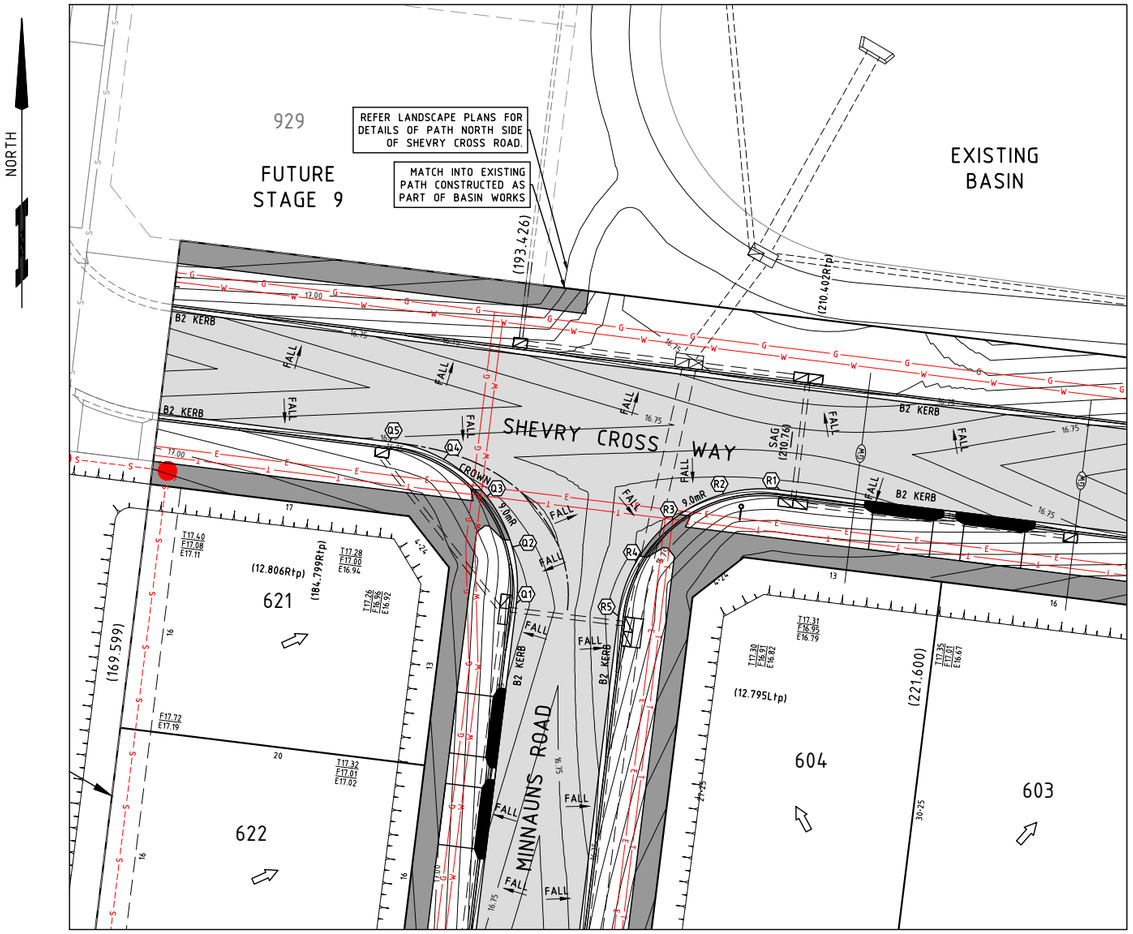
DRAWING TITLE:
MASTER SERVICE LAYOUT PLAN
SHEET 2 OF 2

TGM REF. No. 004108-206 | SHEET: 5 OF 28 | REV. 02

TGM REF No. 004108-206 | SHEET 5 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

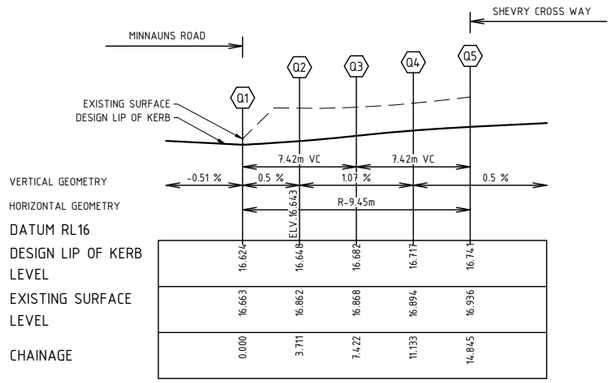
LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER



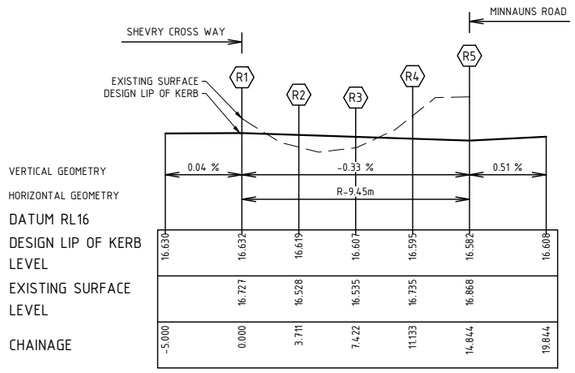

INTERSECTION DETAIL A
SCALE 1:200

## LEGEND

| | |
|---|---|
| FINISHED SURFACE LEVELS | F 10.56 |
| EXISTING SURFACE LEVEL | E 10.54 |
| TOP OF BATTER LEVELS | T 10.58 |
| CENTERLINE CHAINAGES | (109.867) |
| PROPOSED KERB AND CHANNEL | |
| PROPOSED DRIVEWAY LAYBACK | |
| PROPOSED HOTMIX PAVEMENT | |
| FOOTPATH PAVEMENT | |
| PROPOSED STORMWATER DRAINAGE | |
| EXISTING STORMWATER DRAINAGE | |
| PROPOSED SEWER | S |
| EXISTING SEWER | S |
| PROPOSED WATER | W |
| PROPOSED TELSTRA | T |
| PROPOSED ELECTRICAL | E |
| PROPOSED GAS | G |
| STREET SIGN | |
| TOP OF BATTER | |
| MAJOR CONTOUR (0.25m) | 10.50 |
| MINOR CONTOUR (0.05m) | |
| LOT FALL ARROW | |




KERB RETURN Q - LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20




KERB RETURN R - LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20

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DESIGNED: K.BOON | DATE: DECMEBER 17
DRAWN: C.LEWIS | SCALE: H 1:200 V 1:20
SURVEY: TGM GEELONG | SHEET SIZE: A1
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CLIENT: Phalaris Park.

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STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

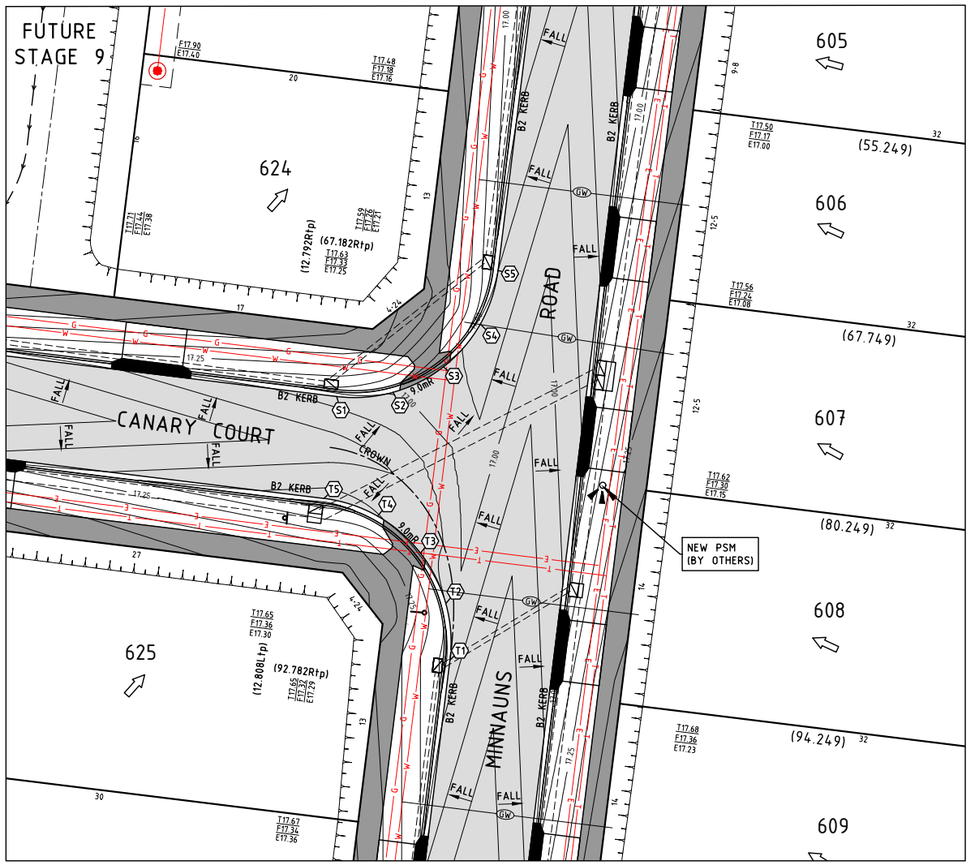
CIVIL DRAWING
DRAWING TITLE:
INTERSECTION DETAIL A AND KERB LONGITUDINAL SECTIONS
TGM REF. No: 004108-206 | SHEET: 6 OF 28 | REV: 02

TGM REF. No. 004108-206 | SHEET 6 OF 28 | REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

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IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER

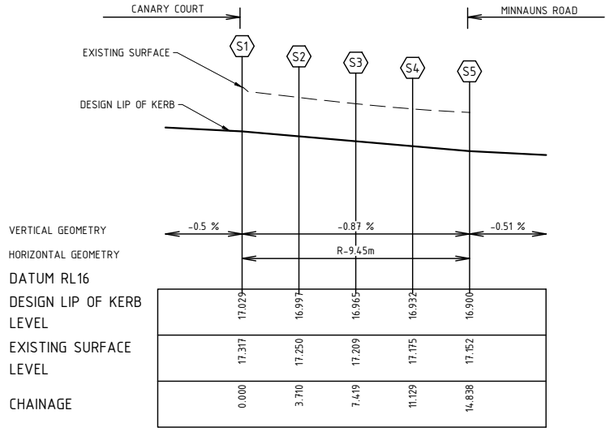
NORTH



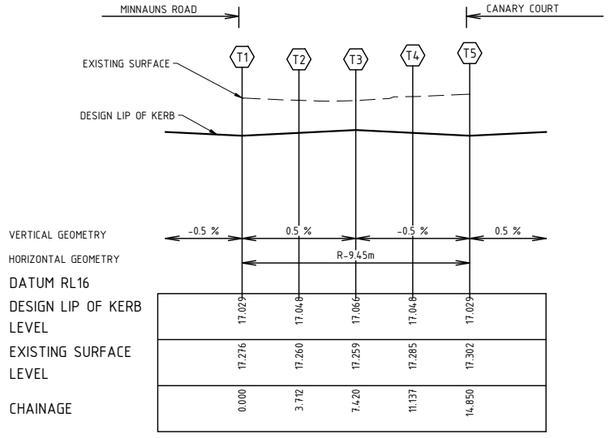

## INTERSECTION DETAIL B
SCALE 1:200

## LEGEND

| | |
|---|---|
| FINISHED SURFACE LEVELS | E 10.56 |
| EXISTING SURFACE LEVEL | E 10.54 |
| TOP OF BATTER LEVELS | T 10.58 |
| CENTERLINE CHAINAGES | (109.867) |
| PROPOSED KERB AND CHANNEL | |
| PROPOSED DRIVEWAY LAYBACK | |
| PROPOSED HOTMIX PAVEMENT | |
| FOOTPATH PAVEMENT | |
| PROPOSED STORMWATER DRAINAGE | |
| EXISTING STORMWATER DRAINAGE | |
| PROPOSED SEWER | S |
| EXISTING SEWER | S |
| PROPOSED WATER | W |
| PROPOSED TELSTRA | T |
| PROPOSED ELECTRICAL | E |
| PROPOSED GAS | G |
| PSM (BY OTHERS) | |
| STREET SIGN | |
| TOP OF BATTER | |
| TOE OF BATTER | |
| MAJOR CONTOUR (0.25m) | 10.50 |
| MINOR CONTOUR (0.05m) | |
| LOT FALL ARROW | |




## KERB RETURN S - LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20




## KERB RETURN T - LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20

**WARNING**
BEWARE OF UNDERGROUND SERVICES
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**WARNING**
OPTIC FIBRE
CABLE IN THE AREA
THE ACCURACY OR COMPLETENESS OF THE TELSTRA CABLE LOCATION SHOWN ON THIS PLAN CAN NOT BE GUARANTEED AND ACCORDINGLY ARE INTENDED TO BE READ AS INDICATIVE ONLY. PLEASE READ AND UNDERSTAND THE TELSTRA DUTY OF CARE STATEMENT.

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 | | | | | |
| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

DESIGNED: K.BOON | DATE: DECMEBER 17
DRAWN: C.LEWIS | SCALE: REFER SHEET
SURVEY: TGM GEELONG | SHEET SIZE: A1
CHECKED: | APPROVED:
POS NO: PS 740227S VERSION: 9 | PERMIT NO: 1123/2004/A
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CLIENT: Phalaris Park.


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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

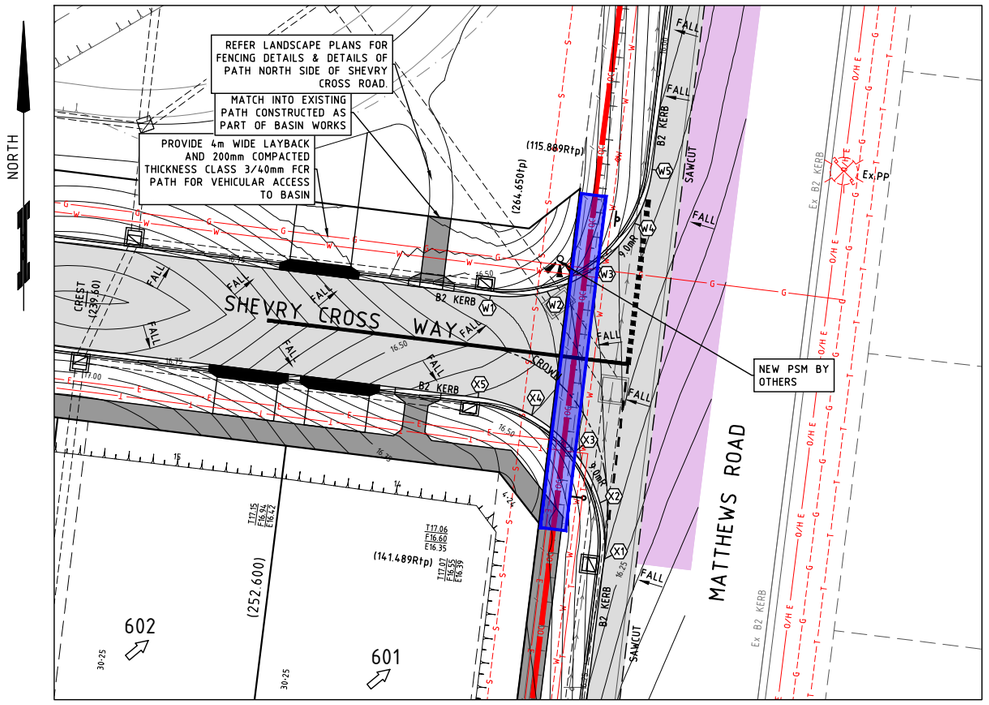
CIVIL DRAWING

DRAWING TITLE:
INTERSECTION DETAIL B AND KERB LONGITUDINAL SECTIONS

TGM REF. No: 004108-206 | SHEET: 7 OF 28 | REV: 02

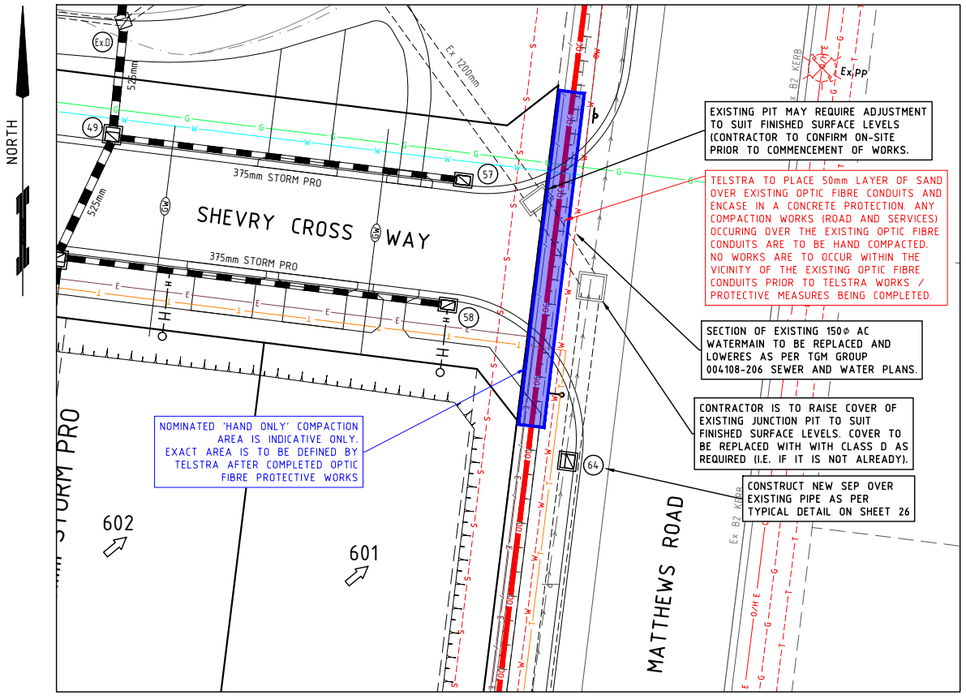
TGM REF. No. 004108-206 | SHEET 7 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




INTERSECTION DETAIL C - ROAD LAYOUT

SCALE 1:200




INTERSECTION DETAIL C - SERVICES LAYOUT

SCALE 1:200

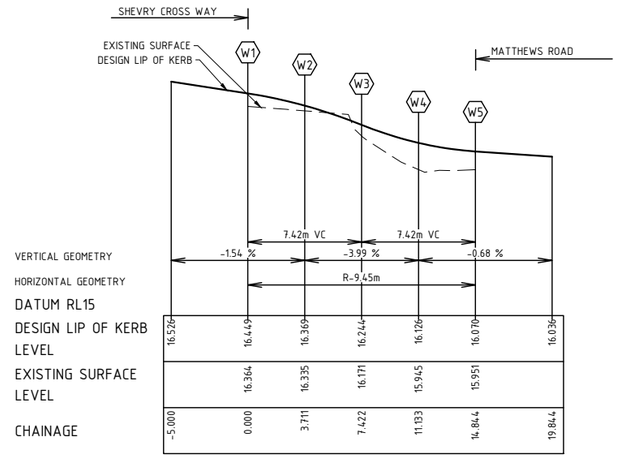
## LEGEND - ROAD LAYOUT

- FINISHED SURFACE LEVELS — F 10.56
- EXISTING SURFACE LEVEL — E 10.54
- TOP OF BATTER LEVELS — T 10.58
- CENTERLINE CHAINAGES — (109.867)
- PROPOSED KERB AND CHANNEL
- PROPOSED DRIVEWAY LAYBACK
- PROPOSED HOTMIX PAVEMENT
- PROPOSED RE-SHEET (DETAIL - SHEET 3)
- FOOTPATH PAVEMENT
- PROPOSED STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE
- PROPOSED SEWER — S
- EXISTING SEWER — S
- PROPOSED WATER — W
- EXISTING WATER — W
- PROPOSED TELSTRA — T
- EXISTING TELSTRA — T
- EXISTING OPTIC FIBRE — OC
- PROPOSED ELECTRICAL — E
- EXISTING ELECTRICAL — E
- EXISTING OVEREAD — O/H E
- PROPOSED GAS — G
- EXISTING GAS — G
- PSM (BY OTHERS)
- STREET SIGN
- TOP OF BATTER
- MAJOR CONTOUR (0.25m) — 10.50
- MINOR CONTOUR (0.05m)
- LOT FALL ARROW
- HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE)

## LEGEND

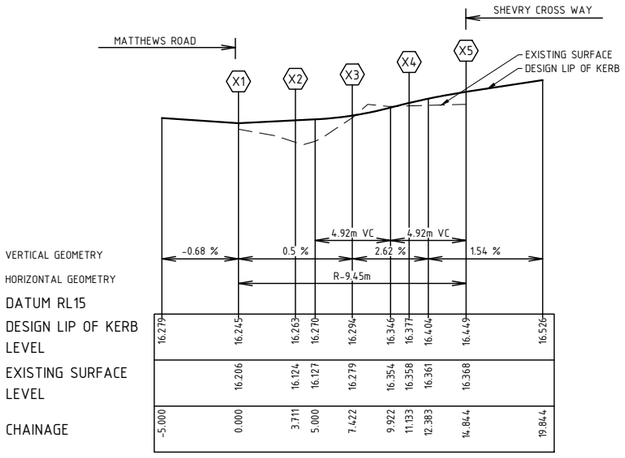
- PROPOSED KERB AND CHANNEL
- PROPOSED DRIVEWAY LAYBACK
- PROPOSED STORMWATER DRAINAGE — 300ø RCP
- EXISTING STORMWATER DRAINAGE — 300ø RCP
- DRAINAGE PIT NUMBER — 08
- DRAINAGE HOUSE CONNECTION — H
- EXISTING SEWER — S
- EXISTING WATER — W
- EXISTING TELEPHONE — T
- EXISTING ELECTRICAL — E
- EXISTING GAS — G
- EXISTING OPTIC CABLE — OC
- EXISTING OVER HEAD ELECTRICAL — O/H E
- EXISTING POWER POLE — Ex.PP
- PROPOSED SEWER — S
- PROPOSED WATER — W
- PROPOSED TELEPHONE — T
- PROPOSED ELECTRICAL — E
- PROPOSED GAS — G
- GAS/WATER/RECYLED CONDUIT — (GW)
- LOT FALL ARROW
- TOP OF BATTER
- EXISTING OPEN DRAIN
- PROPOSED TEMP OPEN DRAIN
- HAND COMPACTION ONLY (PROTECTION OF OPTIC FIBRE)

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER




KERB RETURN W - LONGITUDINAL SECTION

HORZ: 1:200
VERT: 1:20




KERB RETURN X - LONGITUDINAL SECTION

HORZ: 1:200
VERT: 1:20

**WARNING**

BEWARE OF ABOVE GROUND SERVICES

ANY EXCAVATION IN THE VICINITY OF POWER POLES TO BE IN ACCORDANCE WITH THE ELECTRICAL SAFETY (NETWORK ASSETS) REGULATIONS 1999 - RULE 36 (d). NO GO ZONE RULES MAY ALSO APPLY

**WARNING**

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OPTIC FIBRE

CABLE IN THE AREA

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TGM REF No. 004108-206

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DESIGNED: K.BOON — DATE: DECEMBER 17
DRAWN: C.LEWIS — SCALE: REFER SHEET
SURVEY: TGM GEELONG — SHEET SIZE: A1
CHECKED: — APPROVED:
POS NO: PS 740227S — VERSION: 9 — PERMIT NO: 1123/2004/A

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STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

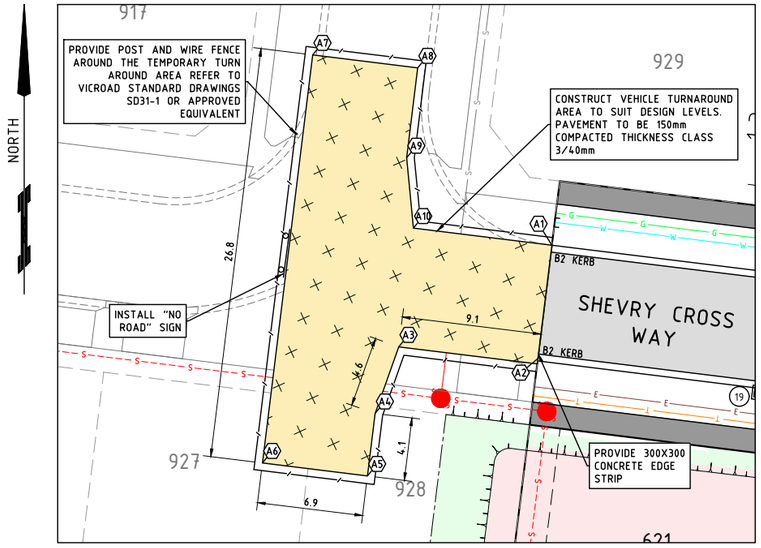
CIVIL DRAWING

DRAWING TITLE:
INTERSECTION DETAIL C AND KERB LONGITUDINAL SECTIONS

TGM REF. No: 004108-206 — SHEET: 8 OF 28 — REV: 02

SHEET 8 OF 28 REV 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

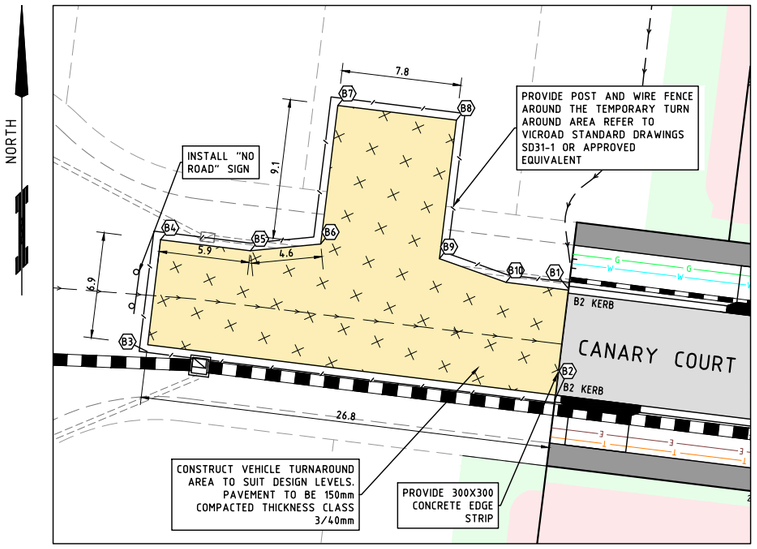



## TEMPORARY TURN AROUND AREA A

SCALE 1:200

### SETOUT POINTS

| POINT | EASTING | NORTHING | RL |
|---|---|---|---|
| A1 | 266398.646 | 5782261.129 | 16.777 |
| A2 | 266397.754 | 5782253.884 | 16.777 |
| A3 | 266388.682 | 5782254.651 | 17.152 |
| A4 | 266387.138 | 5782250.307 | 17.175 |
| A5 | 266386.637 | 5782246.238 | 17.188 |
| A6 | 266379.788 | 5782247.083 | 17.229 |
| A7 | 266383.070 | 5782273.681 | 17.121 |
| A8 | 266389.918 | 5782272.836 | 17.081 |
| A9 | 266389.195 | 5782266.981 | 17.104 |
| A10 | 266389.637 | 5782262.392 | 17.116 |

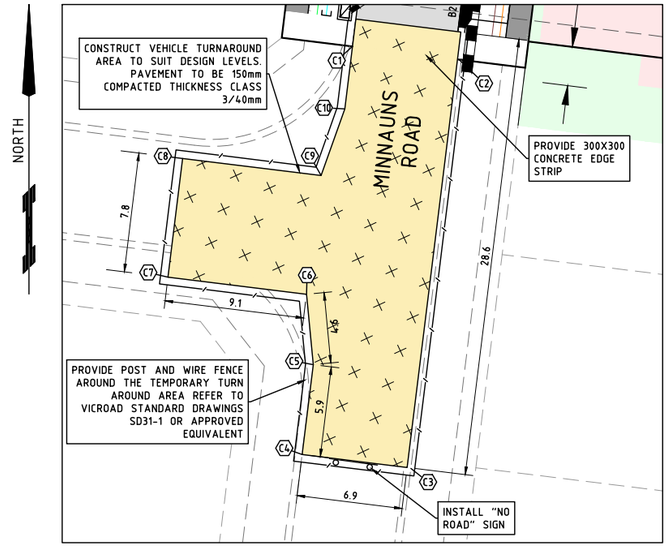



## TEMPORARY TURN AROUND AREA B

SCALE 1:200

### SETOUT POINTS

| POINT | EASTING | NORTHING | RL |
|---|---|---|---|
| B1 | 266378.916 | 5782182.963 | 17.116 |
| B2 | 266378.023 | 5782175.730 | 17.116 |
| B3 | 266351.430 | 5782178.862 | 17.250 |
| B4 | 266352.302 | 5782186.152 | 17.250 |
| B5 | 266358.158 | 5782185.429 | 17.280 |
| B6 | 266362.746 | 5782185.871 | 17.370 |
| B7 | 266363.860 | 5782194.902 | 17.512 |
| B8 | 266371.602 | 5782193.947 | 17.493 |
| B9 | 266370.488 | 5782184.916 | 17.320 |
| B10 | 266374.965 | 5782183.606 | 17.136 |




## TEMPORARY TURN AROUND AREA C

SCALE 1:200

### SETOUT POINTS

| POINT | EASTING | NORTHING | RL |
|---|---|---|---|
| C1 | 266404.036 | 5782103.657 | 17.326 |
| C2 | 266410.984 | 5782102.801 | 17.286 |
| C3 | 266407.843 | 5782076.152 | 17.719 |
| C4 | 266400.755 | 5782077.059 | 17.754 |
| C5 | 266401.477 | 5782082.915 | 17.723 |
| C6 | 266401.036 | 5782087.503 | 17.700 |
| C7 | 266392.004 | 5782088.618 | 17.726 |
| C8 | 266392.959 | 5782096.359 | 17.700 |
| C9 | 266401.991 | 5782095.245 | 17.653 |
| C10 | 266403.534 | 5782099.588 | 17.480 |

**WARNING**

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DESIGNED: K.BOON | DATE: DECMEBER 17
DRAWN: C.LEWIS | SCALE: 1:200
SURVEY: TGM GEELONG | SHEET SIZE: A1
CHECKED: | APPROVED:
POS NO: PS 740227S VERSION: 9 | PERMIT NO: 1123/2004/A

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CLIENT: Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

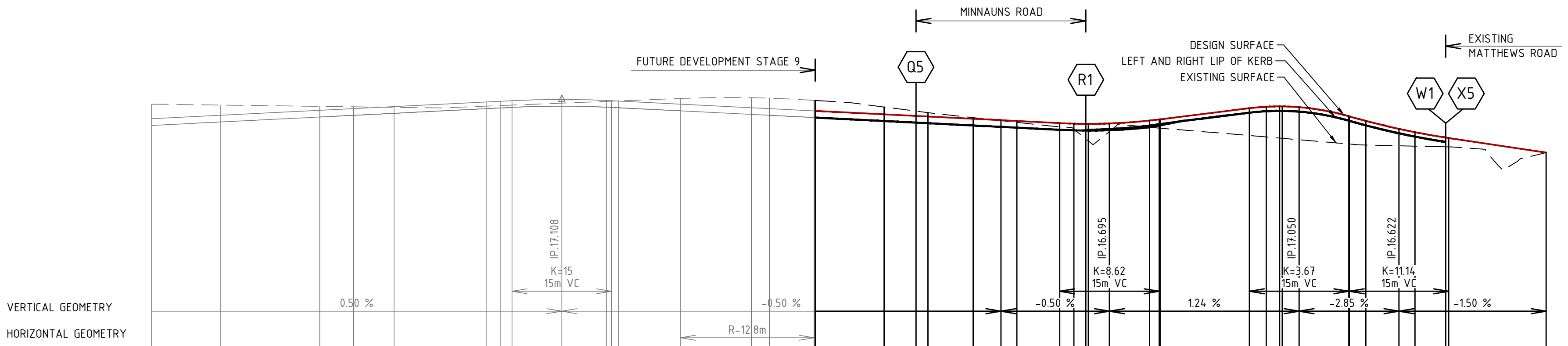
DRAWING TITLE:
TEMPORARY TURN AROUND SETOUT

TGM REF. No: 004108-206 | SHEET: 9 OF 28 | REV: 02

TGM REF. No: 004108-206 | SHEET: 9 OF 28 | REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER




| CHAINAGE | DESIGN SURFACE AT CENTRELINE | RIGHT LIP OF KERB | LEFT LIP OF KERB | EXIST SURFACE AT CENTRELINE | DEPTH OF CUT(-) / FILL(+) | |
|---|---|---|---|---|---|---|
| 69.599 | 16.799 | | 16.698 | 17.018 | -0.219 | |
| 80.000 | 16.851 | | 16.750 | 17.005 | -0.154 | |
| 94.921 | 16.926 | 16.825 | 16.825 | 16.986 | -0.060 | |
| 100.000 | 16.951 | 16.850 | 16.850 | 16.979 | -0.028 | |
| 106.121 | 16.982 | 16.881 | 16.881 | 16.971 | 0.010 | |
| 120.000 | 17.051 | 16.950 | 16.950 | 16.989 | 0.062 | |
| 122.121 | 17.062 | 16.961 | 16.961 | 16.997 | 0.065 | |
| 123.914 | 17.071 | 16.970 | 16.970 | 17.004 | 0.067 | |
| 131.414 | 17.089 | 16.989 | 16.989 | 17.034 | 0.056 | CREST |
| 138.121 | 17.074 | 16.974 | 16.974 | 17.060 | 0.014 | |
| 138.914 | 17.071 | 16.970 | 16.970 | 17.063 | 0.007 | |
| 140.000 | 17.065 | 16.965 | 16.965 | 17.067 | -0.002 | |
| 149.321 | 17.019 | 16.918 | 16.918 | 17.104 | -0.086 | |
| 160.000 | 16.965 | | 16.865 | 17.116 | -0.151 | |
| 162.725 | 16.952 | | 16.851 | 17.108 | -0.157 | |
| 169.427 | 16.918 | 16.817 | 16.817 | 17.076 | -0.158 | |
| 169.599 | 16.917 | 16.817 | 16.817 | 17.075 | -0.158 | START |
| 180.000 | 16.865 | 16.765 | 16.765 | 16.976 | -0.111 | |
| 184.799 | 16.841 | 16.741 | 16.741 | 16.915 | -0.074 | RTP |
| 186.597 | 16.832 | | 16.732 | 16.892 | -0.060 | |
| 193.426 | 16.798 | | 16.697 | 16.815 | -0.017 | |
| 197.600 | 16.777 | | 16.677 | 16.770 | 0.007 | |
| 200.000 | 16.765 | | 16.665 | 16.744 | 0.021 | |
| 206.453 | 16.733 | | 16.632 | 16.679 | 0.053 | |
| 208.600 | 16.725 | | 16.624 | 16.643 | 0.082 | |
| 210.402 | 16.722 | 16.632 | 16.622 | 16.495 | 0.228 | RTP |
| 210.764 | 16.722 | 16.632 | 16.622 | 16.466 | 0.256 | SAG |
| 213.953 | 16.728 | 16.643 | 16.627 | 16.606 | 0.122 | |
| 220.000 | 16.772 | 16.697 | 16.671 | 16.671 | 0.100 | |
| 221.453 | 16.788 | 16.716 | 16.698 | 16.658 | 0.130 | |
| 221.600 | 16.790 | 16.718 | 16.700 | 16.657 | 0.133 | |
| 235.047 | 16.957 | 16.890 | 16.890 | 16.547 | 0.410 | |
| 237.600 | 16.980 | 16.913 | 16.913 | 16.525 | 0.455 | |
| 239.599 | 16.985 | 16.918 | 16.918 | 16.508 | 0.477 | CREST |
| 240.000 | 16.985 | 16.918 | 16.918 | 16.505 | 0.480 | |
| 242.547 | 16.973 | 16.906 | 16.906 | 16.483 | 0.491 | |
| 250.047 | 16.837 | 16.770 | 16.770 | 16.418 | 0.418 | |
| 250.093 | 16.835 | 16.768 | 16.768 | 16.418 | 0.417 | |
| 252.600 | 16.767 | 16.700 | 16.700 | 16.403 | 0.363 | |
| 257.593 | 16.647 | 16.580 | 16.580 | 16.392 | 0.255 | |
| 260.000 | 16.597 | 16.530 | 16.530 | 16.387 | 0.210 | |
| 264.650 | 16.516 | 16.449 | 16.449 | 16.376 | 0.140 | LTP/RTP |
| 265.093 | 16.509 | | | 16.375 | 0.134 | |
| 279.776 | 16.289 | | | 16.289 | 0.000 | |

## SHEVRY CROSS WAY - LONGITUDINAL SECTION

HORZ: 1:500
VERT: 1:50

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DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:500 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A
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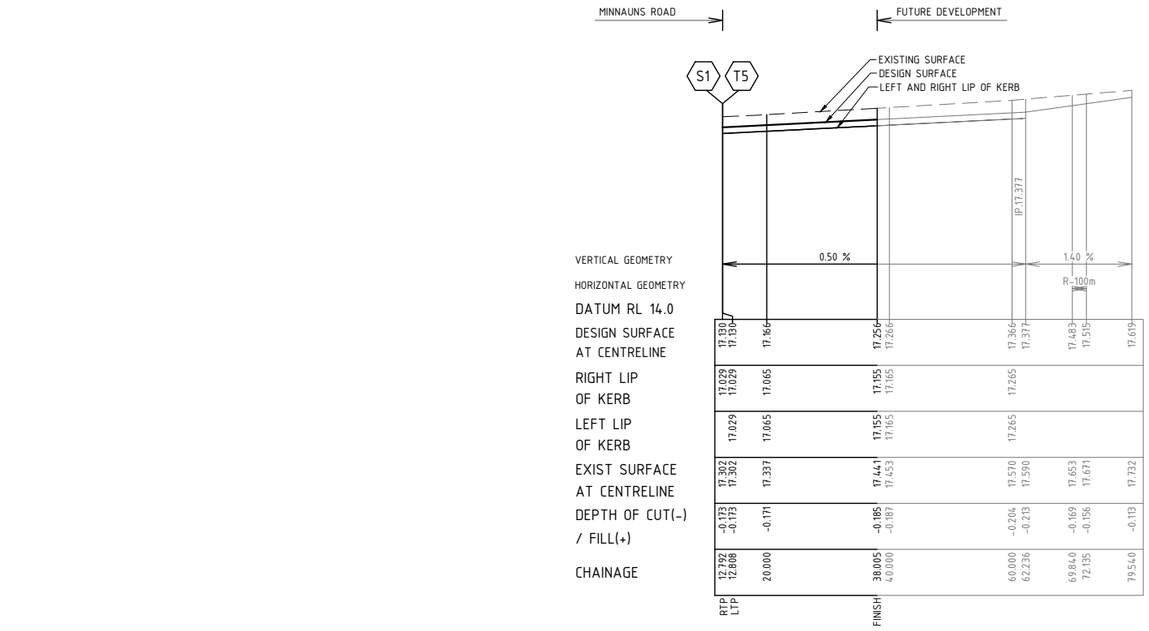
CIVIL DRAWING

DRAWING TITLE:
ROAD LONGITUDINAL SECTIONS
SHEET 1 OF 3

TGM REF. No.: 004108-206
SHEET: 10 OF 28 REV: 02

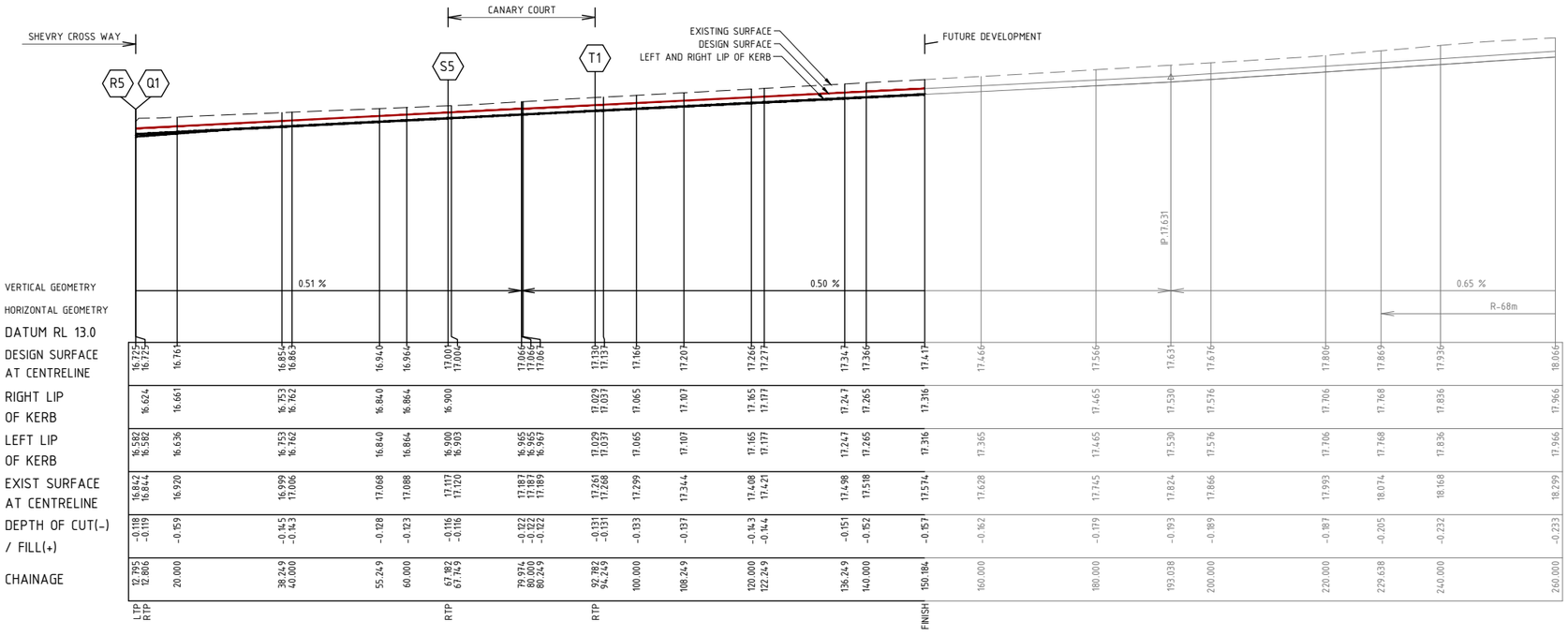

TGM REF. No.: 004108-206
SHEET: 10 OF 28 REV: 02

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TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER




## CANARY COURT - LONGITUDINAL SECTION

HORZ: 1:500
VERT: 1:50




## MINNAUNS ROAD - LONGITUDINAL SECTION

HORZ: 1:500
VERT: 1:50

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|---|---|---|---|---|---|---|---|
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| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:500 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

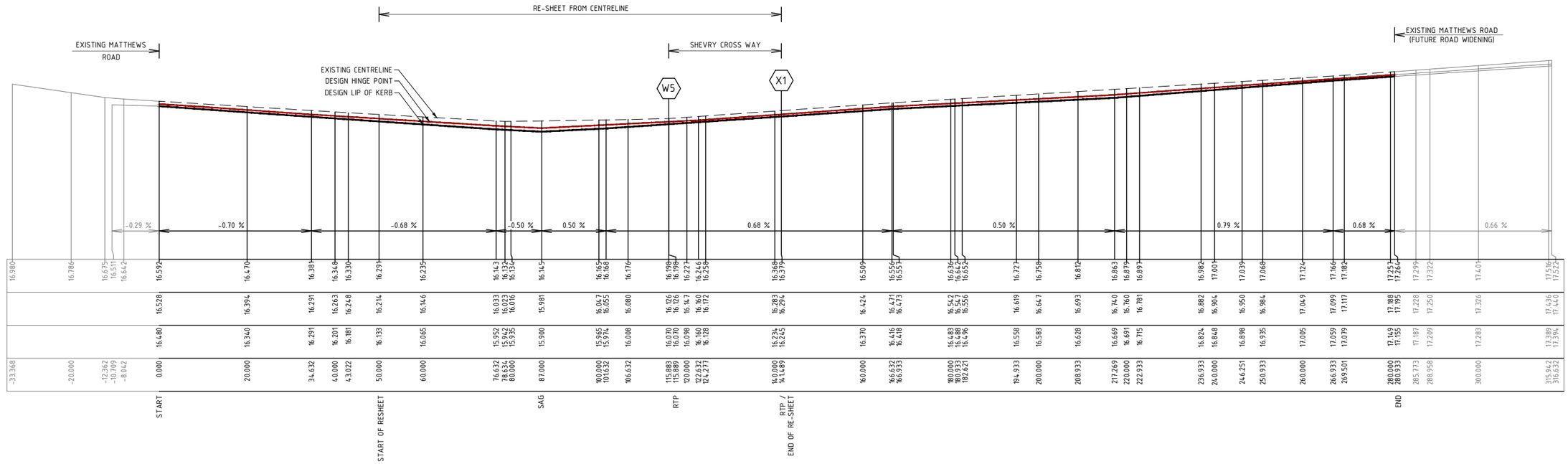
DRAWING TITLE:
ROAD LONGITUDINAL SECTIONS
SHEET 2 OF 3

TGM REF. No: 004108-206
SHEET: 11 OF 28
REV: 02

TGM REF. No. 004108-206
SHEET 11 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER




## MATTHEWS ROAD (WIDENING) - ROAD LONGITUDINAL SECTION

HORZ: 1:500
VERT: 1:50

TGM REF. No. 004108-206

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|---|---|---|
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| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECEMBER 17
SCALE: H 1:500 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

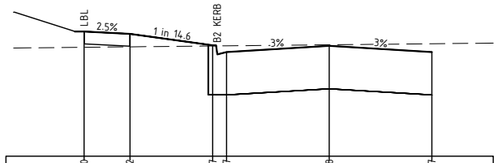
CIVIL DRAWING

DRAWING TITLE:
ROAD LONGITUDINAL SECTIONS
SHEET 3 OF 3

TGM REF. No: 004108-206
SHEET: 12 OF 28
REV: 02

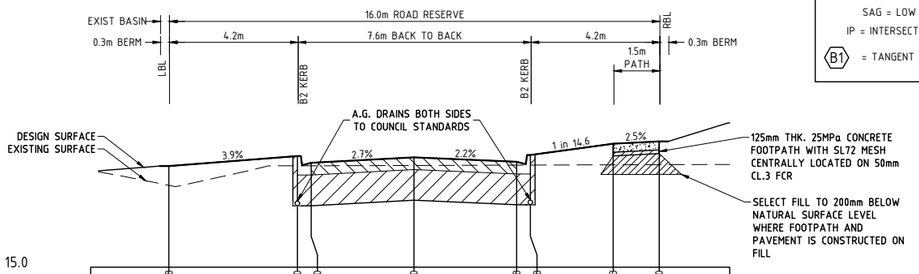
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

LTP = LEFT TANGENT POINT
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CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER



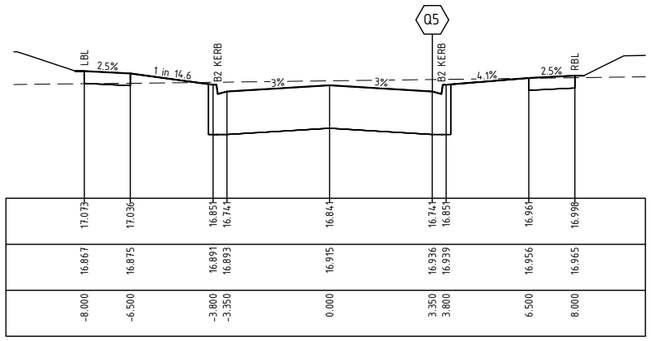

| | | | | | | |
|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | |
| DESIGN SURFACE | 17.030 | 16.992 | 16.807 16.697 | 16.798 | 16.697 | |
| EXISTING SURFACE | 16.774 | 16.782 | 16.796 16.798 | 16.815 | 16.832 | |
| OFFSET | -7.991 | -6.500 | -3.800 -3.350 | 0.000 | 3.350 | |

CH. 193.426



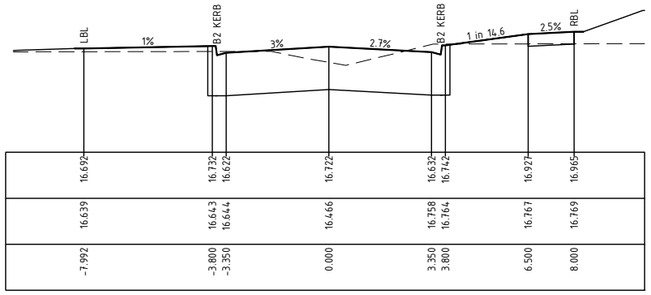

| | | | | | | |
|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | |
| DESIGN SURFACE | 16.648 | 16.810 | 16.790 | 16.718 16.828 | 17.013 | 17.050 |
| EXISTING SURFACE | 16.333 | 16.652 16.652 | 16.657 | 16.663 16.663 | 16.668 | 16.670 |
| OFFSET | -7.994 | -3.800 -3.350 | 0.000 | 3.350 3.800 | 6.500 | 8.000 |

CH. 221.600 (TYPICAL)



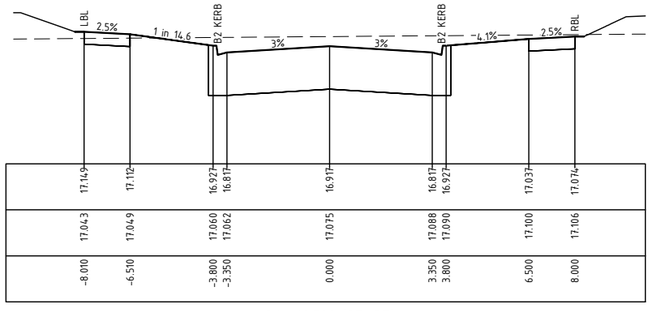

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | |
| DESIGN SURFACE | 17.073 | 17.036 | 16.851 16.741 | 16.841 | 16.741 16.851 | 16.961 | 16.998 |
| EXISTING SURFACE | 16.867 | 16.875 | 16.891 16.893 | 16.915 | 16.936 16.939 | 16.956 | 16.965 |
| OFFSET | -8.000 | -6.500 | -3.800 -3.350 | 0.000 | 3.350 3.800 | 6.500 | 8.000 |

CH. 184.799 (RTP)



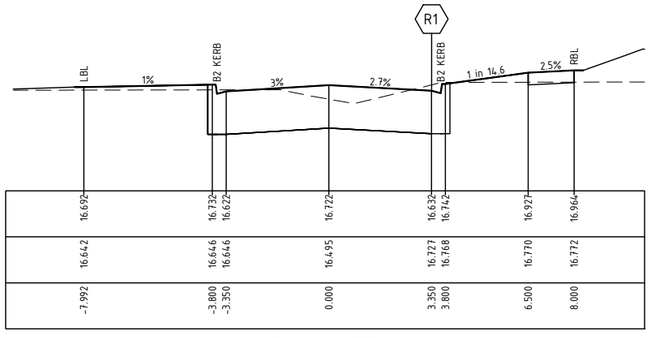

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | |
| DESIGN SURFACE | 16.692 | 16.732 16.622 | 16.722 | 16.632 16.742 | 16.927 | 16.965 | |
| EXISTING SURFACE | 16.639 | 16.643 16.644 | 16.466 | 16.758 16.764 | 16.767 | 16.769 | |
| OFFSET | -7.992 | -3.800 -3.350 | 0.000 | 3.350 3.800 | 6.500 | 8.000 | |

CH. 210.764 (SAG)




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | |
| DESIGN SURFACE | 17.149 | 17.112 | 16.927 16.817 | 16.917 | 16.817 16.927 | 17.037 | 17.074 |
| EXISTING SURFACE | 17.043 | 17.049 | 17.060 17.062 | 17.075 | 17.088 17.090 | 17.100 | 17.106 |
| OFFSET | -8.010 | -6.510 | -3.800 -3.350 | 0.000 | 3.350 3.800 | 6.500 | 8.000 |

CH. 169.599 (START)




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | |
| DESIGN SURFACE | 16.692 | 16.732 16.622 | 16.722 | 16.632 16.742 | 16.927 | 16.964 | |
| EXISTING SURFACE | 16.642 | 16.646 16.646 | 16.495 | 16.727 16.768 | 16.770 | 16.772 | |
| OFFSET | -7.992 | -3.800 -3.350 | 0.000 | 3.350 3.800 | 6.500 | 8.000 | |

CH. 210.402 (RTP)

## ROAD CROSS SECTIONS - SHEVRY CROSS WAY

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
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| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

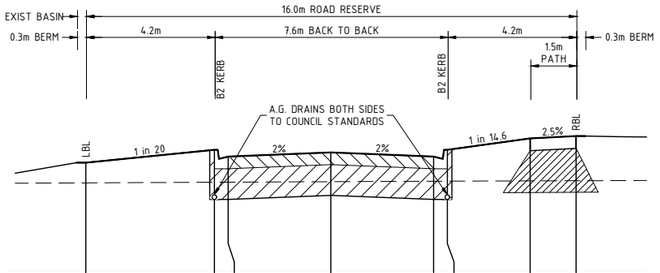
DRAWING TITLE:
ROAD CROSS SECTIONS
SHEVRY CROSS WAY SHEET 1 OF 2

TGM REF. No: 004108-206 | SHEET: 13 OF 28 | REV: 02

TGM REF. No: 004108-206 | SHEET: 13 OF 28 | REV: 02

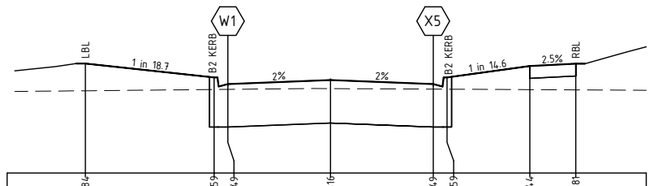
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER



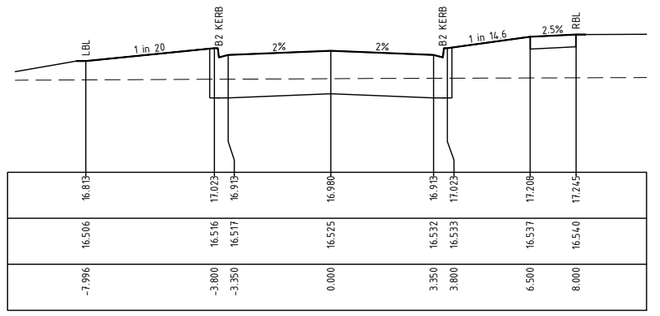

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | | |
| DESIGN SURFACE | 16.818 | 17.028 | 16.918 | 16.985 | 16.918 | 17.028 | 17.213 | 17.251 |
| EXISTING SURFACE | 16.489 | 16.499 | 16.500 | 16.508 | 16.516 | 16.516 | 16.521 | 16.523 |
| OFFSET | -7.996 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

CH. 239.599 (CREST) (TYPICAL)



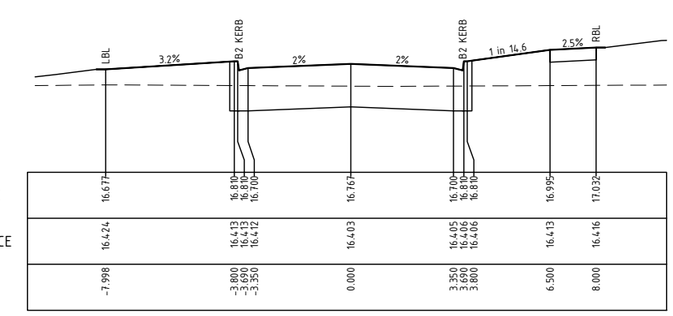

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | | |
| DESIGN SURFACE | 16.784 | 16.559 | 16.449 | 16.516 | 16.449 | 16.559 | 16.744 | 16.781 |
| EXISTING SURFACE | 16.341 | 16.362 | 16.364 | 16.376 | 16.368 | 16.366 | 16.359 | 16.355 |
| OFFSET | -8.000 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

CH. 264.650 (LTP) (RTP) (FINISH)




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | | |
| DESIGN SURFACE | 16.813 | 17.023 | 16.913 | 16.980 | 16.913 | 17.023 | 17.208 | 17.245 |
| EXISTING SURFACE | 16.506 | 16.516 | 16.517 | 16.525 | 16.532 | 16.533 | 16.537 | 16.540 |
| OFFSET | -7.996 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

CH. 237.600




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATUM 15.0 | | | | | | | | |
| DESIGN SURFACE | 16.677 | 16.810 | 16.810 | 16.700 | 16.761 | 16.700 | 16.810 | 16.810 | 16.995 | 17.032 |
| EXISTING SURFACE | 16.424 | 16.413 | 16.413 | 16.412 | 16.403 | 16.405 | 16.406 | 16.406 | 16.413 | 16.416 |
| OFFSET | -7.998 | -3.800 | -3.690 | -3.350 | 0.000 | 3.350 | 3.690 | 3.800 | 6.500 | 8.000 |

CH. 252.6

## ROAD CROSS SECTIONS - SHEVRY CROSS WAY

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
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| 02 | FOR APPROVAL | 20/11/18 |

| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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CLIENT: Phalaris Park.


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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

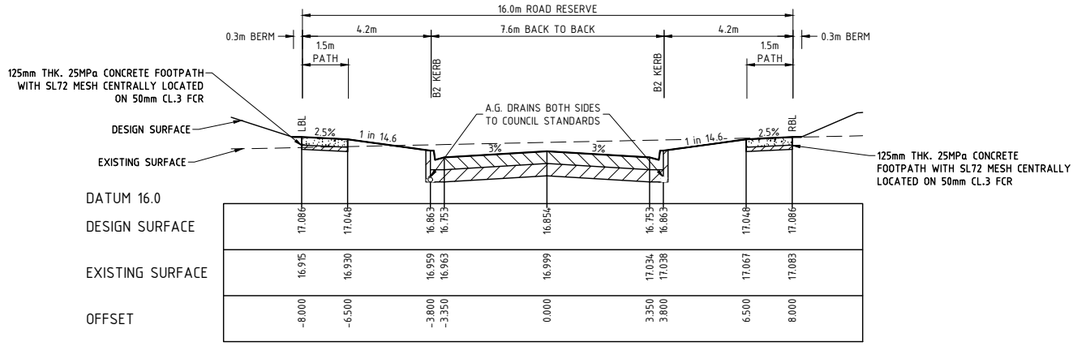
DRAWING TITLE:
ROAD CROSS SECTIONS
SHEVRY CROSS WAY SHEET 2 OF 2

TGM REF. No: 004108-206
SHEET: 14 OF 28
REV: 02

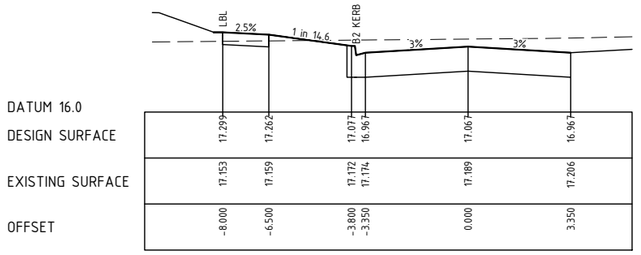
TGM REF. No. 004108-206
SHEET 14 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

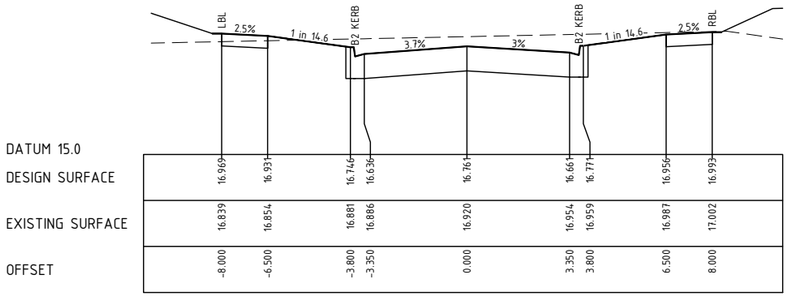
LTP = LEFT TANGENT POINT
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CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER



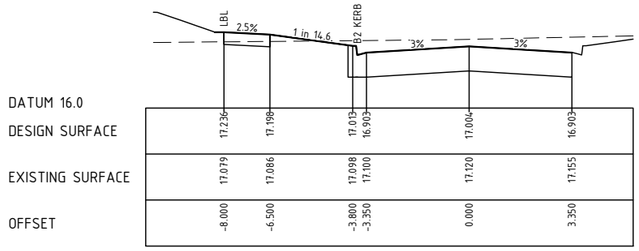

CH. 38.249 (TYPICAL)



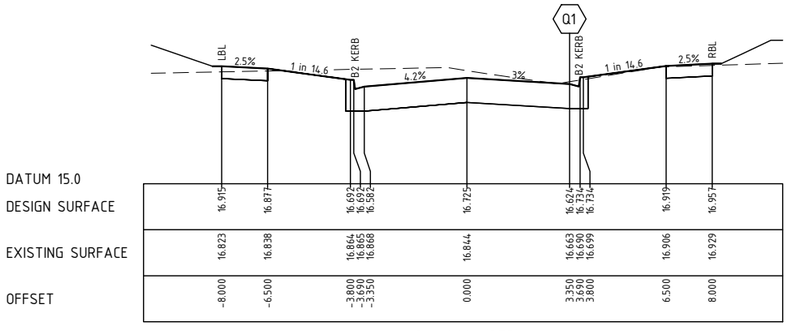

CH. 80.249



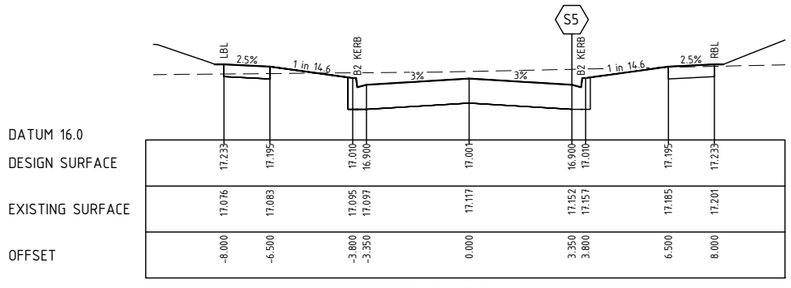

CH. 20.000



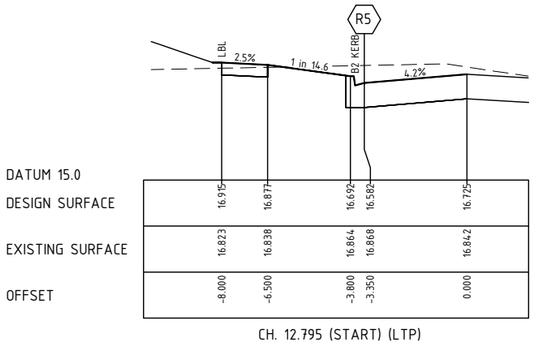

CH. 67.749



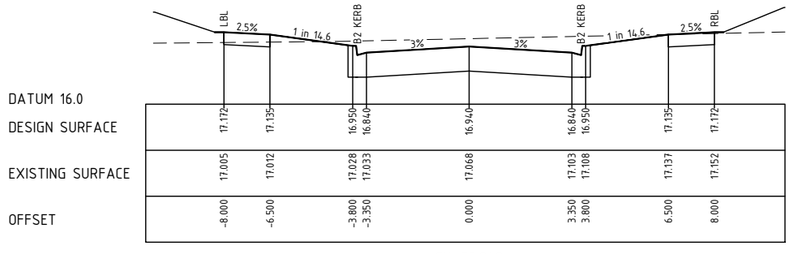

CH. 12.806 (RTP)




CH. 67.182 (RTP)




CH. 12.795 (START) (LTP)




CH. 55.249

# ROAD CROSS SECTIONS - MINNAUNS ROAD

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
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|---|---|---|---|---|

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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CLIENT: Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

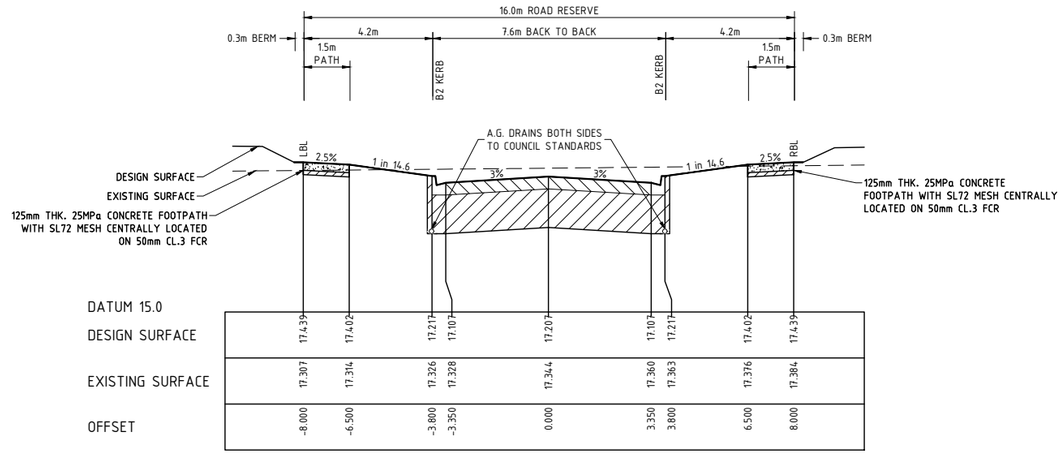
DRAWING TITLE:
ROAD CROSS SECTIONS
MINNAUNS ROAD SHEET 1 OF 2

TGM REF. No: 004108-206 | SHEET: 15 OF 28 | REV: 02

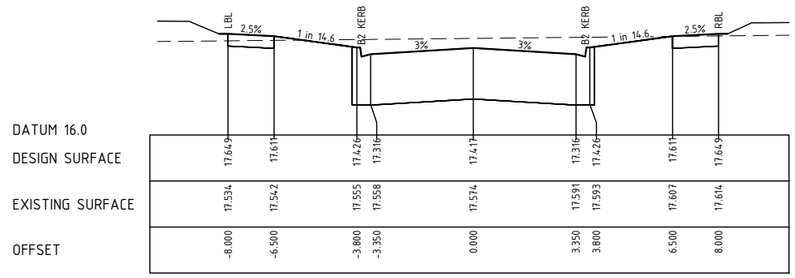
TGM REF. No: 004108-206
SHEET: 15 OF 28 REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

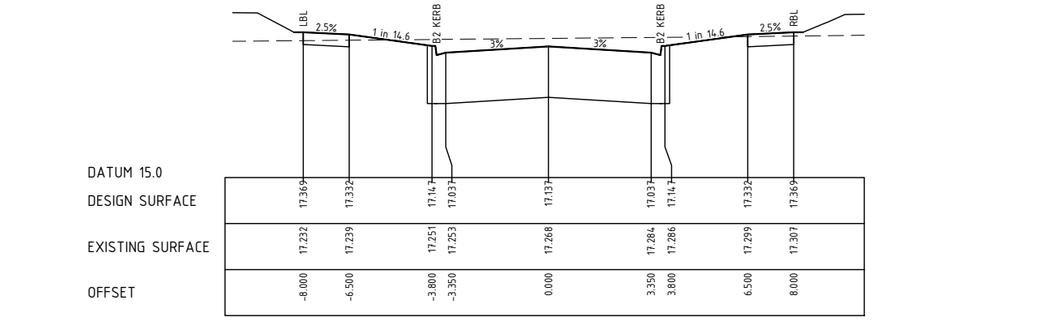
LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER



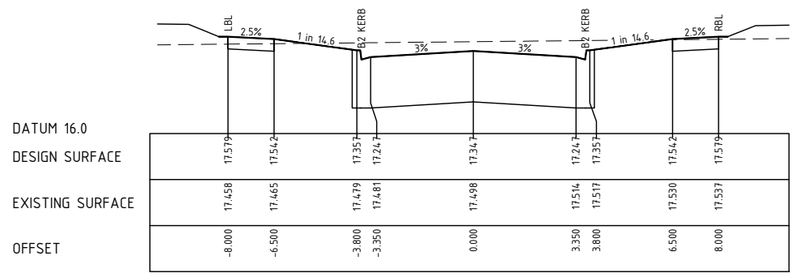

CH. 108.249 (TYPICAL)



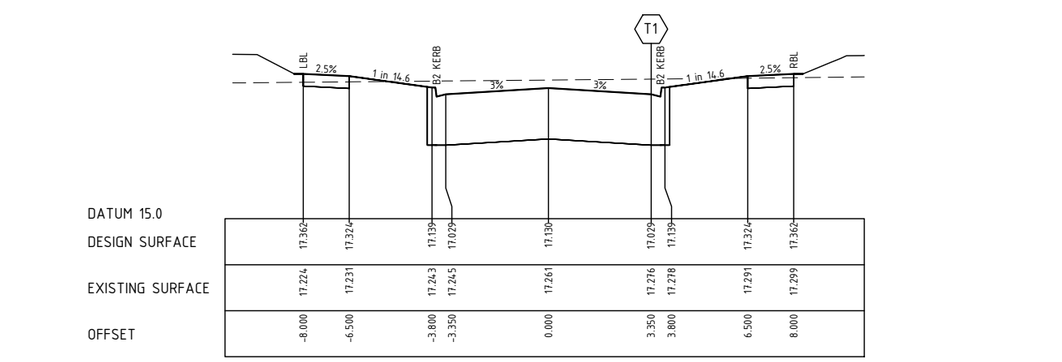

CH. 150.184 (FINISH)



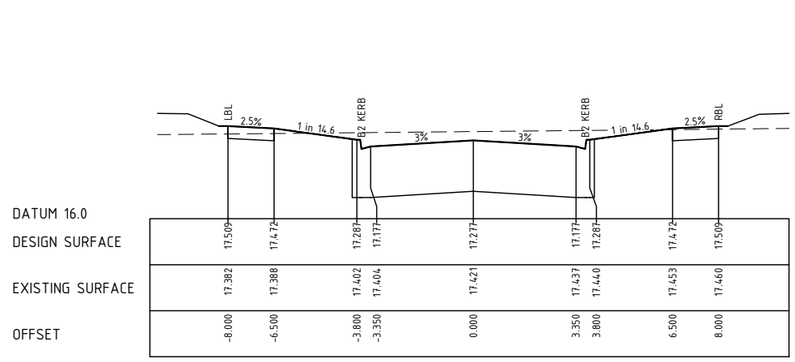

CH. 94.249




CH. 136.249




CH. 92.782 (RTP)




CH. 122.249

## ROAD CROSS SECTIONS - MINNAUNS ROAD

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 | | | | | |
| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECEMBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A
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CLIENT: Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

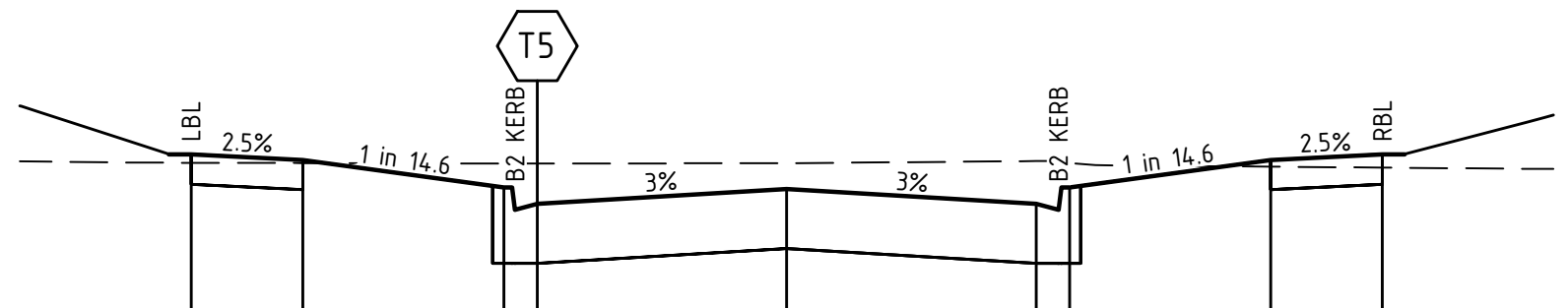
DRAWING TITLE:
ROAD CROSS SECTIONS
MINNAUNS ROAD SHEET 2 OF 2

TGM REF. No: 004108-206 | SHEET: 16 OF 28 | REV: 02

TGM REF. No. 004108-206
SHEET 16 OF 28
REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

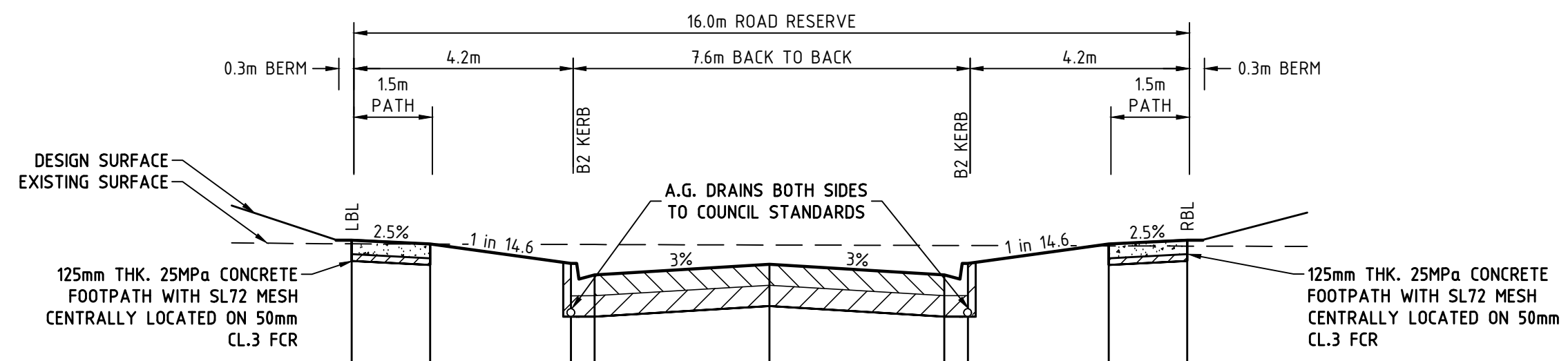
LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
= TANGENT POINT NUMBER




DATUM 16.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DESIGN SURFACE | 17.362 | 17.324 | 17.139 | 17.029 | 17.130 | 17.029 | 17.139 | 17.324 | 17.362 |
| EXISTING SURFACE | 17.306 | 17.304 | 17.300 | 17.301 | 17.302 | 17.317 | 17.304 | 17.280 | 17.273 |
| OFFSET | -8.000 | -6.500 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

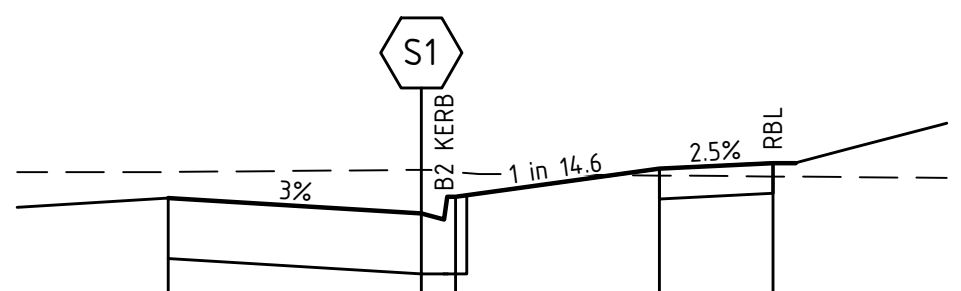
CH. 12.808 (LTP)




DATUM 16.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DESIGN SURFACE | 17.488 | 17.450 | 17.265 | 17.155 | 17.256 | 17.155 | 17.265 | 17.450 | 17.488 |
| EXISTING SURFACE | 17.452 | 17.450 | 17.446 | 17.446 | 17.441 | 17.437 | 17.436 | 17.432 | 17.430 |
| OFFSET | -8.000 | -6.500 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

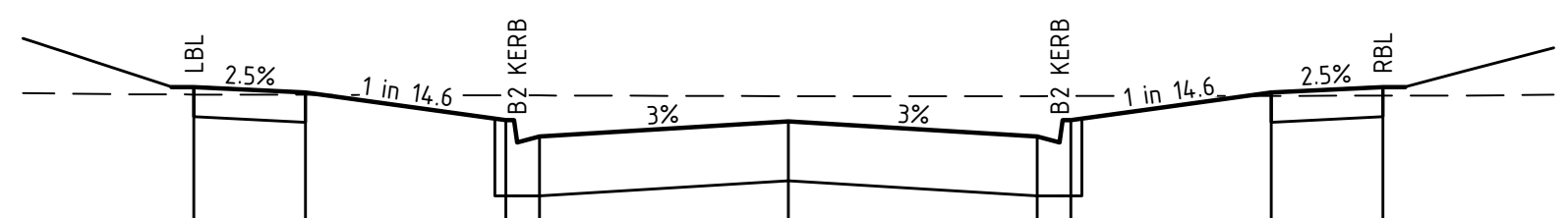
CH. 38.005 (FINISH) (TYPICAL)




DATUM 16.0

| | | | | | |
|---|---|---|---|---|---|
| DESIGN SURFACE | 17.130 | 17.029 | 17.139 | 17.324 | 17.362 |
| EXISTING SURFACE | 17.302 | 17.317 | 17.303 | 17.279 | 17.273 |
| OFFSET | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

CH. 12.792 (START) (RTP)




DATUM 16.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DESIGN SURFACE | 17.398 | 17.360 | 17.175 | 17.065 | 17.166 | 17.065 | 17.175 | 17.360 | 17.398 |
| EXISTING SURFACE | 17.347 | 17.345 | 17.342 | 17.341 | 17.337 | 17.337 | 17.337 | 17.339 | 17.339 |
| OFFSET | -8.000 | -6.500 | -3.800 | -3.350 | 0.000 | 3.350 | 3.800 | 6.500 | 8.000 |

CH. 20

## ROAD CROSS SECTIONS - CANARY COURT

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 | | | | | |
| 01 | FOR APROVAL | 31/05/18 | | | | | |
| 02 | FOR APPROVAL | 20/11/18 | | | | | |

| | | | |
|---|---|---|---|
| DESIGNED: | K.BOON | DATE: | DECMEBER 17 |
| DRAWN: | C.LEWIS | SCALE: | H 1:100 V 1:50 |
| SURVEY: | TGM GEELONG | SHEET SIZE: | A1 |
| CHECKED: | [signature] | APPROVED: | [signature] |
| POS NO: | PS 740227S VERSION: 9 | PERMIT NO: | 1123/2004/A |

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CLIENT:
Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

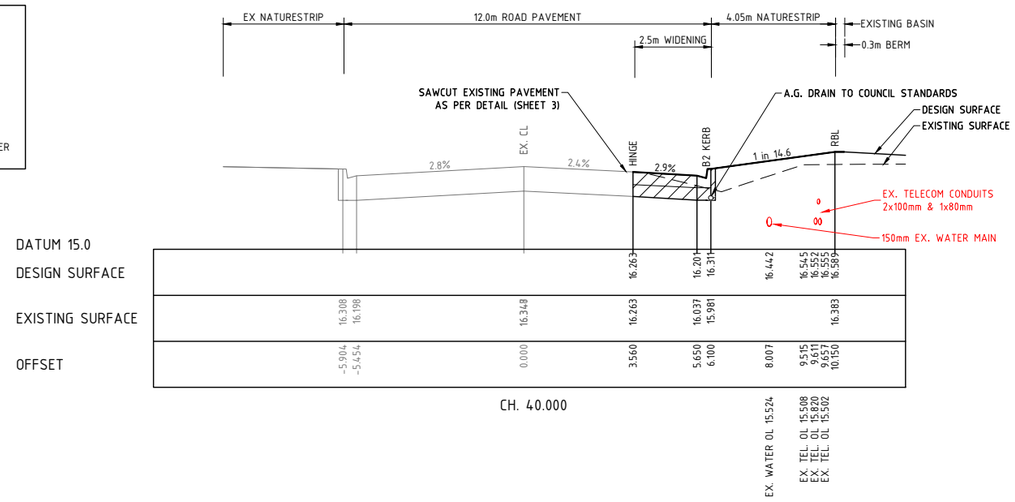
CIVIL DRAWING

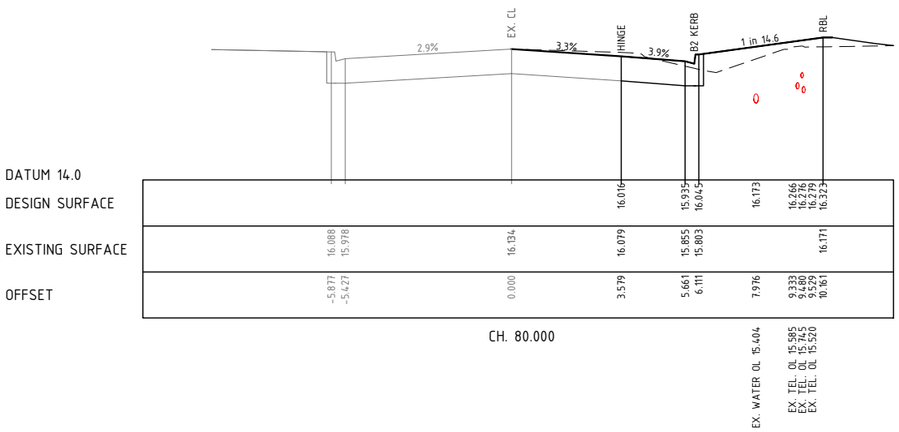
DRAWING TITLE:
ROAD CROSS SECTIONS
CANARY COURT

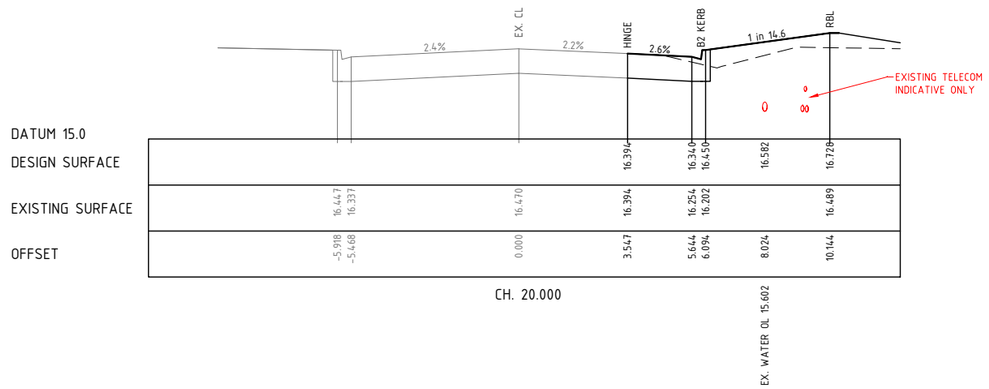
TGM REF. No.: 004108-206 SHEET: 17 OF 28 REV: 02

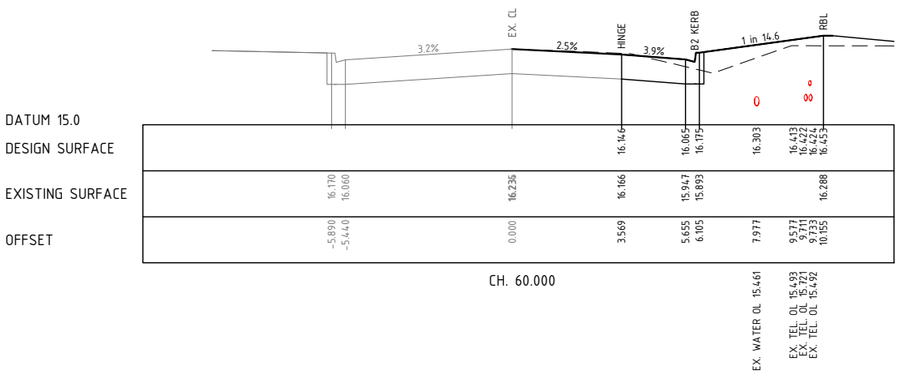
TGM REF. No.: 004108-206
SHEET: 17 OF 28
REV: 02

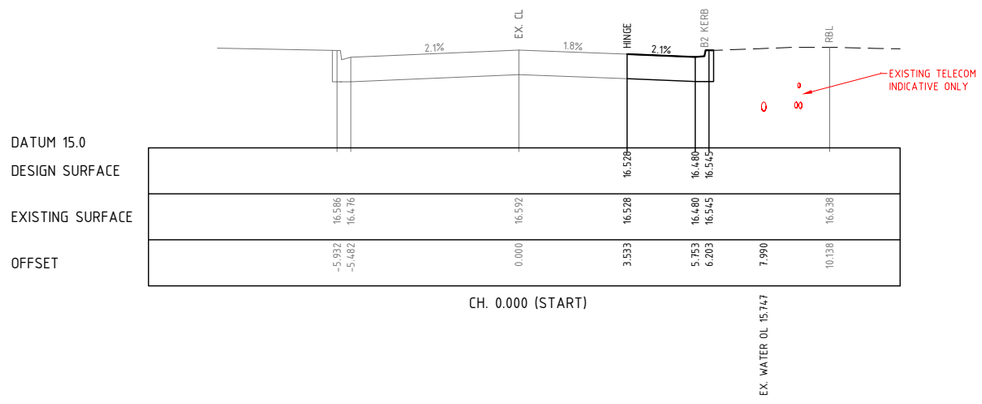
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RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER

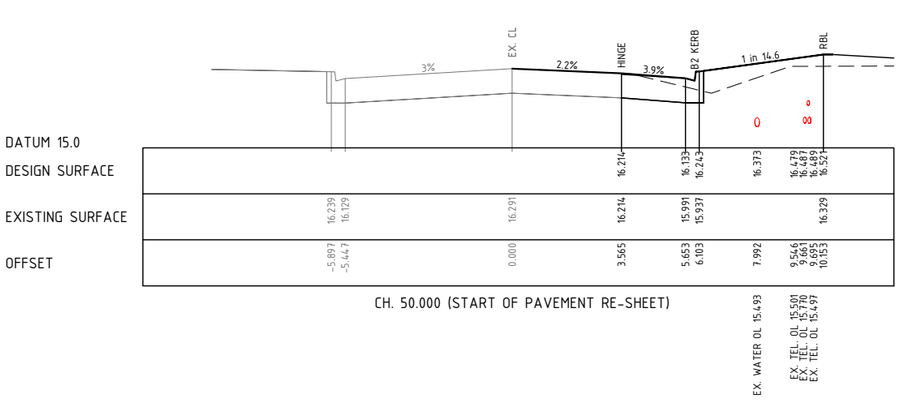



# ROAD CROSS SECTIONS - MATTHEWS ROAD

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
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| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

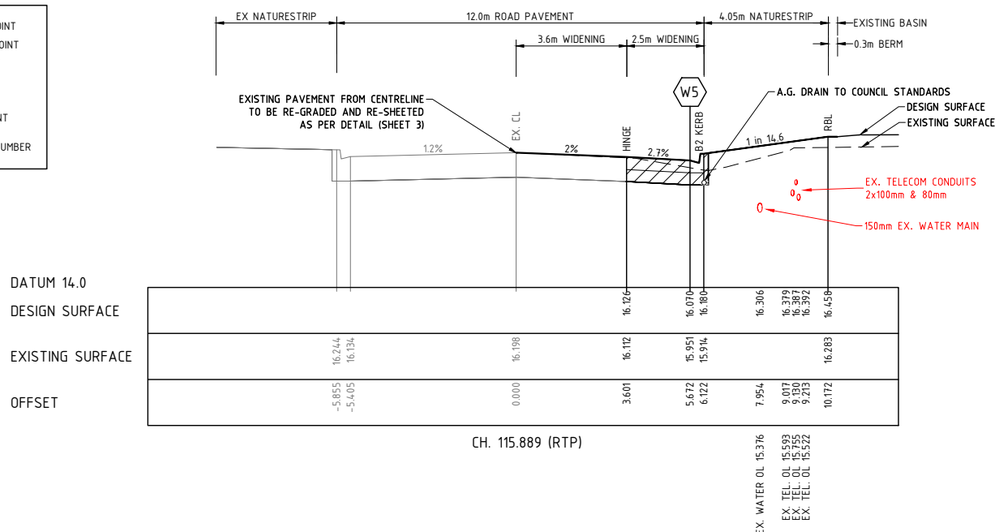
DRAWING TITLE:
ROAD CROSS SECTIONS
MATTHEWS ROAD SHEET 1 OF 4

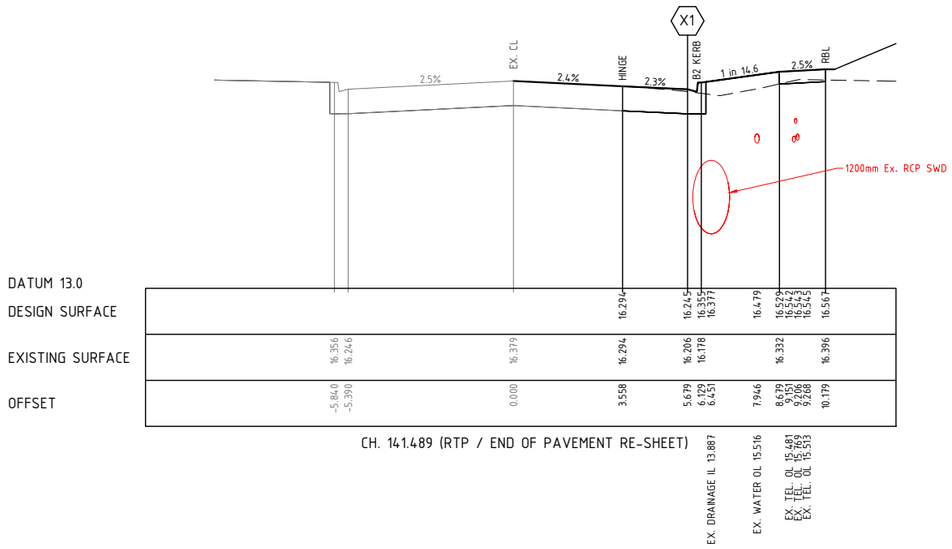
TGM REF. No. 004108-206 | SHEET: 18 OF 28 | REV: 02

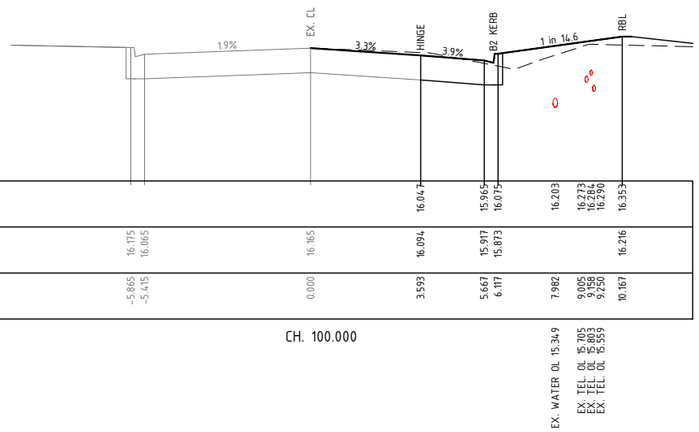
TGM REF. No. 004108-206
SHEET 18 OF 28 REV. 02

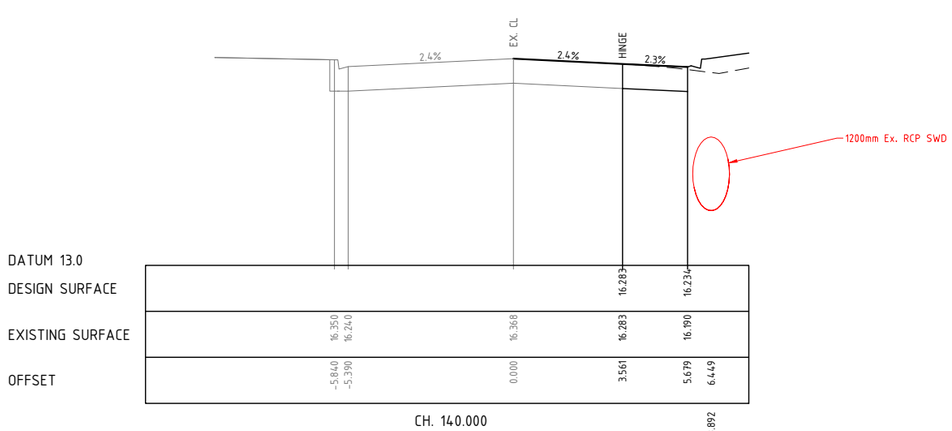
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

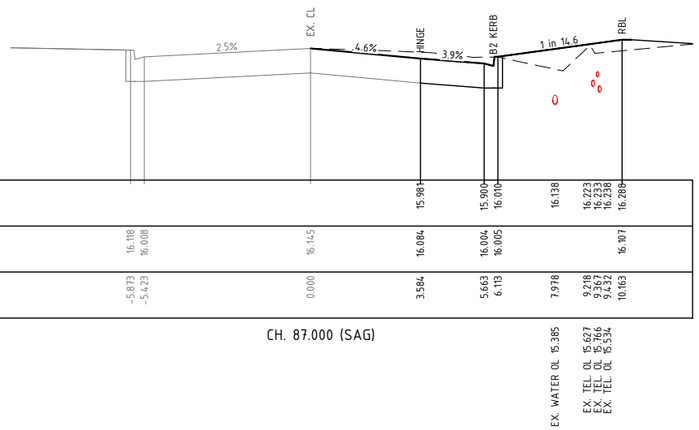
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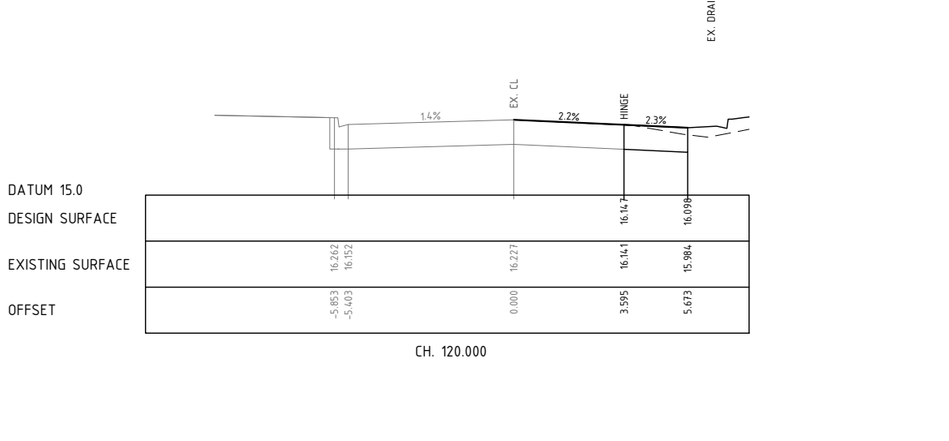



# ROAD CROSS SECTIONS - MATTHEWS ROAD

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
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| 00 | FOR APPROVAL | 22/12/17 |
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|---|---|---|---|---|

| | | | |
|---|---|---|---|
| DESIGNED: K.BOON | DATE: DECMEBER 17 | | |
| DRAWN: C.LEWIS | SCALE: H 1:100 V 1:50 | | |
| SURVEY: TGM GEELONG | SHEET SIZE: A1 | | |
| CHECKED: | APPROVED: | | |
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STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

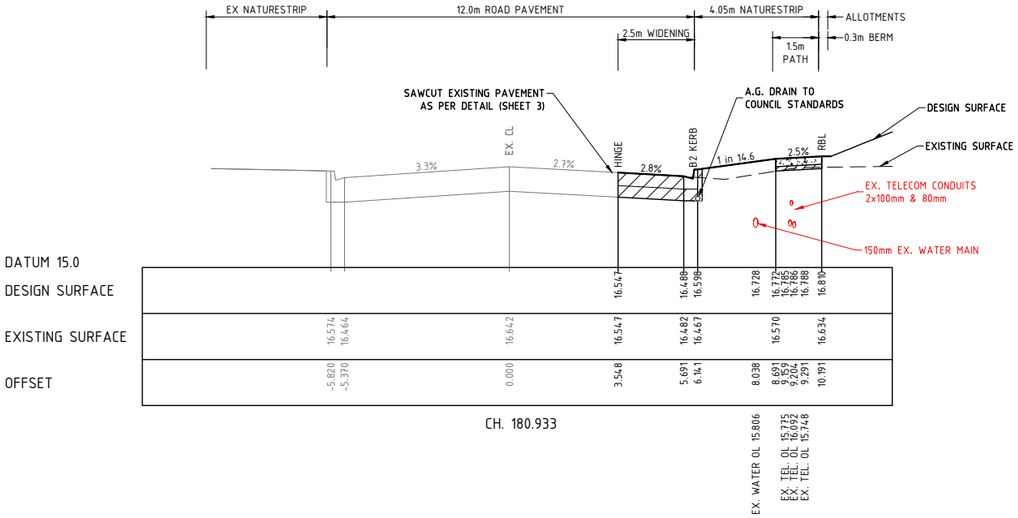
CIVIL DRAWING

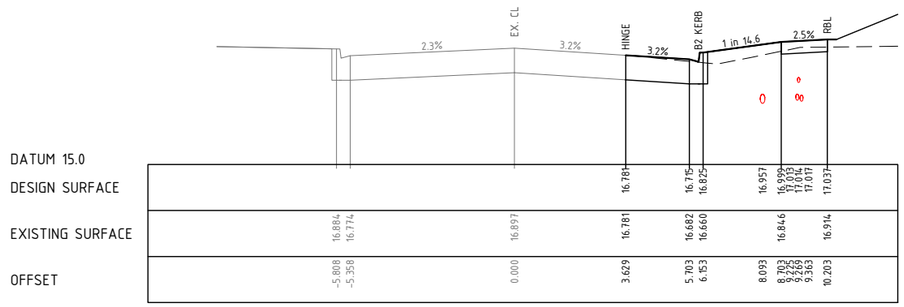
DRAWING TITLE:
ROAD CROSS SECTIONS
MATTHEWS ROAD SHEET 2 OF 4

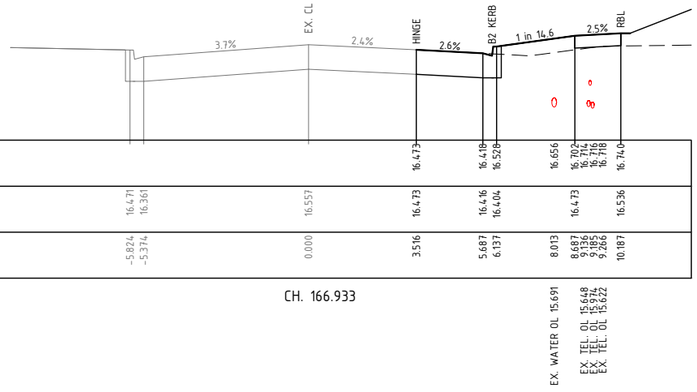
TGM REF. No. 004108-206 | SHEET: 19 OF 28 | REV. 02

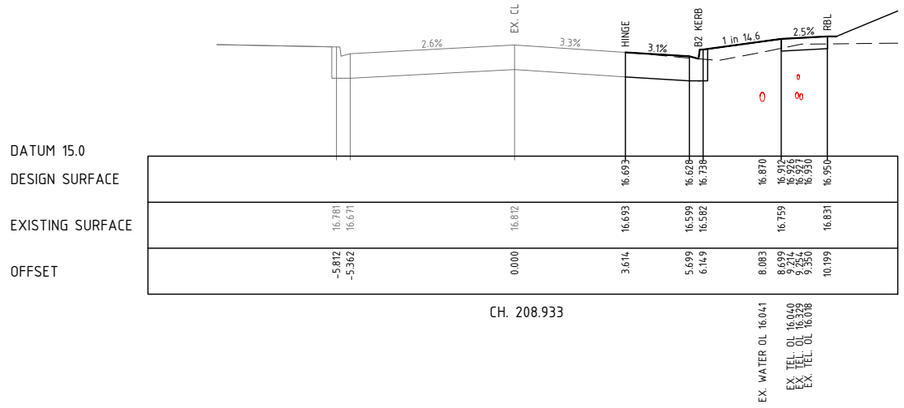
TGM REF. No. 004108-206 | SHEET 19 OF 28 REV. 02

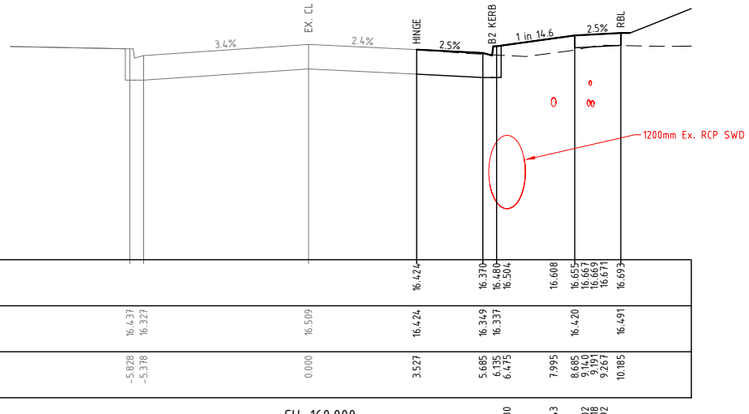
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

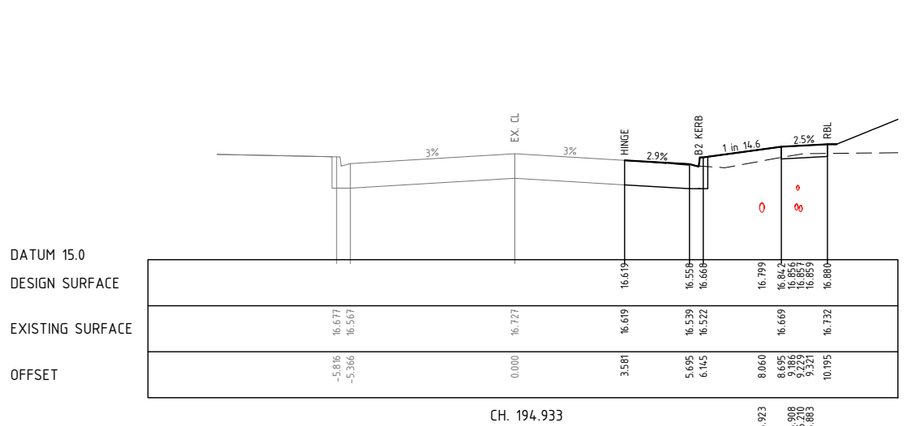



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CREST = HIGH POINT
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# ROAD CROSS SECTIONS - MATTHEWS ROAD

HORZ: 1:100
VERT: 1:50

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DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
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LOVELY BANKS, VIC 3221
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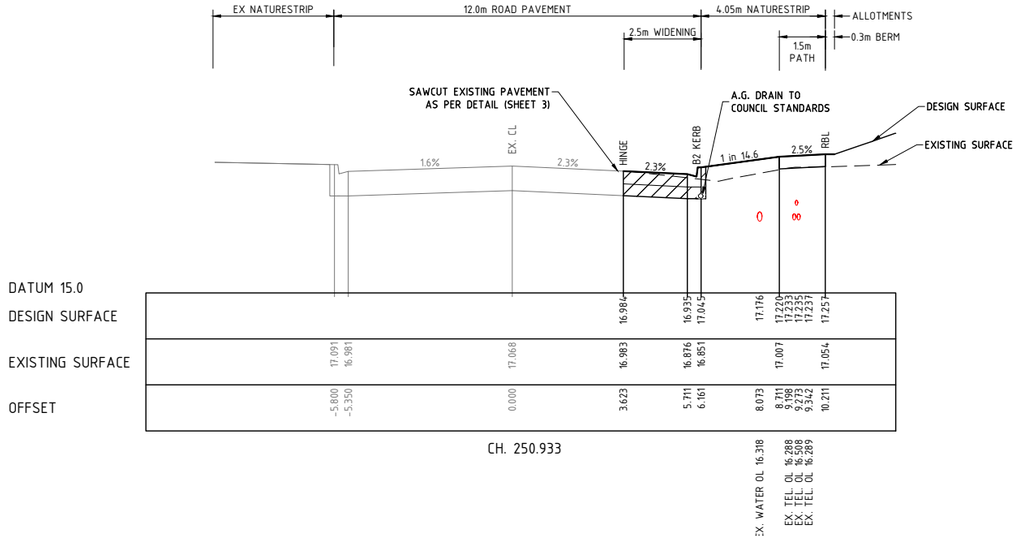
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ROAD CROSS SECTIONS
MATTHEWS ROAD SHEET 3 OF 4

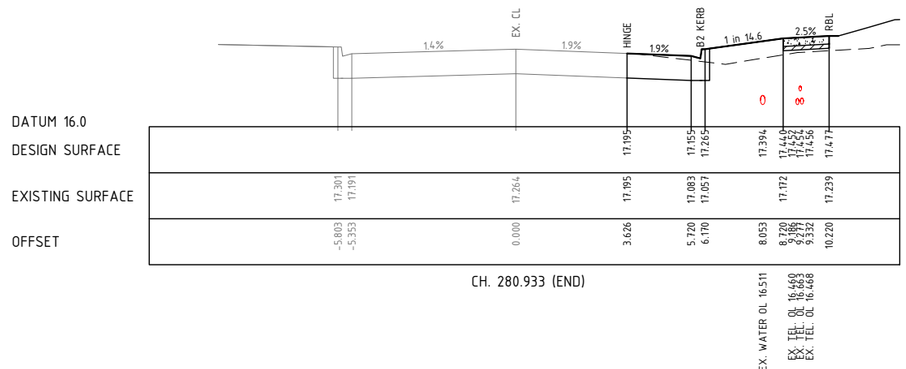
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SHEET: 20 OF 28
REV: 02

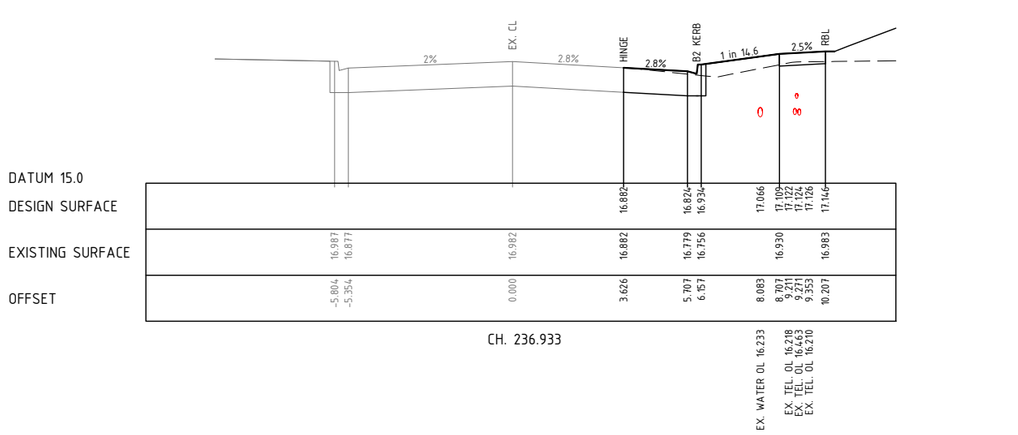
TGM REF. No: 004108-206
SHEET: 20 OF 28
REV: 02

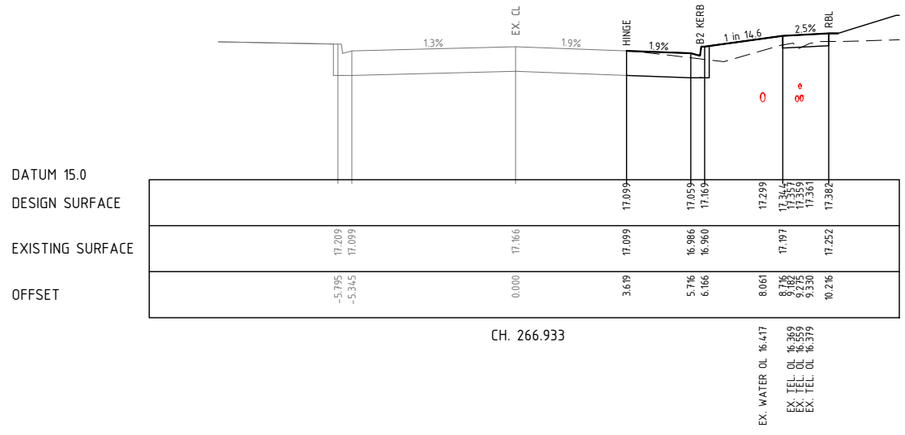
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
(B1) = TANGENT POINT NUMBER




# ROAD CROSS SECTIONS - MATTHEWS ROAD

HORZ: 1:100
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
| 02 | FOR APPROVAL | 20/11/18 |

| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: H 1:100 V 1:50
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

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CLIENT: Phalaris Park.


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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

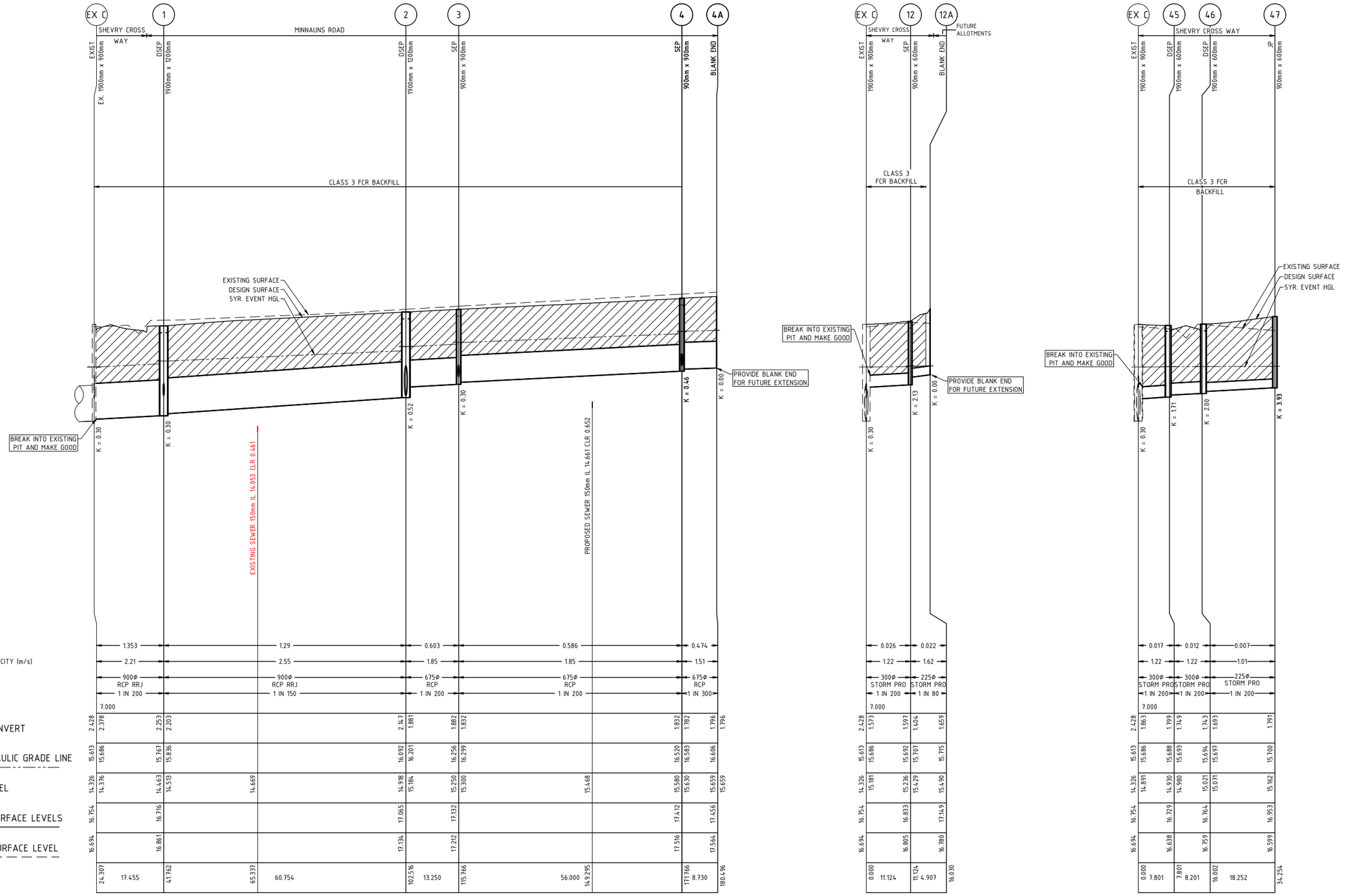
CIVIL DRAWING

DRAWING TITLE:
ROAD CROSS SECTIONS
MATTHEWS ROAD SHEET 4 OF 4

TGM REF. No: 004108-206
SHEET: 21 OF 28
REV: 02

TGM REF. No. 004108-206
SHEET 21 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




# DRAINAGE LONGITUDINAL SECTIONS

HORZ: 1:500
VERT: 1:50

| ISSUE | ISSUED FOR | DATE |
|---|---|---|
| 00 | FOR APPROVAL | 22/12/17 |
| 01 | FOR APROVAL | 31/05/18 |
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DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
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SHEET SIZE: A1
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STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

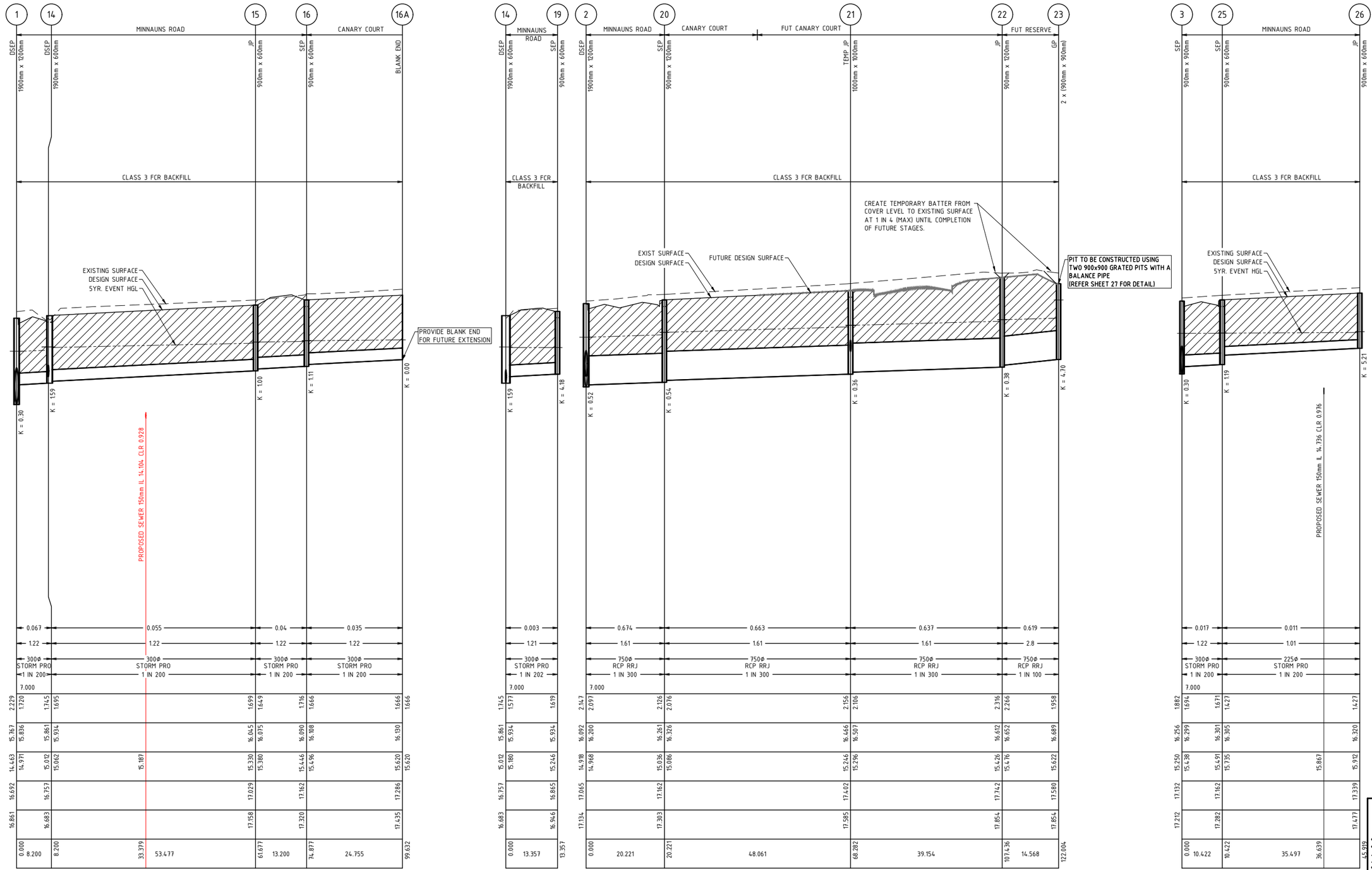
CIVIL DRAWING

DRAWING TITLE:
DRAINAGE LONGITUDINAL SECTIONS
SHEET 1 OF 4

TGM REF. No: 004108-206
SHEET: 22 OF 28
REV: 02

TGM REF. No: 004108-206
SHEET: 22 OF 28
REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




## DRAINAGE LONGITUDINAL SECTIONS

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DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
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PROJECT:
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STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

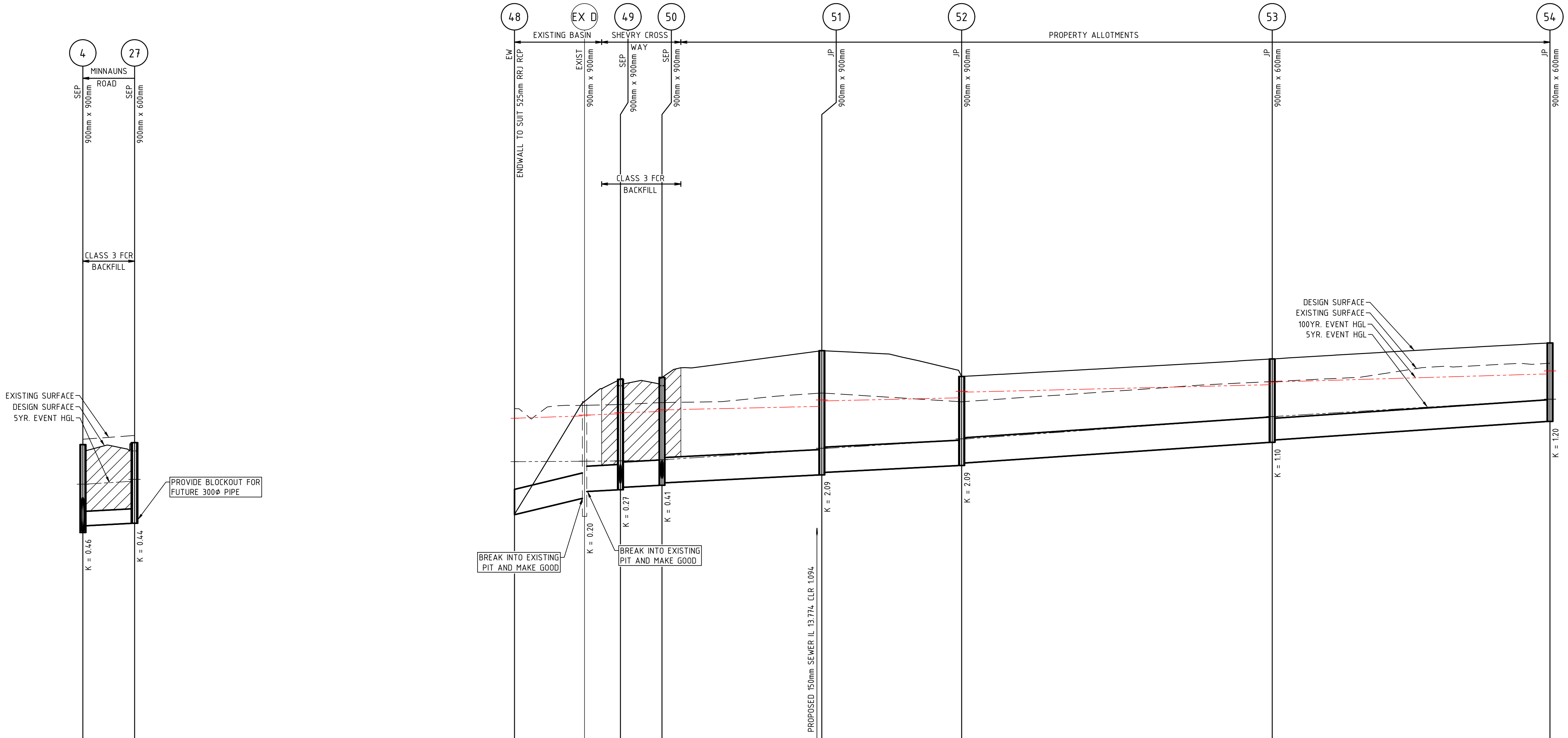
CIVIL DRAWING

DRAWING TITLE:
DRAINAGE LONGITUDINAL SECTIONS
SHEET 2 OF 4

TGM REF. No. 004108-206
SHEET: 23 OF 28
REV: 02

TGM REF. No. 004108-206
SHEET 23 OF 28 REV. 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




**Pits 4 – 27**

| | 4 – 27 |
|---|---|
| FLOW (CUMECS) | 0.093 |
| AT GRADE VELOCITY (m/s) | 1.22 |
| PIPE SIZE (mm) | 300ø STORM PRO |
| GRADE | 1 IN 200 |

DATUM 8.000

| | Pit 4 | | Pit 27 | |
|---|---|---|---|---|
| DEPTH TO INVERT | 1.823 | 1.684 | 1.671 | 1.621 |
| 5YR. HYDRAULIC GRADE LINE | 16.520 | 16.583 | 16.645 | 16.684 |
| INVERT LEVEL | 15.580 | 15.720 | 15.774 | 15.824 |
| FINISHED SURFACE LEVELS | 17.404 | | 17.445 | |
| EXISTING SURFACE LEVEL | 17.516 | | 17.592 | |
| CHAINAGE | 0.000 | 10.723 | 10.723 | |

**Pits 48 – 54**

| | 48 – EX D | EX D – 49 | 49 – 50 | 50 – 51 | 51 – 52 | 52 – 53 | 53 – 54 |
|---|---|---|---|---|---|---|---|
| 100yr FLOW (CUMECS) | 0.281 | 0.282 | 0.277 | 0.245 | 0.249 | 0.258 | 0.19 |
| 5yr FLOW (CUMECS) | 0.109 | 0.11 | 0.108 | 0.095 | 0.097 | 0.1 | 0.073 |
| AT GRADE VELOCITY (m/s) | 3.44 | 1.58 | 1.73 | 1.73 | 1.73 | 2 | 1.82 |
| PIPE SIZE (mm) | 525ø RCP RRJ | 525ø RCP RRJ | 525ø STORM PRO | 525ø STORM PRO | 525ø STORM PRO | 525ø STORM PRO | 450ø STORM PRO |
| GRADE | 1 IN 42.7 | 1 IN 200 | 1 IN 200 | 1 IN 200 | 1 IN 200 | 1 IN 150 | 1 IN 150 |
| CHAINAGE (length) | 14.528 | 7.440 | 8.623 | 33.150 | 29.000 | 64.395 | 57.605 |

DATUM 7.000

| | 48 | EX D | 49 | 50 | Sewer | 51 | 52 | 53 | 54 |
|---|---|---|---|---|---|---|---|---|---|
| DEPTH TO INVERT | 0.000 / 0.000 | 2.009 / 2.382 | 2.293 / 2.243 | 2.237 / 2.187 | | 2.576 / 2.526 | 1.846 / 1.796 | 1.730 / 1.680 | 1.629 / 1.579 |
| 5YR. HYDRAULIC GRADE LINE | 15.300 | 15.308 / 15.310 | 15.314 / 15.318 | 15.335 / 15.340 | | 15.551 / 15.572 | 15.746 / 15.767 | 16.225 / 16.237 | 16.584 / 16.597 |
| 100YR. HYDRAULIC GRADE LINE | 16.200 | 16.249 / 16.267 | 16.292 / 16.316 | 16.340 / 16.374 | | 16.446 / 16.560 | 16.625 / 16.741 | 16.896 / 16.952 | 17.120 / 17.182 |
| INVERT LEVEL | 14.200 / 14.200 | 14.540 / 14.165 14.680 | 14.717 / 14.767 | 14.810 / 14.860 | 15.023 | 15.026 / 15.076 | 15.221 / 15.271 | 15.700 / 15.750 | 16.134 / 16.184 |
| FINISHED SURFACE LEVELS | 14.725 | 16.549 | 17.010 | 17.047 | | 17.602 | 17.067 | 17.430 | 17.763 |
| EXISTING SURFACE LEVEL | 16.399 | 16.468 | 16.485 | 16.525 | | 16.723 | 16.540 | 16.961 | 17.341 |
| CHAINAGE | 0.000 | 14.528 | 21.969 | 30.592 | 62.728 | 63.742 | 92.742 | 157.137 | 214.742 |

# DRAINAGE LONGITUDINAL SECTIONS

HORZ: 1:500
VERT: 1:50

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DESIGNED: K.BOON  DATE: DECMEBER 17
DRAWN: C.LEWIS  SCALE: H 1:500 V 1:50
SURVEY: TGM GEELONG  SHEET SIZE: A1
CHECKED:  APPROVED:
POS NO: PS 740227S VERSION: 9  PERMIT NO: 1123/2004/A

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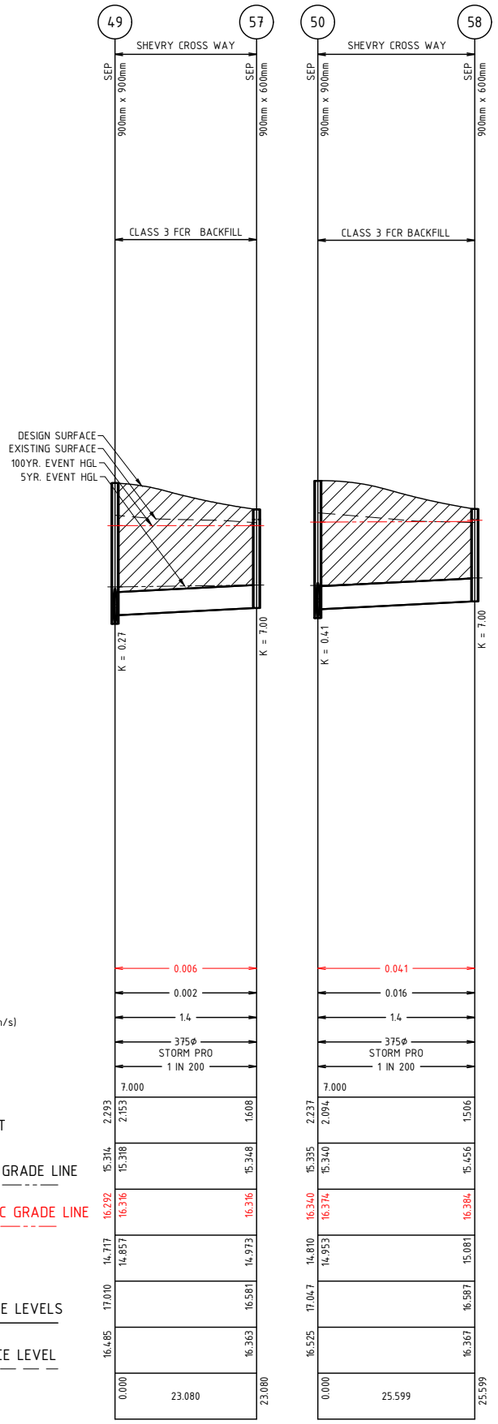
PROJECT:
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STAGE 6
MATTHEWS ROAD
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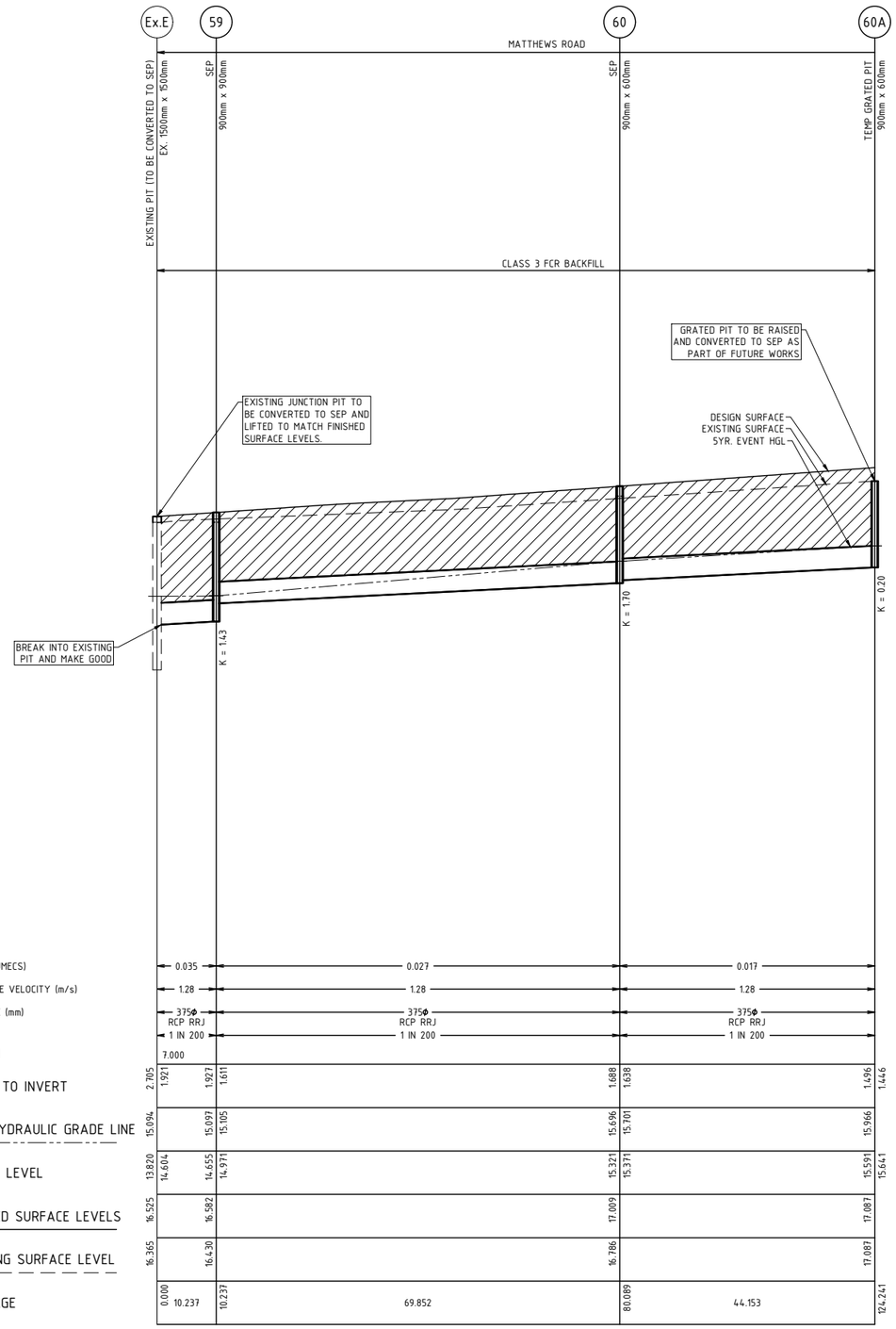
CIVIL DRAWING

DRAWING TITLE:
DRAINAGE LONGITUDINAL SECTIONS
SHEET 3 OF 4

TGM REF. No.: 004108-206  SHEET: 24 OF 28  REV: 02

TGM REF. No.: 004108-206
SHEET: 24 OF 28
REV: 02




## DRAINAGE LONGITUDINAL SECTIONS

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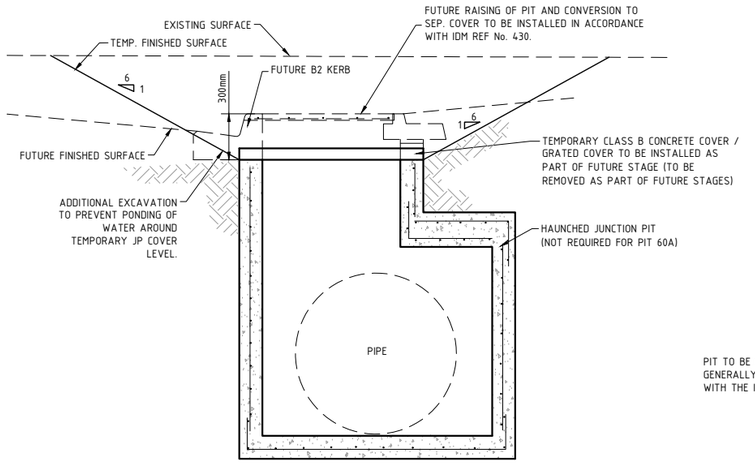
CIVIL DRAWING

DRAWING TITLE:
DRAINAGE LONGITUDINAL SECTIONS
SHEET 4 OF 4

TGM REF. No: 004108-206
SHEET: 25 OF 28
REV: 02

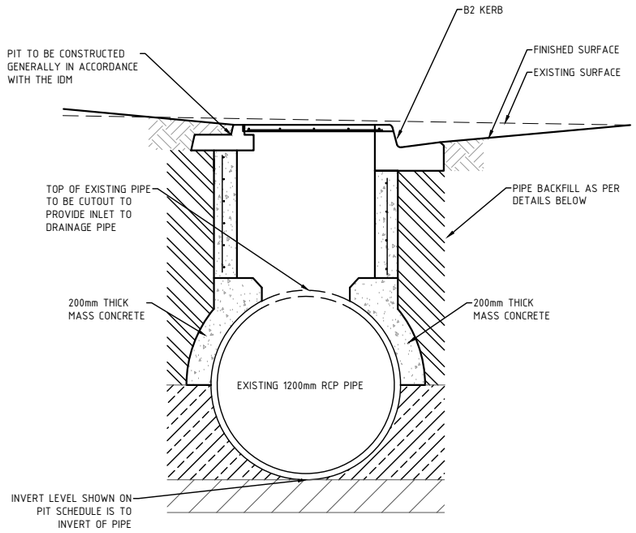
TGM REF. No. 004108-206
SHEET 25 OF 28
REV. 02

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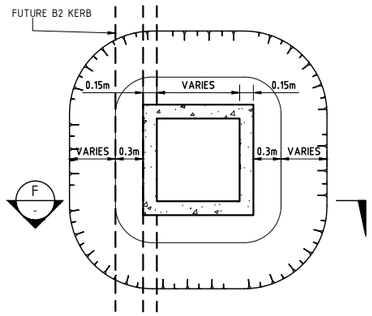

## SECTION F-F

SCALE N.T.S




## TYPICAL CONSTRUCTION OF SEP/DSEP OVER EXISTING DRAINAGE PIPE (PITS 63 & 64)

SCALE N.T.S




## TYPICAL FUTURE CONVERSION OF JP/GP TO SEP (PITS 21 & 60A)

## PIT SCHEDULE

| PIT | | | | INTERNAL | | FROM | INLET | | OUTLET | | PIT | PIT | COVER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAME | TYPE | EASTING | NORTHING | WD | LEN | PIT | DIA | INV | DIA | INV | RL | DEPTH | CLASS | REMARKS |
| Ex C | EXIST | 266432.40 | 5782257.42 | 1900 | 900 | 1 | 900 | 14.376 | 900 | 14.326 | 16.754 | 2.428 | --- | Break into Ex. Pit |
| | | | | | | 12 | 300 | 15.181 | | | | | | |
| | | | | | | 45 | 300 | 14.891 | | | | | | |
| 1xx | DSEP | 266428.438 | 5782240.433 | 1900 | 1200 | 2 | 900 | 14.513 | 900 | 14.463 | 16.716 | 2.253 | CLASS D | Refer IDM SD 445 & 410 |
| | | | | | | 14 | 300 | 14.971 | | | | | | |
| 2xx | DSEP | 266420.99 | 5782180.14 | 1900 | 1200 | 3 | 675 | 15.184 | 900 | 14.918 | 17.065 | 2.147 | CLASS D | Refer IDM SD 445 & 410 |
| | | | | | | 20 | 750 | 14.968 | | | | | | |
| 3x | SEP | 266419.37 | 5782166.99 | 900 | 900 | 4 | 675 | 15.300 | 675 | 15.250 | 17.132 | 1.882 | CLASS D | Refer IDM SD 430 & 410 |
| | | | | | | 25 | 300 | 15.438 | | | | | | |
| 4x | SEP | 266412.50 | 5782111.41 | 900 | 900 | 4A | 675 | 15.630 | 675 | 15.580 | 17.404 | 1.823 | CLASS D | Refer IDM SD 430 & 410 |
| | | | | | | 27 | 300 | 15.720 | | | | | | |
| 4A | BE | 266411.43 | 5782102.75 | - | - | Fut | 675 | 15.659 | 675 | 15.659 | 17.447 | 1.788 | --- | Provide Blank End for Future Extension |
| 12 | SEP | 266421.36 | 5782258.78 | 900 | 600 | 12A | 225 | 15.429 | 300 | 15.236 | 16.833 | 1.597 | CLASS D | Refer IDM SD 430 |
| 12A | BE | 266421.96 | 5782263.65 | - | - | Fut | 225 | 15.490 | 225 | 15.490 | 17.149 | 1.659 | --- | Provide Blank End for Future Extension |
| 14 | DSEP | 266420.30 | 5782241.43 | 1900 | 600 | 15 | 300 | 15.062 | 300 | 15.012 | 16.757 | 1.745 | CLASS D | Refer IDM SD 445 |
| | | | | | | 19 | 300 | 15.180 | | | | | | |
| 15 | JP | 266413.74 | 5782188.36 | 900 | 600 | 16 | 300 | 15.380 | 300 | 15.330 | 17.029 | 1.699 | CLASS D | Refer IDM SD 420 |
| 16 | SEP | 266403.55 | 5782180.40 | 900 | 600 | 16A | 300 | 15.496 | 300 | 15.446 | 17.162 | 1.716 | CLASS D | Refer IDM SD 430 |
| 16A | BE | 266378.97 | 5782183.42 | --- | --- | Fut | 300 | 15.620 | 300 | 15.620 | 17.286 | 1.666 | --- | Provide Blank End for Future Extension |
| 19 | SEP | 266412.34 | 5782251.63 | 900 | 600 | | | | 300 | 15.246 | 16.865 | 1.619 | CLASS D | Refer IDM SD 430 |
| 20x | SEP | 266402.53 | 5782172.26 | 900 | 1200 | 21 | 750 | 15.086 | 750 | 15.036 | 17.162 | 2.126 | CLASS D | Refer IDM SD 430 & 410 |
| 21x | TEMP JP | 266354.83 | 5782178.12 | 1000 | 1000 | 22 | 750 | 15.296 | 750 | 15.246 | 17.402 | 2.156 | CLASS D | As Per Typ. Detail & IDM SD 410 |
| | | | | | | Fut | 300 | 15.826 | | | | | | |
| 22x | JP | 266315.71 | 5782179.40 | 900 | 1200 | 23 | 750 | 15.476 | 750 | 15.426 | 17.742 | 2.316 | CLASS D | Refer IDM SD 420 & 410 |
| 23x | GP | 266301.50 | 5782176.21 | 2x(900x900) | | | | | 750 | 15.622 | 17.580 | 1.958 | CLASS D | As per Detail Sheet 27 |
| 25 | SEP | 266410.49 | 5782162.06 | 900 | 600 | 26 | 225 | 15.735 | 300 | 15.491 | 17.162 | 1.671 | CLASS D | Refer IDM SD 430 |
| 26 | JP | 266406.14 | 5782126.83 | 900 | 600 | | | | 225 | 15.912 | 17.339 | 1.427 | CLASS D | Refer IDM SD 420 |
| 27 | SEP | 266403.57 | 5782105.98 | 900 | 600 | Fut | 300 | 15.824 | 300 | 15.774 | 17.445 | 1.671 | CLASS D | Refer IDM SD 430 |
| 45 | DSEP | 266440.14 | 5782256.47 | 1900 | 600 | 46 | 300 | 14.980 | 300 | 14.930 | 16.729 | 1.799 | CLASS D | Refer IDM SD 445 |
| 46 | DSEP | 266439.134 | 5782248.332 | 1900 | 600 | 47 | 225 | 15.071 | 300 | 15.021 | 16.764 | 1.743 | CLASS D | Refer IDM SD 445 |
| | | | | | | | | | | | | | | |
| 47 | JP | 266457.249 | 5782246.095 | 900 | 600 | | | | 225 | 15.162 | 16.953 | 1.791 | CLASS D | Refer IDM SD 420 |
| | | | | | | | | | | | | | | |
| 48 | EW | 266471.87 | 5782274.68 | - | - | Ex D | 525 | 14.200 | | | 14.725 | 0.000 | --- | Refer IDM SD 465 |
| Ex D | EXIST | 266470.47 | 5782260.22 | 900 | 900 | 49 | 525 | 14.680 | 525 | 14.540 | 16.547 | 2.382 | --- | Break into Ex. Pit |
| 49x | SEP | 266469.688 | 5782252.821 | 900 | 900 | 50 | 525 | 14.767 | 525 | 14.717 | 17.010 | 2.293 | CLASS D | Refer IDM SD 430 & 410 |
| | | | | | | 57 | 375 | 14.857 | | | | | | |
| 50x | SEP | 266466.181 | 5782244.992 | 900 | 900 | 51 | 525 | 14.860 | 525 | 14.810 | 17.047 | 2.237 | CLASS D | Refer IDM SD 430 & 410 |
| | | | | | | 58 | 375 | 14.953 | | | | | | |
| 51x | JP | 266462.12 | 5782212.09 | 900 | 900 | 52 | 525 | 15.076 | 525 | 15.026 | 17.602 | 2.576 | CLASS B | Refer IDM SD 425 & 410 |
| 52x | JP | 266490.90 | 5782208.54 | 900 | 900 | 53 | 525 | 15.271 | 525 | 15.221 | 17.067 | 1.846 | CLASS B | Refer IDM SD 425 & 410 |
| 53 | JP | 266483.00 | 5782144.63 | 900 | 600 | 54 | 450 | 15.750 | 525 | 15.700 | 17.430 | 1.730 | CLASS B | Refer IDM SD 425 |
| 54 | JP | 266475.94 | 5782087.46 | 900 | 600 | Fut | 375 | 16.184 | 450 | 16.134 | 17.763 | 1.629 | CLASS B | Refer IDM SD 425 |
| 57 | SEP | 266492.594 | 5782249.991 | 900 | 600 | | | | 375 | 14.973 | 16.581 | 1.608 | CLASS D | Refer IDM SD 430 |
| 58 | SEP | 266491.587 | 5782241.853 | 900 | 600 | | | | 375 | 15.081 | 16.587 | 1.506 | CLASS D | Refer IDM SD 430 |
| Ex E | EXIST | 266496.89 | 5782210.05 | 1500 | 1500 | 59 | 375 | 14.379 | | | 16.525 | 2.705 | --- | Convert to SEP |
| 59x | SEP | 266495.64 | 5782199.90 | 900 | 900 | 60 | 375 | 14.971 | 375 | 14.430 | 16.582 | 2.152 | CLASS D | Refer IDM SD 430 & 410 |
| 60 | SEP | 266487.06 | 5782130.57 | 900 | 600 | 61 | 375 | 15.371 | 375 | 15.321 | 17.009 | 1.688 | CLASS D | Refer IDM SD 430 |
| 60A | TEMP GP | 266481.65 | 5782086.75 | 900 | 600 | Fut | 375 | 15.641 | 375 | 15.591 | 17.087 | 1.495 | CLASS D | As per Typ. Detail |
| 63xx | DSEP | 266506.29 | 5782286.21 | 1900 | 900 | | | | 1200 | 14.058 | 16.031 | 1.973 | CLASS D | As per Typ. Detail |
| 64 | SEP | 266499.551 | 5782231.650 | 900 | 900 | | 1200 | 13.887 | 1200 | 13.885 | 16.378 | 2.493 | CLASS D | As per Typ. Detail |

NOTE:

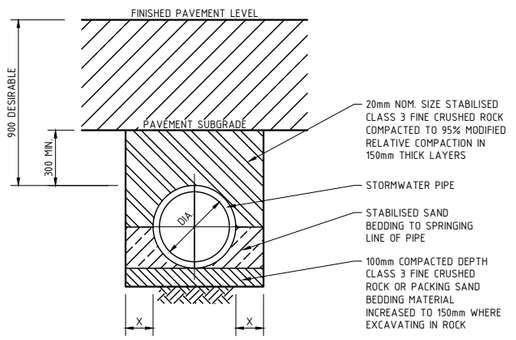
1. ALL SETOUT POINTS QUOTED TO CENTRE OF 900x600 PIT e.g.:



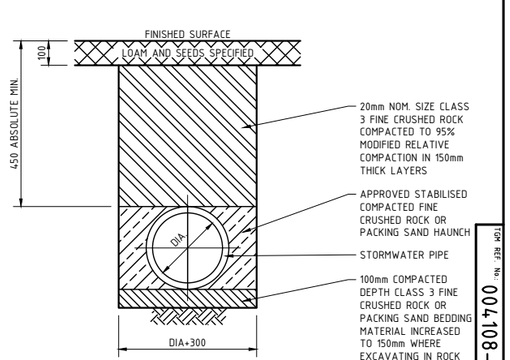

2. SEP PITS NOTED WITH 'x' TO BE HAUNCHED TO A 900x600 (INTERNAL) OPENING WITH APPROPRIATE COVER.
3. DSEP PITS NOTED WITH 'xx' TO BE HAUNCHED TO A 1900x600 (INTERNAL) OPENING WITH APPROPRIATE COVER.
4. ALL HAUNCHING TO BE IN ACCORDANCE WITH IDM SD 410
5. ALL DRAINAGE PITS TO BE TERRA-FIRMA OR APPROVED EQUIVALENT.

NOTES:

1. TRENCHING DETAILS INDICATIVE ONLY AND SHOULD BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
2. WHERE PIPE IS BEHIND KERB AND CHANNEL, INSTALL ONE METRE (1m) MINIMUM OF APPROVED 90< CLASS 400 SLOTTED/ PERFORATED SUBSOIL DRAIN WITH GEOTEXTILE SOCK SURROUND INTO PIT IN LIEU OF SUB-SOIL DRAINAGE BEHIND KERB.
3. BACKFILL DESIGN TO BE IN ACCORDANCE WITH CEMENT & CONCRETE ASSOCIATION OF AUSTRALIA 'PIPE CLASS' REQUIREMENTS. BACKFILL UNDER ROAD PAVEMENT TO BE STABILISED WHERE CCAA INFORMATION IS NOT AVAILABLE.
4. APPROVAL MAY BE GIVEN FOR USE OF BACKFILL MATERIAL OTHER THAN CRUSHED ROCK WHERE IT CAN BE DEMONSTRATED THAT A MINIMUM OF 95% MODIFIED RELATIVE COMPACTION CAN BE ACHIEVED.
5. CEMENT, CONCRETE OR CEMENT STABILISED CRUSHED ROCK TO BE USED WHERE SETTLEMENT OF TRENCH WILL EFFECT INFRASTRUCTURE.




## UNDER ROAD PAVEMENT BACKFILL DETAIL




ALL MEASUREMENTS IN MILLIMETRES

## BEHIND KERB

| ISSUE | ISSUED FOR | DATE |
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| 02 | FOR APPROVAL | 20/11/18 |

| No. | AMENDMENT | DATE | DRAWN | APPROVED |
|---|---|---|---|---|
| | | | | |

DESIGNED: K.BOON
DRAWN: C.LEWIS
SURVEY: TGM GEELONG
CHECKED:
POS NO: PS 740227S VERSION: 9
DATE: DECMEBER 17
SCALE: NTS
SHEET SIZE: A1
APPROVED:
PERMIT NO: 1123/2004/A

WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.

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www.tgmgroup.com
Melbourne | Ballarat | Ballina
Geelong | Melbourne | Ballarat
JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001

CLIENT: Phalaris Park.

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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

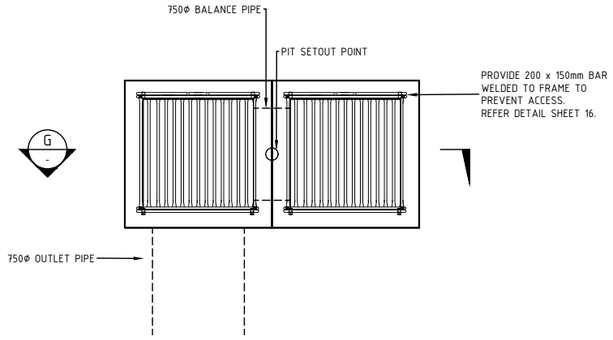
CIVIL DRAWING

DRAWING TITLE:
DRAINAGE PIT SCHEDULE

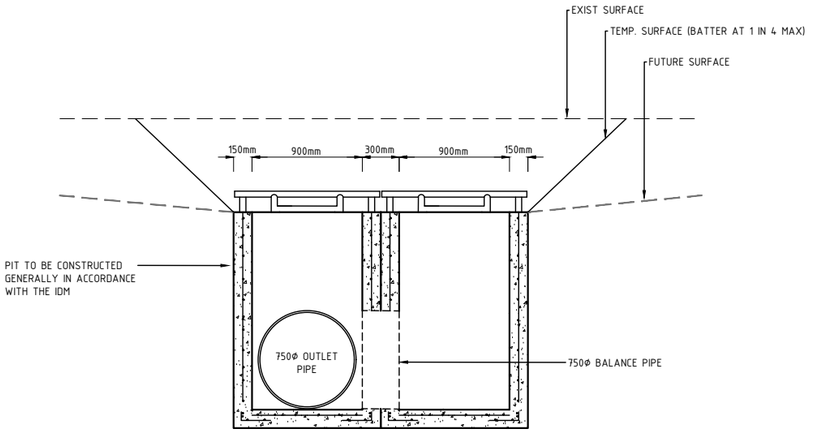
TGM REF. No. 004108-206
SHEET: 26 OF 28
REV: 02

TGM REF. No. 004108-206
SHEET 26 OF 28 REV. 02

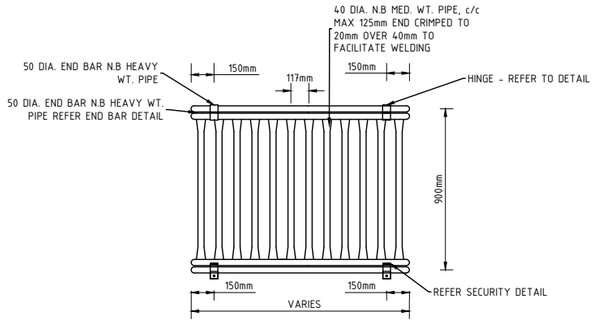
\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG



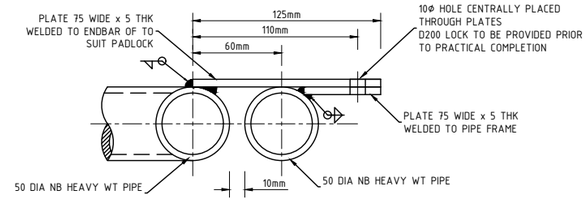

## PIT 23 DETAIL
N.T.S.



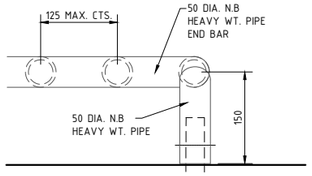

## SECTION G
N.T.S.



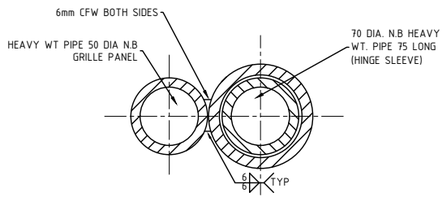

## PANEL DETAIL
NOT TO SCALE



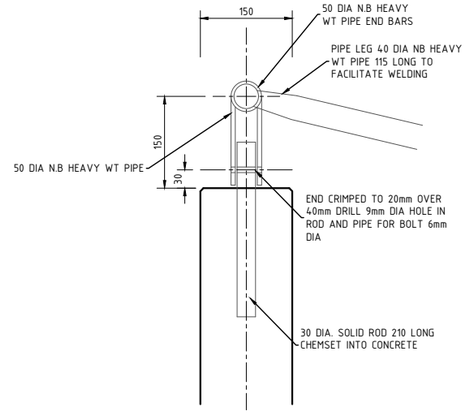

## SECURITY DETAIL
SCALE 1:4




## END BAR DETAIL
SCALE 1:10




## HINGE DETAIL
SCALE 1:4




## OUTLET PIT FRAME SEATING DETAIL
SCALE 1:10

TGM REF. No. 004108-206

SHEET 27 OF 28 REV. 02

| ISSUE | ISSUED FOR | DATE | No. | AMENDMENT | DATE | DRAWN | APPROVED |
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| | | | |
|---|---|---|---|
| DESIGNED: | K.BOON | DATE: | DECEMBER 17 |
| DRAWN: | C.LEWIS | SCALE: | NTS |
| SURVEY: | TGM GEELONG | SHEET SIZE: | A1 |
| CHECKED: | | APPROVED: | |
| POS NO: | PS 740227S VERSION: 9 | PERMIT NO: | 1123/2004/A |

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CLIENT: Phalaris Park.

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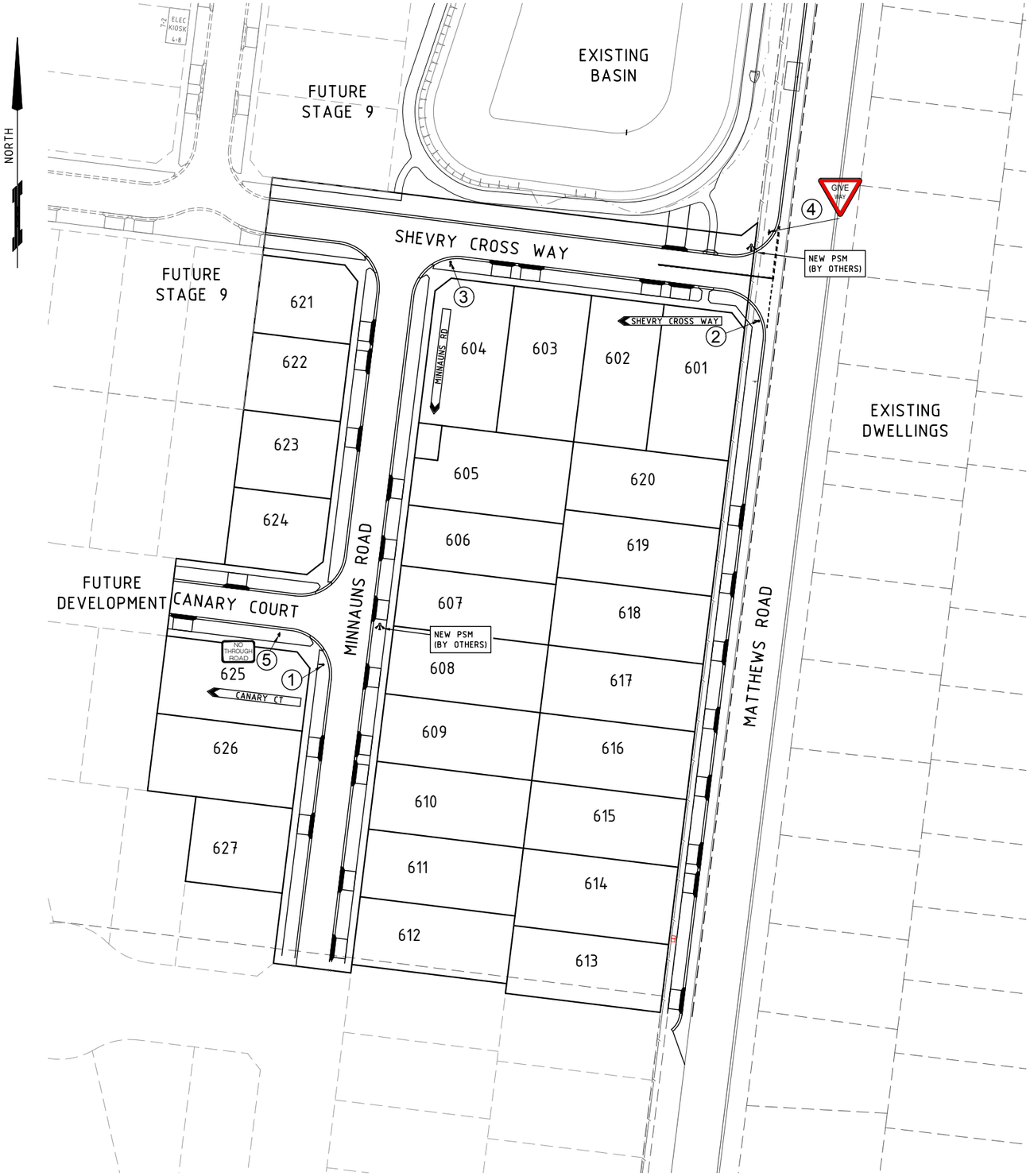
PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

DRAWING TITLE:
DRAINAGE DETAILS

TGM REF. No. 004108-206 | SHEET: 27 OF 28 | REV: 02

\\TGMGSV-FS1\PROJECTS\004108 (MATTHEWS ROAD)\206-CE (STAGE 6)\DWG\004108-206 (CIVIL) REV02.DWG




## SIGNAGE AND LINEMARKING PLAN

SCALE 1:500

## LEGEND

PROPOSED KERB AND CHANNEL/ DRIVEWAY LAYBACKS

STREET SIGN

PSM (BY OTHERS)

| | | | |
|---|---|---|---|
| 1 x 1 | CANARY CT | G5 SERIES | STREET NAME |
| 2 x 1 | SHEVRY CROSS WAY | G5 SERIES | STREET NAME |
| 3 x 1 | MINNAUNS RD | G5 SERIES | STREET NAME |
| 4 x 1 | GIVE WAY | R1-2 | GIVE WAY |
| 5 x 1 | NO THROUGH ROAD | G9-18 | NO THROUGH ROAD |

ALL SIGNS AND LINEMARKING TO BE CARRIED OUT IN ACCORDANCE WITH VIC ROADS STANDARDS
REFER TO VICROADS TRAFFIC MANAGEMENT MANUAL.
PAINT TO BE WATER BASED LONG LIFE PAINT IN ACCORDANCE WITH VICROADS STANDARDS

### NOTICE

CULTURAL HERITAGE REQUIREMENTS

PRIOR TO ANY WORKS COMMENCING ONSITE, THE CONTRACTOR SHALL ARRANGE FOR A SITE INDUCTION WITH THE WATHAURUNG ABORIGINAL CORPORATION. A COPY OF THE CHMP IS TO BE KEPT ONSITE AT ALL TIMES.

### WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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DESIGNED: K.BOON
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PROJECT:
PHALARIS PARK ESTATE
STAGE 6
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

DRAWING TITLE:
SIGN AND LINEMARKING PLAN

TGM REF. No.: 004108-206
SHEET: 28 OF 28
REV: 02

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