

MERRIFIELD DEVELOPMENT

STAGE 17

DONNYBROOK ROAD, MICKLEHAM

HUME CITY COUNCIL

FOR

merrifield



CIVIL DRAWINGS
ROAD AND DRAINAGE

DCE REF : 11737

AS CONSTRUCTED



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Drawing File: C:\Designdata\1700\11737-MERRIFIELD - Prelim 1 - Stage 17\Acad\RD\11737TD01.dwg - 11737TD01
Date/Time: Thu Jul 21, 2016 - 11:29am --byron.shade--

HUME CITY COUNCIL GENERAL NOTES:

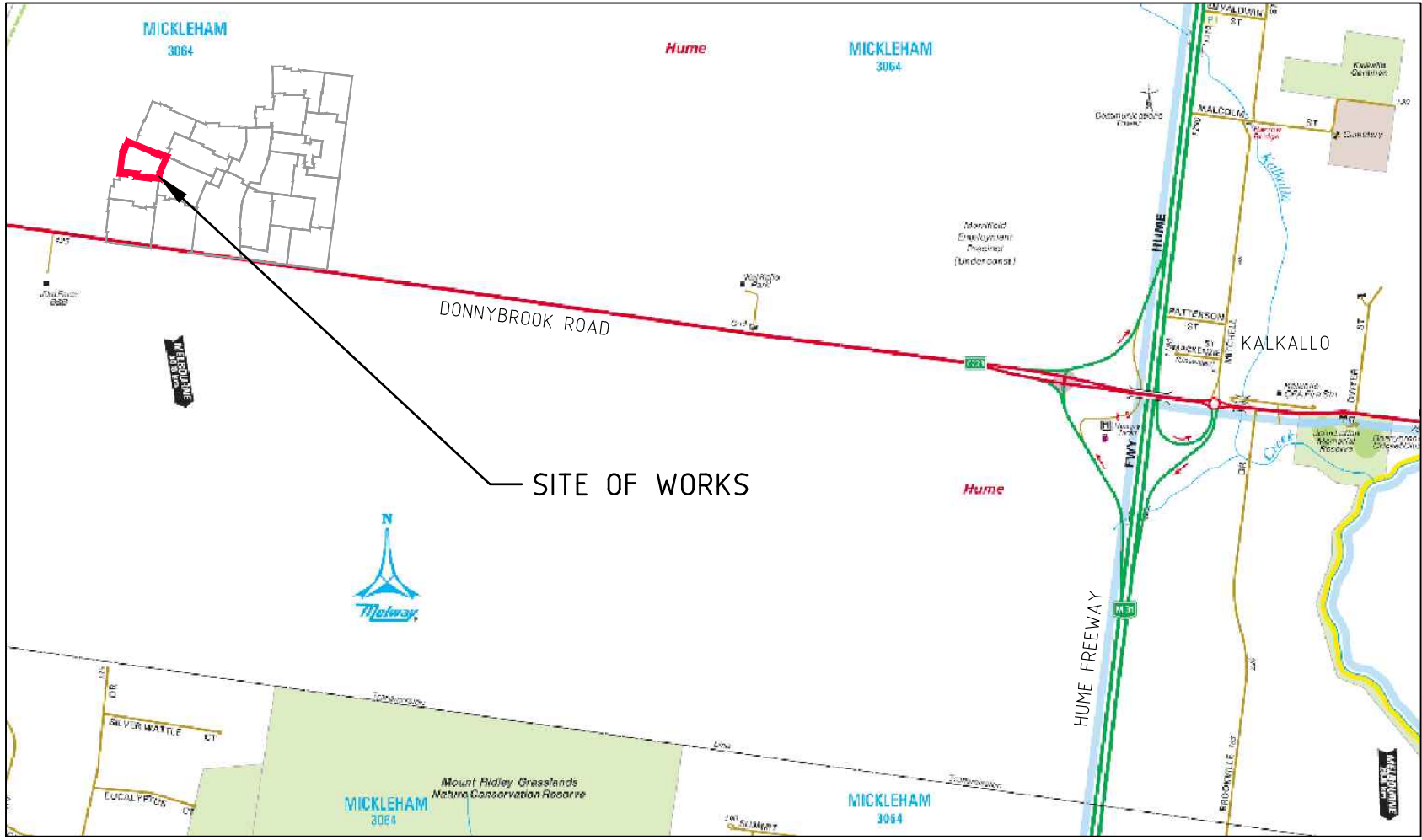
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH MPA AND HUME CITY COUNCIL STANDARD DRAWINGS, SPECIFICATIONS, APPROVED PLANS AND TO THE SATISFACTION OF THE SUPERINTENDENT, THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE. ALL WORKS TO BE IN ACCORDANCE WITH AS4000 AMENDED GENERAL CONDITIONS OF CONTRACT AND THE ROAD & DRAINAGE SPECIFICATION.
- COUNCIL TO BE NOTIFIED SEVEN (7) CLEAR WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORKS WITH A PRE-COMMENCEMENT MEETING BEING HELD BETWEEN HUME CITY COUNCIL, THE CONSULTANT AND THE CONTRACTOR BEFORE WORKS COMMENCE. A SITE MANAGEMENT PLAN IS TO BE SUBMITTED PRIOR TO COMMENCEMENT OF WORKS AND PRIOR TO AN ONSITE PRE-COMMENCEMENT MEETING.
- PRIOR TO COMMENCEMENT OF THE WORKS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
(A) SOURCE OF QUARRY MATERIAL.
(B) N.A.T.A APPROVED TEST RESULTS FOR THE F.C.R. THAT IS TO BE USED.
(C) IF THE SOURCE OF THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF THE WORKS, THE NEW TEST RESULTS SHALL BE PROVIDED.
- PRIOR TO ALL COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004, HAVE BEEN AND WILL BE COMPLIED WITH.
- ON COMMENCEMENT OF CONSTRUCTION WORKS, THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENTAL PROTECTION AUTHORITY PUBLICATION "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL." APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD FOR THE WORKS.
- THE DISPOSAL SITE FOR SPOIL REMOVAL FROM SITE AND TRUCK ROUTE IS TO BE SUBMITTED TO AND APPROVED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE AS PER THE HOLD POINTS IN THE HUME CITY COUNCIL SPECIFICATIONS IN WRITING PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND EXPOSED/PROVED PRIOR TO COMMENCEMENT OF WORKS, AND THE RELEVANT AUTHORITIES NOTIFIED SEVEN (7) CLEAR DAYS PRIOR TO THE COMMENCEMENT OF THE WORKS
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
- ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA).
- THE CONTRACTOR MUST ARRANGE THE REQUISITE INSPECTIONS OF THE WORKS WITH THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE AS PER THE HOLD POINTS IN THE HUME CITY COUNCIL SPECIFICATIONS.
- FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED, AND TOPSOIL REPLACED TO OBTAIN THE FINAL FILL LEVELS SHOWN ON PLAN. FILLING IS TO BE CLEAN CLAY COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH AS1289.5.1.1-2003.
- FILLING TO COMPLY WITH AS3798-2007, LEVEL 1 UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION NO 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL IF REQUIRED PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- WHERE, AS A CONDITION OF THE PLANNING PERMIT OR AS A RESULT OF THE PRE-CONSTRUCTION MEETING, FENCING OF AREAS CONTAINING TREES, NATIVE GRASSES AND SHRUBS IS REQUIRED, A THREE STRAND STAR PICKET AND WIRE FENCE SHALL BE CONSTRUCTED.
- NO TREES OR NATIVE VEGETATION IS TO BE DISTURBED OR REMOVED WITHOUT PRIOR APPROVAL FROM COUNCIL SUSTAINABLE ENVIRONMENT DEPARTMENT. ANY TREES REMOVED, VEGETATION OR OTHER MATERIALS ARE NOT TO BE BURNT ON SITE.
- BEFORE COMMENCING WORK ON TRENCHES IN EXCESS OF 1.5M DEEP, NOTICE OF SUCH PROPOSAL IS TO BE FORWARDED BY THE CONTRACTOR TO WORKSAFE VICTORIA.
- THE CONTRACTOR IS TO OBTAIN A BUILDING PERMIT FOR ANY STRUCTURE/FENCES AND FOR ANY RETAINING WALLS OVER 1.0M IN HEIGHT.
- ANY INFRASTRUCTURE DAMAGE DURING THE DEFECTS LIABILITY PERIOD IS THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE AND IS TO BE REINSTATED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER OR HIS REPRESENTATIVE.
- ALL DISTURBED AREAS, ie, NATURESTRIPS, BATTERS, ALLOTMENTS AND RESERVES, ARE TO BE REINSTATED TO A CLEAN, TIDY CONDITION, TOP DRESSED (100MM LOAMY TOP SOIL FREE OF CLUMPS, SODS AND CLAY LUMPS) AND SOWN WITH GRASS SEED. SEED IS TO BE A DROUGHT TOLERANT COUCH/FESCUE MIX UNLESS OTHERWISE DETAILED. BLEND IS GENERALLY AS FOLLOWS:
40% DWARF TALL FESCUE - DROUGHT TOLERANT CULTIVARS
40% COUCH
20% HARD FESCUE

NOTE: GRASS IS TO BE ESTABLISHED PRIOR TO THE END OF THE MAINTENANCE PERIOD.
- FOOTPATHS TO BE OFFSET 50mm FROM THE TITLE BOUNDARIES UNLESS NOTED OTHERWISE. VEHICLE CROSSING ALIGNMENTS ARE GENERALLY TO BE PARALLEL TO THE SIDE BOUNDARY.
- ALL NEW CONCRETE WORKS SHALL BE JOINED INTO ABUTTING EXISTING CONCRETE WITH 450MM LONG Y20 DOWEL BARS @ 600 CENTERS, UNLESS OTHERWISE SPECIFIED.

- ANY EXPOSED AGGREGATE CONCRETE WORKS TO BE ACHIEVED BY SAND-BLASTING ONLY. WASHING AGGREGATE OFF WITH WATER IS NOT PERMITTED.
- ALL SERVICE CONDUITS TRENCHES UNDER ROAD PAVEMENTS ARE TO BE BACKFILLED WITH 20MM 3% CEMENT TREATED CLASS 3 CRUSHED ROCK COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH AS1289.5.2.1-2003. ALL SERVICE CONDUITS TRENCHES UNDER FOOTPATH, VEHICULAR CROSSINGS, PARKING BAYS AND WITH 750MM OF PARKING BAYS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK.
- ALL STORMWATER DRAINS ARE TO BE CLASS '2' RC OR RIGID FRC PIPES WITH ADCOL FLEXIBLE COLLARS UNLESS NOTED OTHERWISE. ALL PIPES UP TO AND INCLUDING 750mm DIA. ARE TO BE RUBBER RING JOINTED INTERLOCKING/FLUSH JOINTS WITH EXTERNAL BANDS CAN ONLY BE USED ON PIPE SIZES OVER 750mm DIA.
- WHERE NEW ASPHALT, CONCRETE K & C, PATHS AND DRIVEWAYS MATCH INTO EXISTING, THE EXISTING SURFACE IS TO BE SAW CUT AND MATCHED NEATLY.
- ALL REDUNDANT ASSETS ARE TO BE REMOVED AND DISPOSED OFF SITE.
- ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS OTHERWISE SHOWN OR DIRECTED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- AT THE COMPLETION OF ALL WORKS, ALL RUBBISH DEBRIS AND SURPLUS SPOIL SHALL BE REMOVED AND THE SITE SHALL BE CLEARED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- ALL DRAINS BEHIND KERB AND CHANNEL SHALL BE BACKFILLED TO MATCH PAVEMENT SUBGRADE LEVEL WITH 20mm CLASS 2 F.C.R COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH AS 1289.5.2.1-2003. ALL DRAINS, SEWER, GAS & WATER MAINS LAID THROUGH THE ROAD PAVEMENT (EXCEPT CONDUITS) ARE TO BE BACKFILLED WITH 20mm CLASS 2 F.C.R COMPACTED TO 98%OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH AS 1289.5.2.1-2003.
- PAVEMENT DEPTH SPECIFIED IS A MINIMUM DEPTH AND MAY BE VARIED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE. SOFT SPOTS SHALL BE EXCAVATED TO A PROOF ROLLED BASE AND BACKFILLED WITH APPROVED MATERIAL COMPACTED IN 150MM LAYERS TO ACHIEVE TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH AS1289.5.1.1-2003.
- ALL EXISTING ASSETS AFFECTED BY THE WORKS: EG SIGNS, VEHICLE CROSSINGS, FOOTPATHS, KERB AND LINEMARKING SHALL BE REINSTATED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF THE WORKS TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- ALL FIRE HYDRANTS ARE TO ME MARKED IN ACCORDANCE WITH "IDENTIFICATION OF STREET HYDRANTS FOR FIREFIGHTING PURPOSES" PUBLICATION (DEVELOPED BY C.F.A, M.F.E.S.B & N.R.E). MARKINGS TO BE VIA BLUE PAVEMENT MARKER AND A (RED TOPPED) WHITE POST.
- AGRICULTURAL DRAINS ARE TO BE PLACED BEHIND ALL KERB AND CHANNEL, KERB ONLY AND EDGE STRIPS IN ACCORDANCE WITH COUNCIL STANDARD DRAWING S0282.
- ALL TABLE DRAINS AND VERGES ARE TO BE REINSTATED UPON COMPLETION OF WORKS TO THE SATISFACTION OF THE CONTRACTOR MUST ARRANGE THE REQUISITE INSPECTIONS OF THE WORKS TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- ALL TRAFFIC CONTROL MEASURES, SIGNS AND LINEMARKING SHALL BE IN ACCORDANCE WITH AS1742 - 1, 2 & 3. STREET NAME SIGNS ARE TO BE IN ACCORDANCE WITH STANDARD DRAWING S0408.
- ALL LINEMARKING PAINT SHALL BE LONG LIFE IN ACCORDANCE WITH SECTION 95C OF THE HUME CITY COUNCIL SPECIFICATIONS. LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGAUR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL.
- ALL SIGNS TO BE CLASS 1 HIGH INTENSITY TYPE AND COMPLY WITH THE REQUIREMENTS OF AS1743-2001.
- HOUSE DRAIN CONNECTIONS TO 150mm DIAMETER PIPES TO BE VIA A MANUFACTURED JUNCTION PIECE. 150mm DIAMETER STORMWATER PIPES ARE TO BE HEAVY DUTY SEWER GRADE. PVC SHALL BE BACKFILLED WITH 10mm MINUS F.C.R TO 150mm ABOVE TOP OF PIPE IN ALL LOCATIONS.
- 100mm HOUSE DRAIN CONNECTIONS TO BE LAID AT AN OFFSET OF 5.0m MINIMUM FROM THE LOW SIDE TITLE BOUNDARY AND PROPERTY INLETS 1.0m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN.
- BLASTING GENERALLY IS NOT ENCOURAGED, HOWEVER BLASTING MAY BE REQUIRED AS A LAST RESORT DEPENDING ON GROUND CONDITIONS. COUNCIL IS TO BE NOTIFIED IN WRITING IF ANY BLASTING IS NECESSARY. RESIDENTS LIKELY TO BE AFFECTED BY THE BLASTING AND ALL SERVICE AUTHORITIES SHALL BE NOTIFIED IN WRITING PRIOR TO WORKS COMMENCING. COPIES OF THESE NOTIFICATIONS ARE TO BE SUBMITTED TO COUNCIL. RESIDENT NOTIFICATION LETTER IS TO INCLUDE BLASTING GUIDELINES, FIRING AND MISFIRE PROCEDURES AND CONTRACTORS AND CONSULTANT CONTACT NAMES AND NUMBERS. ALL BLASTING IS TO BE WITHIN THE LIMITS FOR AIR AND GROUND VIBRATION LEVELS AS SET DOWN IN AS1287.2-1993. ALL BLASTS SHALL BE MONITORED FOR AIR AND NOISE VIBRATION AT POTENTIALLY AFFECTED RESIDENCES. "FORM A" FROM AS1287.2-1993, AND WAVE TRACE COPIES ARE TO BE SUBMITTED TO COUNCIL FOR EACH BLAST. BLASTING IS TO BE RESTRICTED TO BETWEEN 9:00AM AND 3:30PM. BLASTING IS NOT TO OCCUR ON WEEKENDS OR PUBLIC HOLIDAYS. BLASTING AREA SIGNS ARE TO BE PLACED AT ALL ENTRANCES TO THE SITE.

GENERAL NOTES:

- ALL BLOCKS ARE TO SURFACE GRADE WITH A MINIMUM FALL OF 1 IN 150 ALONG THE LOW SIDE BOUNDARY TO THE POINT OF DISCHARGE.
- ALL BATTERS SHALL BE 1 IN 6, UNLESS OTHERWISE SHOWN.
- ALL CHAINAGES REFER TO ROAD RESERVE DESIGN LINES EXCEPT:
- IN COURT HEADS WHERE CHAINAGES REFER TO LIP OF KERB
- KERB RETURNS WHERE CHAINAGES REFER TO LIP OF KERB.
- GENERALLY B2 KERB AND CHANNEL IS TO BE USED THROUGHOUT THE SUBDIVISION, WHERE OTHER KERB TYPES ARE REQUIRED THEY ARE SPECIFICALLY SHOWN ON THE DRAWINGS.
- LIP OF ALL KERB RADI ARE 8.60m UNLESS OTHERWISE SHOWN.
- WHEN PAVEMENT EXCAVATION IS IN ROCK ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.
- TBMS TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF TBMS THEREAFTER.
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES.
- THE CONTRACTOR IS REQUIRED TO CONFINE CONSTRUCTION VEHICLES TO THE ROAD RESERVE AND EASEMENTS. ANY DAMAGE CAUSED TO ALLOTMENTS MUST BE MADE GOOD.
- ANY BUILDINGS, TROUGHS, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN THE SCHEDULE.
- VEHICULAR CROSSINGS OF THE TYPE INDICATED ARE TO BE OFFSET 1.5m FROM THE LOT BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN. DRIVEWAY GRADES TO BE 1 IN 6 MAX.
- PROVIDE LAYBACKS IN KERB TO ALL PRAM CROSSINGS IN ACCORDANCE WITH COUNCIL STANDARDS.
- ASPHALT FILLETS/RAMPS ARE TO BE PROVIDED ON THE BASE COURSE ASPHALT TO REMOVE TRIPS AT ALL PEDESTRIAN CROSSING LOCATIONS.
- ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AS 1742-3.
- ALL EASEMENTS ARE 2.0m OR 3.0m WIDE DRAINAGE AND SEWERAGE EASEMENTS UNLESS OTHERWISE SHOWN.
- CENTRELINES OF ALL SEWERS ARE OFFSET 1.2m OR 2.2m FROM THE PROPERTY LINE UNLESS OTHERWISE SHOWN.
- CENTRELINES OF ALL EASEMENT DRAINS ARE OFFSET 1.0m OR 2.2m FROM THE PROPERTY LINE UNLESS OTHERWISE SHOWN.
- WHERE CURVED PIPES ARE SHOWN ON THE DETAIL PLANS THEY ARE TO BE LAID PARALLEL TO THE BACK OF KERB, EXCEPT WHERE A RADIUS HAS BEEN SPECIFICALLY NOMINATED. ALL DRAINS BEHIND KERBS ARE TO BE LAID AT THE OFFSET SPECIFIED IN THE COUNCIL SPECIFICATION. CURVED PIPES OF DIAMETER LESS THAN 600mm ON LARGE RADIUS CURVES ARE APPROVED BY COUNCIL SUBJECT TO COMPLIANCE WITH MANUFACTURER'S SPECIFICATION.
- ALL SIDE ENTRY PITS EXCEPT THOSE AT LOW POINTS ARE TO HAVE FLUTES AS SPECIFIED IN THE COUNCIL STANDARD DRAWINGS.
- ALL SERVICE TRENCHES UNDER DRIVEWAYS, FOOTPATHS AND PARKING BAYS TO BE BACKFILLED WITH CLASS 2 CRUSHED ROCK. SERVICE TRENCHES LESS THAN 750mm BEHIND PARKING BAYS ARE ALSO TO BE BACKFILLED WITH COMPACTED CLASS 2 CRUSHED ROCK.
- POSITION CONDUITS SO THAT A MINIMUM DISTANCE BETWEEN TAPPINGS IS 1.0m. CONDUITS NOT TO BE LOCATED WITHIN 4.0m OF ALLOTMENT BOUNDARY, UNLESS OTHERWISE SHOWN.
- WATER TAPPINGS FOR LOTS SITUATED ON THE SAME SIDE AS THE WATERMAIN ARE TO BE LOCATED AT THE CENTRE OF THE LOT. THE KERB IS TO BE MARKED "W" WITH AN ARROW POINTING TO THE TAPPING.
- GAS TO BE 50mm DIA. CLASS 12 P.V.C. & WATER CONDUITS TO BE 100 DIA. CLASS 12 P.V.C. SINGLE CONDUIT CONTAINING BOTH DW & NDW SERVICES LAID IN ACCORDANCE WITH WSA 03-2002 DUAL WATER SUPPLY SYSTEM STANDARD DRAWING WAT-1806-V
- ELECTRICITY CONDUITS ARE TO BE LAID WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS :
UNDER ROADS - 0.90m
ELSEWHERE - 0.60m
- TACTILE GROUND SURFACE INDICATORS (TGSI'S) TO BE INSTALLED. TGSI'S ARE TO COMPLY WITH AS1428.4
- CROSSOVERS TO COMPLY WITH WYNDHAM CITY COUNCIL STANDARD DRAWING SD4-1 (EXCLUDING TABLE 1).



LOCALITY PLAN

MELWAY REF MAP: 366 D3,E4
NTS

DRAWING INDEX

SHEET NO.	DRAWING NO.	DESCRIPTION
01	11737TD01	LOCALITY PLAN, INDEX AND NOTES
02	11737TD02	TYPICAL SECTIONS AND DETAILS
03	11737SP01	STAGING PLAN
04	11737DP01	DETAIL PLAN
05	11737SOP01	SET OUT DETAILS
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08-10	11737LS01-03	LONGITUDINAL SECTIONS - SHEETS 01 TO 03
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14-15	11737OED01-02	OPEN EARTH DRAIN PLAN - SHEETS 01 TO 02
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20	11737DR05	DRAINAGE PIT SCHEDULE AND PIT DETAILS
21	11737POS01	PLAN OF SUBDIVISION
22	11737FP01	CUT AND FILL PLAN
23	11737EF01	EXISTING FEATURES PLAN

1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871036
Verified B.GORDON
Date 28/07/15
AN 162395
Audited T.OBOUHOFF
Date 29/01/16
AN 912774
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885096

AS CONSTRUCTED

merrifield
MAB gpc

Coords: MGA
Levels: AHD

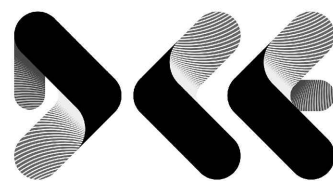


Scale @ A1/A3

MERRIFIELD DEVELOPMENT
DANNYBROOK ROAD, MICKLEHAM
STAGE 17
LOCALITY PLAN, INDEX AND NOTES

Drawing No. 11737TD01 Rev 1
Sheet No. 01 AS CONSTRUCTED

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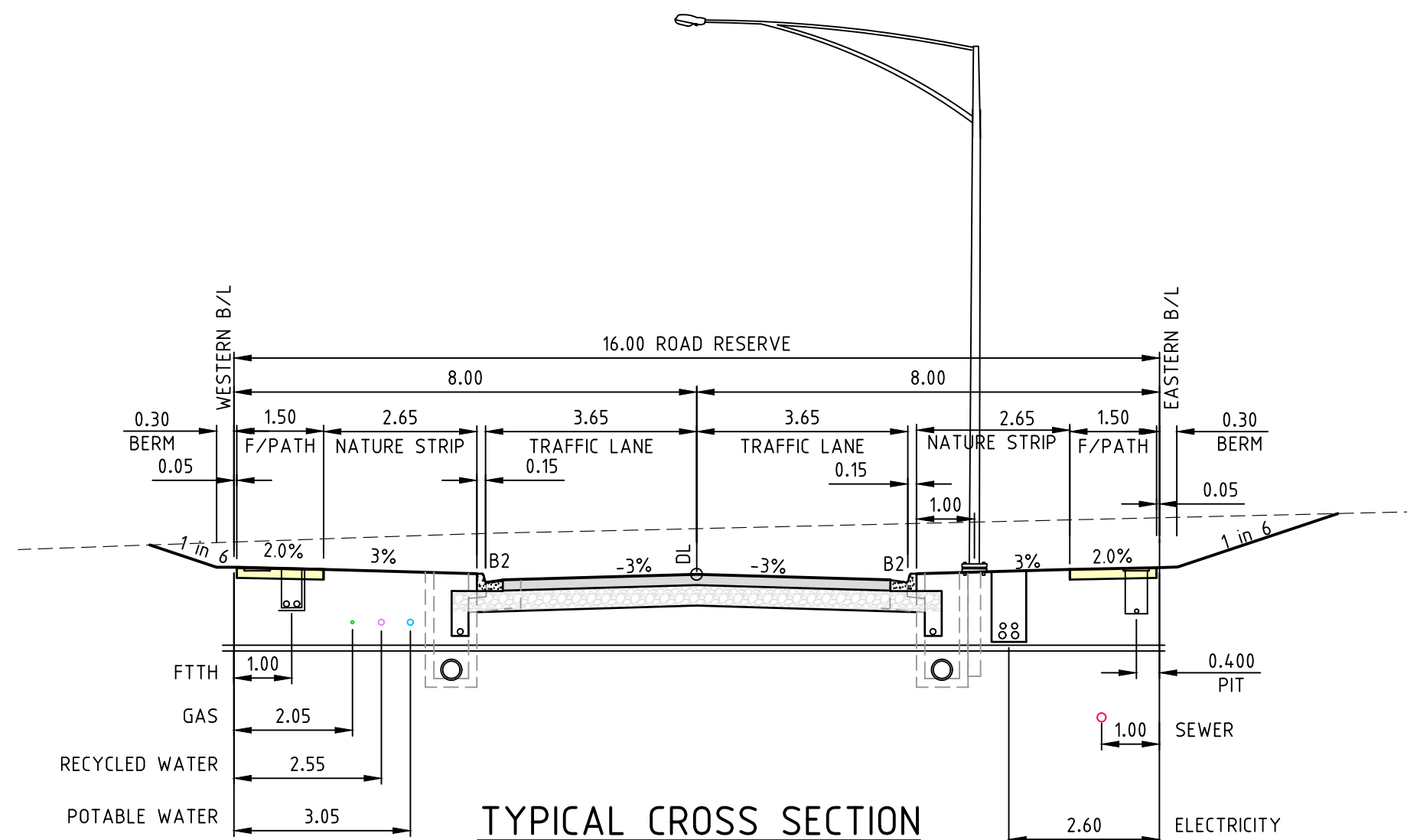
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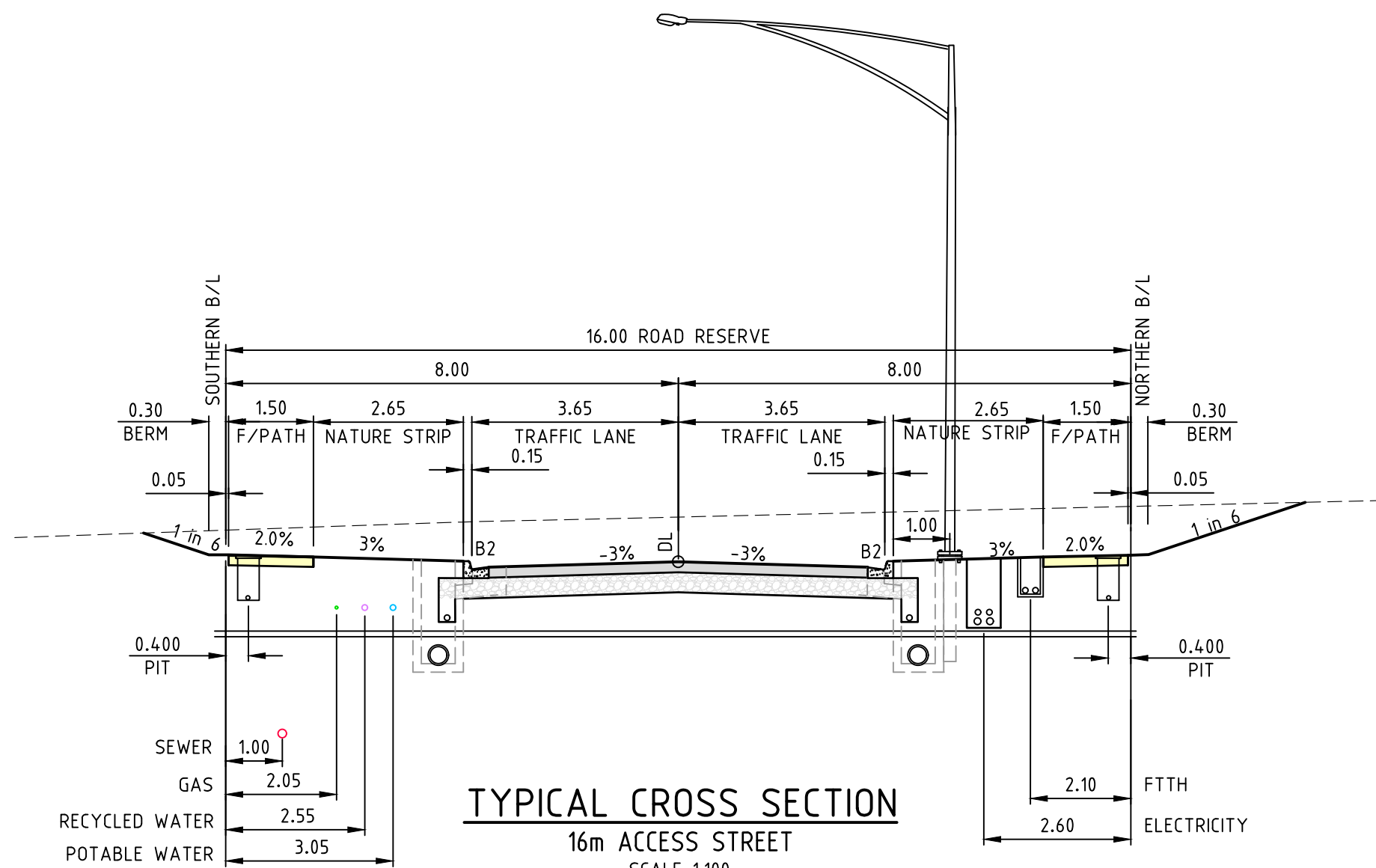
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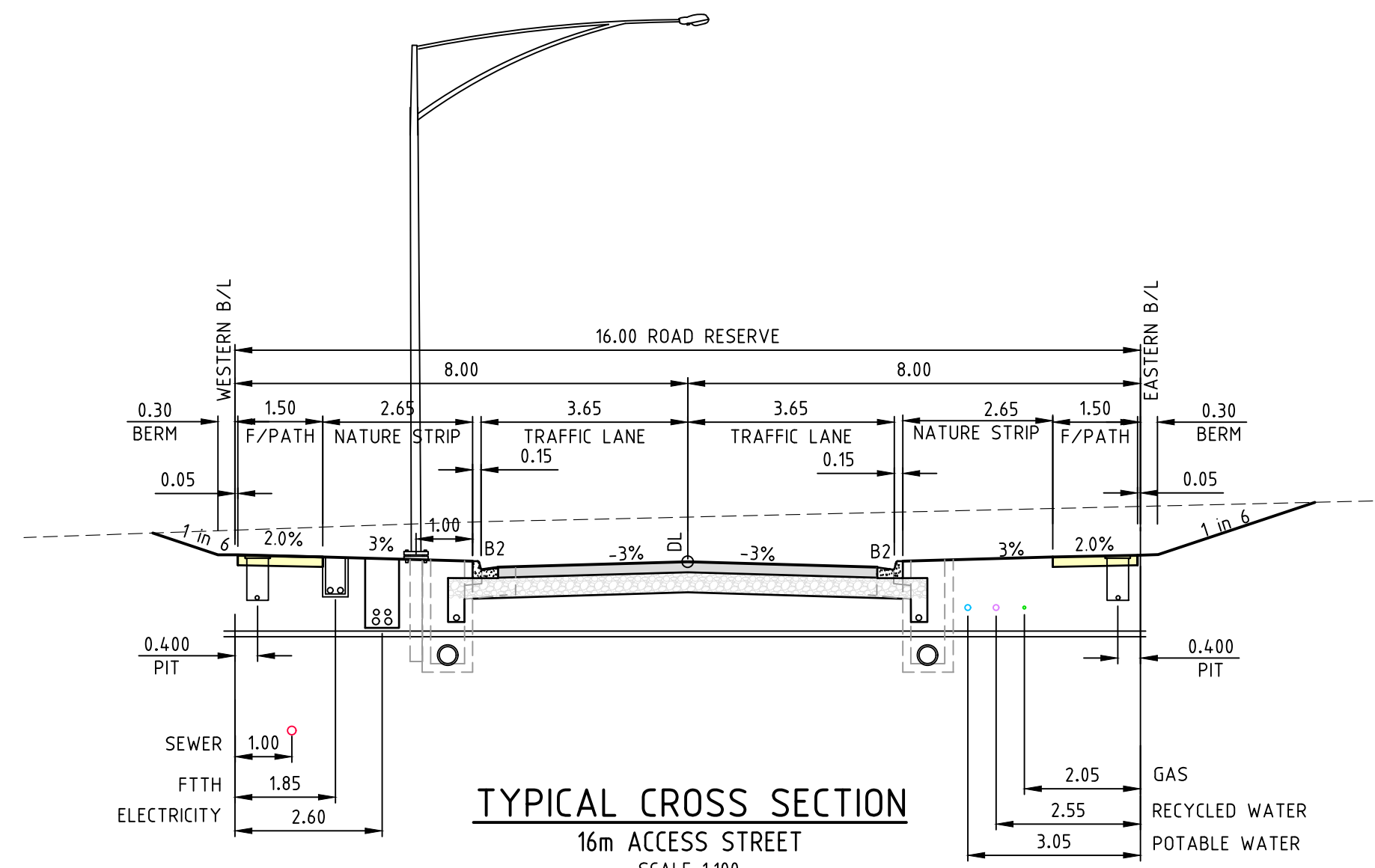
TYPICAL CROSS SECTION
16m ACCESS STREET
SCALE 1:100

CANNING DRIVE (CH50.700 - CH54.000)



TYPICAL CROSS SECTION
16m ACCESS STREET
SCALE 1:100

ROWENA WAY

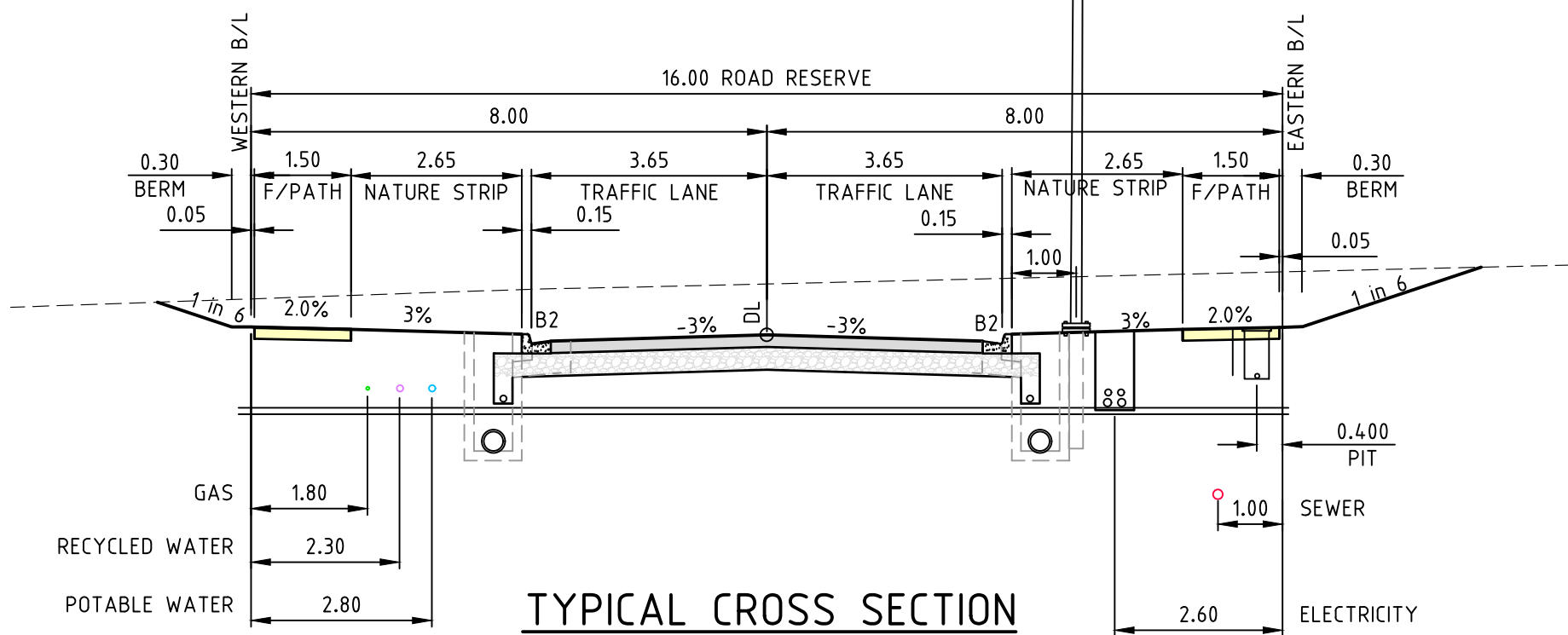


TYPICAL CROSS SECTION
16m ACCESS STREET
SCALE 1:100

JOLIMONT AVENUE

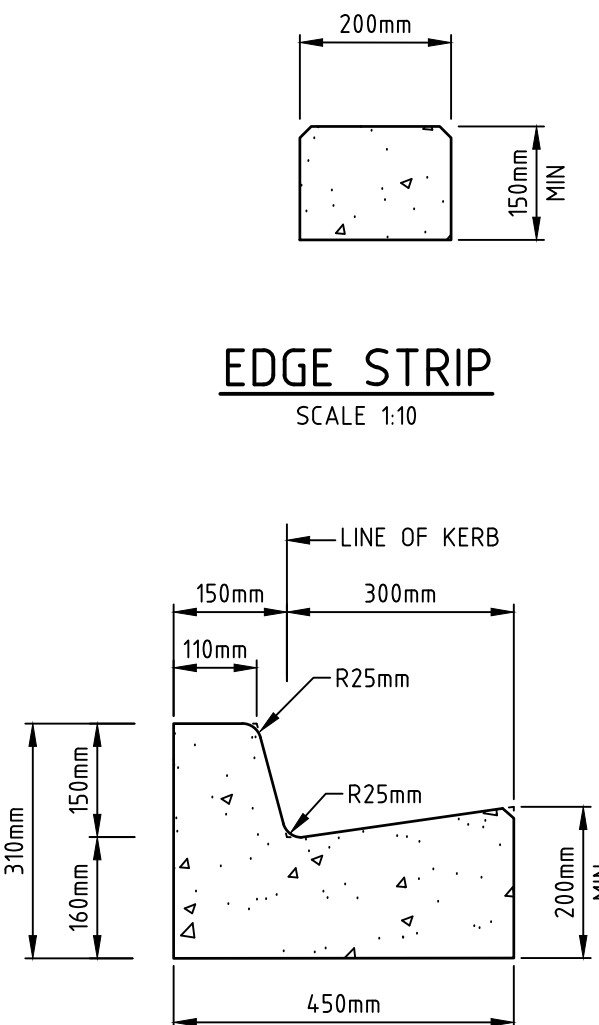
TYPICAL CROSS SECTION NOTES:

1. NATURE STRIPS, VERGES AND BATTERS TO BE TOP-SOILED WITH MIN. 75mm DEPTH LOAM AND SOWN WITH SEED.
2. CONCRETE PATH TO BE 125mm THICK WITH 50mm COMPACTED CRUSH ROCK BEDDING AS PER G.A.A. STD. DRG. FIGURE 006.



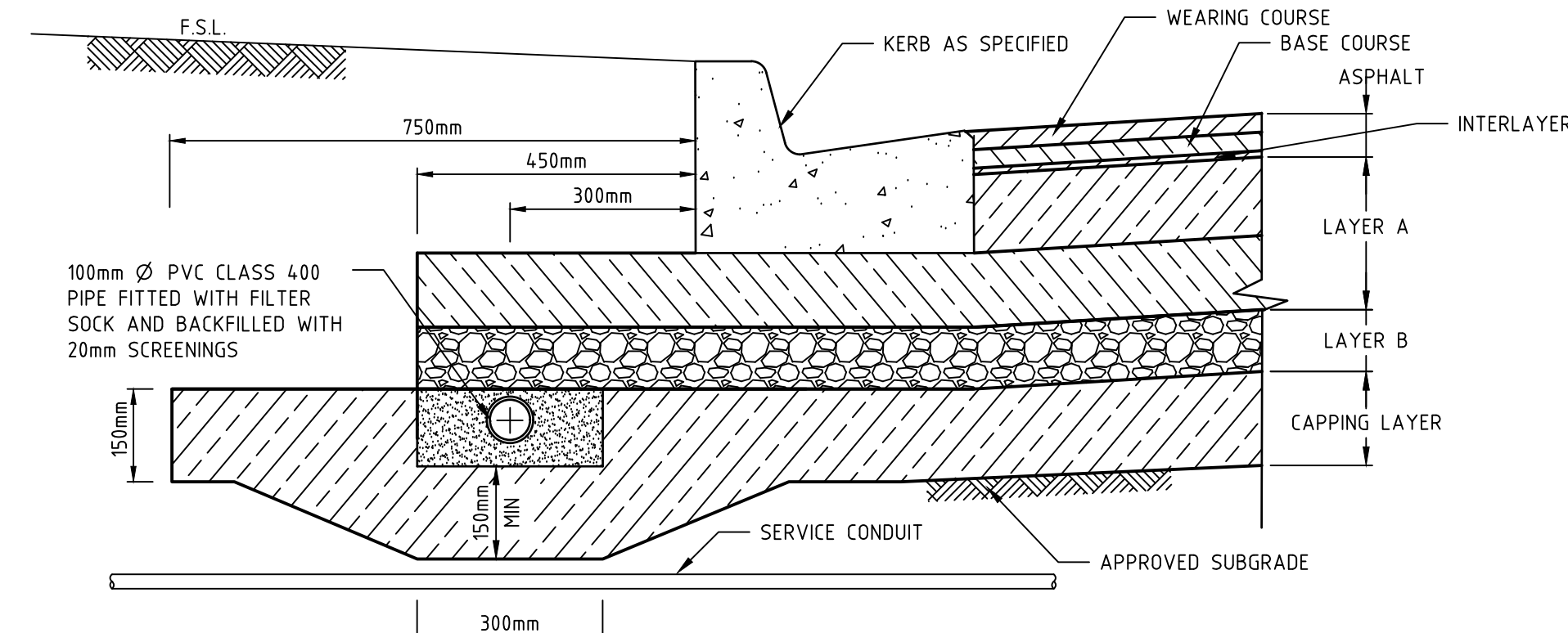
TYPICAL CROSS SECTION
16m ACCESS STREET
SCALE 1:100

CANNING DRIVE (CH54.000 - CH98.039)



EDGE STRIP
SCALE 1:10

B2 KERB & CHANNEL
SCALE 1:10

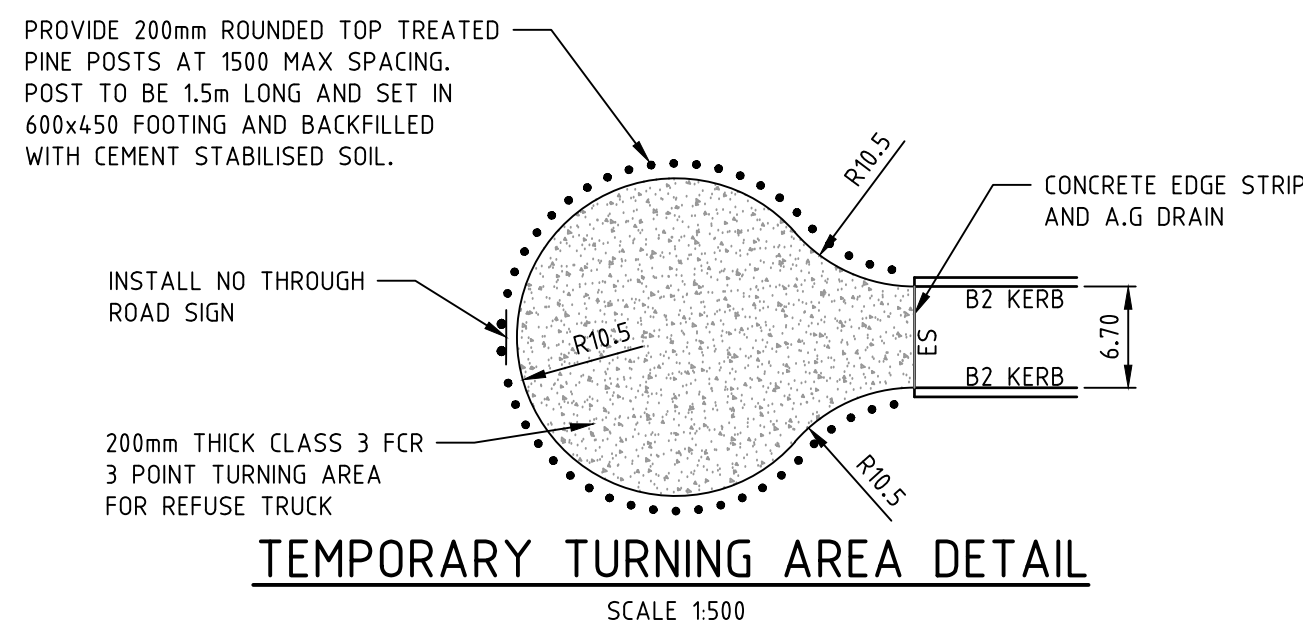


TYPICAL PAVEMENT DETAIL
ACCESS STREETS/PLACES
SCALE 1:10

ACCESS STREETS / PLACES	
CANNING DRIVE, JOLIMONT AVENUE AND ROWENA WAY	
ASPHALT	WEARING COURSE 30mm SIZE 10mm TYPE N ASPHALT BASE COURSE 30mm SIZE 10mm TYPE N ASPHALT INTERLAYER 10mm SAMI TREATMENT PRIME UNDERLAID WITH BITUMINOUS PRIME SPRAY
LAYER A	BASE COURSE 130mm SIZE 20mm CLASS 2 CRUSHED ROCK UPPER SUBBASE 120mm SIZE 20mm CLASS 3 CRUSHED ROCK
LAYER B	LOWER SUBBASE 100mm SIZE 20mm CLASS 4 CRUSHED ROCK
CAPPING LAYER	CAPPING 150mm REFER SECTION 7.4 OF REPORT
DEPTH	570mm
SUBGRADE	SUBGRADE CBR ≥ 2%

REFER TO GOLDBER ASSOCIATE'S GEOTECHNICAL REPORT
NUMBER 127612078-001-R-Rev0 DATED 18/01/2013

NOTE: SHOULD THE SUBGRADE BE SOFT OR ROCKY MATERIAL, SUBGRADE
IMPROVEMENT IS REQUIRED WHERE THE SUBGRADE IS TO BE FURTHER
EXCAVATED AND THE DEPTH TO BE AT THE DISCRETION OF THE CONTRACTOR
AND BROUGHT BACK UP TO SUBGRADE LEVEL IN A UNIFORM LAYER FOR THE
COUNCIL SUPERVISOR TO INSPECT AS A HOLD POINT.



TEMPORARY TURNING AREA DETAIL
SCALE 1:500

REV	AMENDMENTS	DATE	APP'D.
3	AS CONSTRUCTED	21/07/16	TL
2	FURTHER NBN REALIGNMENTS	11/02/16	TL
1	NBN ALIGNMENT AMENDED	02/02/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL

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Date 29/01/16
AN 912775
Approved T. LIAKOPOULOS
Date 29/01/16
AN 885097

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

AS CONSTRUCTED

merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor 1:100 0m 1m 2m 4m 6m
Scale @ A1/A3 1:100/1:200

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
TYPICAL SECTIONS AND DETAILS

Drawing No. 11737TD02 Rev 3
Sheet No. 02 AS CONSTRUCTED

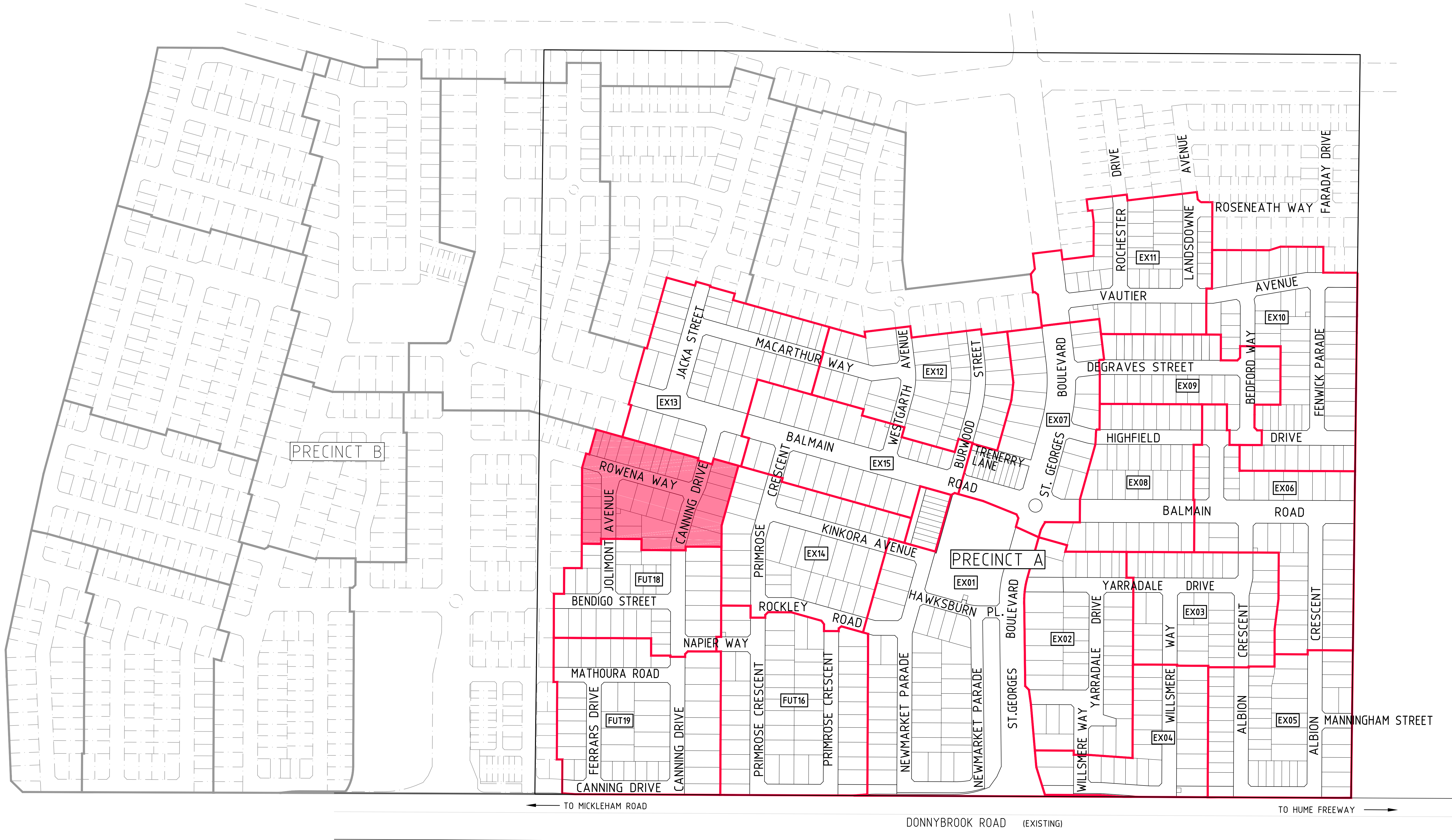
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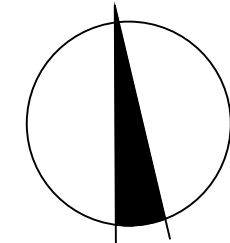


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AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871038
Verified B.GORDON
Date 28/07/15
AN 162397
Audited T.OBOUHOFF
Date 29/01/16
AN 912776
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885098

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

AS CONSTRUCTED

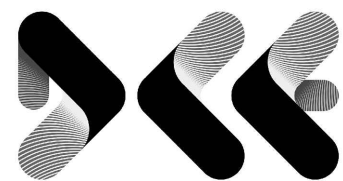


merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor 1:2000 0m 20m 40m 80m 120m
Scale @ A1/A3 1:2000/1:4000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
STAGING PLAN

Drawing No. 11737SP01 Rev 1
Sheet No. 03 AS CONSTRUCTED
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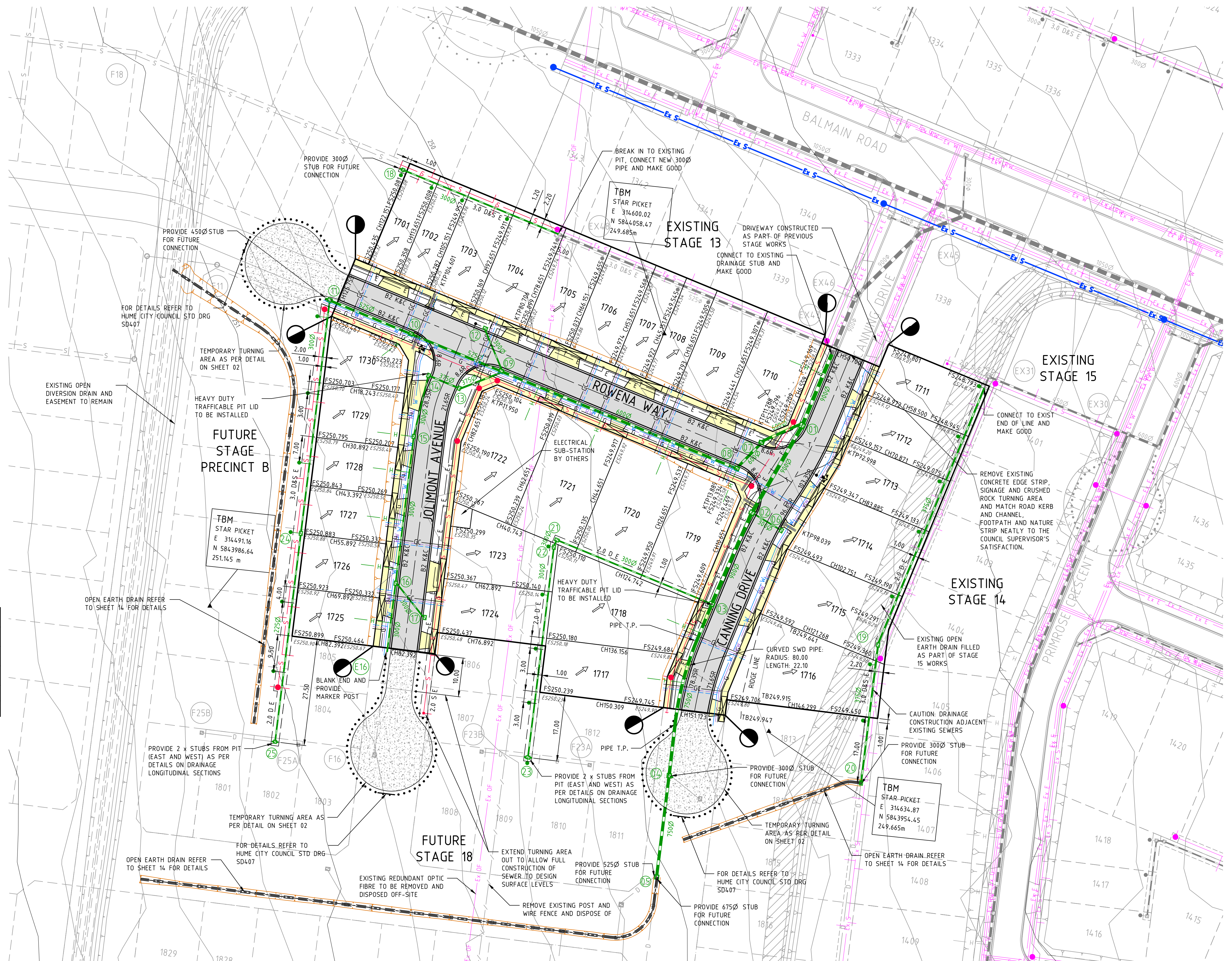
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AS CONSTRUCTED

STREET NAME	WATER	NO-WATER	SEWER	GAS	TELSTRA	ELEC.	BOK
CANNING DRIVE (CH50.700 TO CH54.000)	3.05 E	2.55 E	1.00 W	2.05 E	1.00 E	2.60 W	4.20
CANNING DRIVE (CH55.250 TO CH98.039)	2.80 E	2.30 E	1.00 W	1.80 E	1.00 E	2.60 W	4.20
CANNING DRIVE (CH98.039 TO CH151.123)	2.80 E	2.30 E	1.00 W	1.80 E	1.85 W	2.60 W	4.20
ROWENA WAY	3.05 S	2.55 S	1.00 S	2.05 S	1.85 N	2.60 N	4.20
JOLIMONT AVENUE	3.05 W	2.55 W	1.00 E	2.05 W	1.85 E	2.60 E	4.20

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

WARNING!
THE LOCATION OF EXISTING SERVICES SHOWN ON THESE PLANS MUST BE PROVEN ON SITE, THE APPROPRIATE AUTHORITY MUST BE CONTACTED AND THE SERVICES LOCATED PRIOR TO COMMENCEMENT OF ANY WORKS.



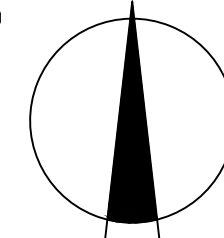
REV	AMENDMENTS	DATE	APP'D.
5	AS CONSTRUCTED	21/07/16	TL
4	TBM AMENDMENTS	22/02/16	TL
3	SEWER MANHOLE MOVED	17/02/16	TL
2	FURTHER NBN REALIGNMENTS	11/02/16	TL
1	NBN ALIGNMENT AMENDED	02/02/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL

Drawn M.CAPALDO Date 21/07/15 AN 1451041 Designed K.PHAL Date 28/07/15 AN 1871039 Verified B.GORDON Date 28/07/15 AN 162398 Audited T.OBOUHOFF Date 29/01/16 AN 912777 Approved T.LIAKOPOULOS Date 29/01/16 AN 885099	21/07/16 22/02/16 17/02/16 11/02/16 02/02/16 29/01/16	TL TL TL TL TL TL
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Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

LEGEND

- Ex OF EXISTING OPTIC FIBRE
- Ex W EXISTING WATER MAIN
- Ex G EXISTING GAS MAIN
- Ex E EXISTING ELECTRICAL CABLE
- Ex S EXISTING SEWER MAIN & MANHOLE
- Ex T EXISTING TELECOMM. CABLE AND PIT
- Ex P EXISTING ELEC. POLE & O'HEAD LINES
- Ex D EXISTING STORMWATER DRAIN & PIT
- CONSTRUCTED PRE DEVELOPMENT
- PERMANENT SURVEY MARK
- W WATER
- RW RECYCLED WATER
- T TELECOMMUNICATIONS
- E ELECTRICITY
- G GAS
- STREET NAME SIGN
- DIRECTION OF FALL (MIN 1 IN 150)
- ASPHALT PAVEMENT
- CONC FOOTPATH / DRIVEWAY
- LIMIT OF WORKS
- FINISHED SURFACE CONTOUR
- EXISTING 300Ø BRANCH SEWER MAIN
- S SEWER MAIN AND MANHOLE
- STORMWATER DRAIN & PIT
- SW DRAIN & PIT CONSTRUCTED IN PREVIOUS STAGES
- PROPERTY INLETS
- H HOUSE DRAIN
- GC GAS CONDUIT
- WATER CONDUIT
- RECYCLED WATER CONDUIT
- TELECOMM. CONDUIT
- EXISTING TREES TO BE REMOVED
- EXISTING SURFACE LEVEL
- FINISHED SURFACE LEVEL
- OPEN EARTH DRAIN (O.E.D.)
- FILLING OVER 200mm



merrifield
MAB gpc

Coords: MGA
Levels: AHD

Hor 1:500 0m 5m 10m 20m 30m

Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
DETAIL PLAN

Drawing No. 11737DP01 Rev 5
Sheet No. 04 AS CONSTRUCTED

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Drawing File: G:\designdata\11700\11737-MERRIFIELD - Precinct 1 - Stage 17\Acad\RD\11737SOP01.dwg - 11737SOP01
Date/Time: Thu Jul 21, 2016 - 11:29am --byron.shade--

HORIZONTAL ALIGNMENT REPORT FOR CANNING DRIVE

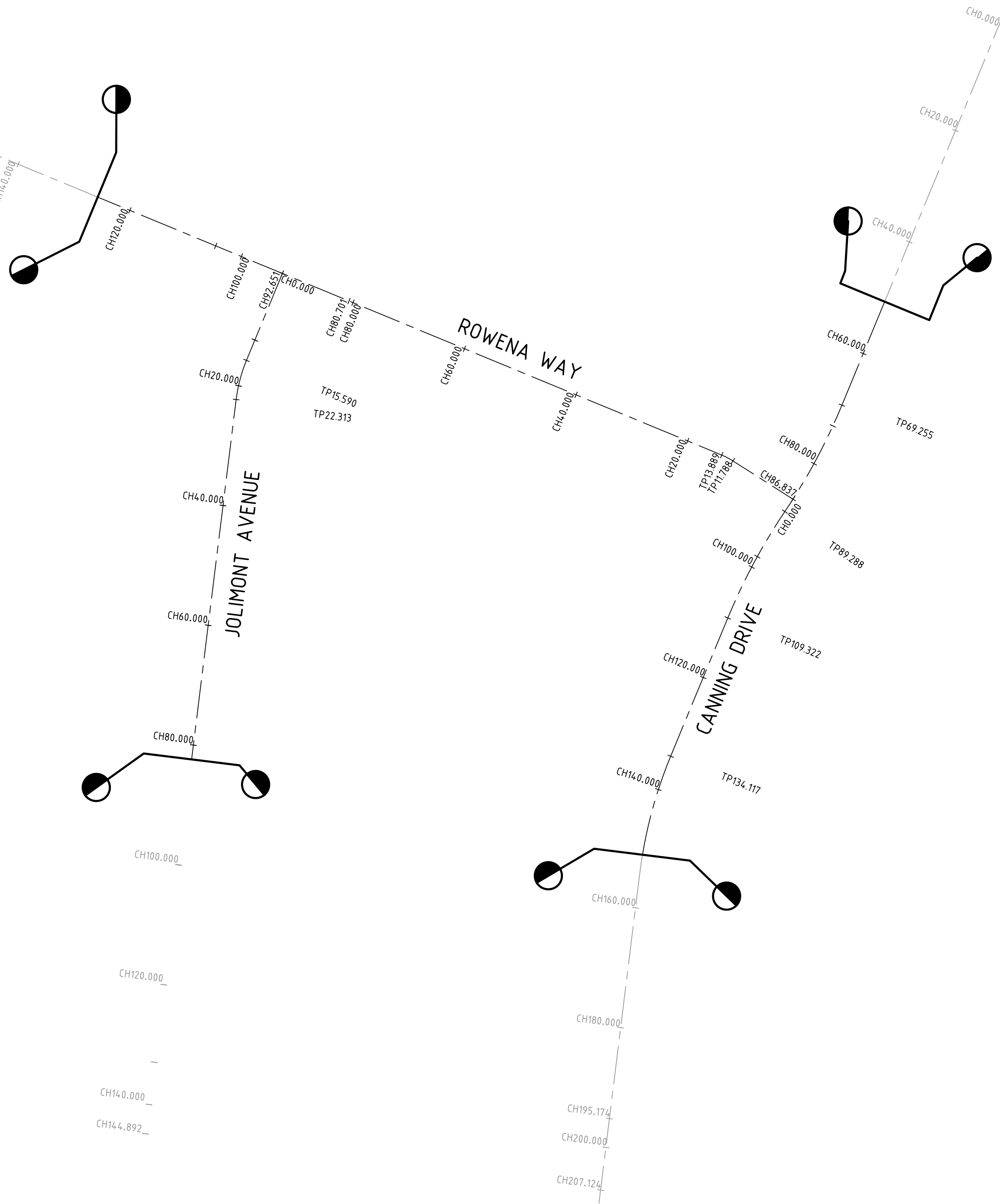
POINT TYPE	CHAINAGE	EASTING	COORDINATES NORTHING	RL	BEARING DEG MIN SEC	RADIUS
STRAIGHT (START ALN)	0.000	314675.269	5844098.053	248.523	202°27'34.26"	
STRAIGHT	20.000	314667.629	5844079.570	248.452	202°27'34.26"	
STRAIGHT	40.000	314659.988	5844061.087	248.627	202°27'34.26"	
TANGENT-TANGENT	50.700	314655.900	5844051.199	248.734	202°27'34.26"	
STRAIGHT	60.000	314652.347	5844042.605	248.874	202°27'34.26"	
TANGENT-CURVE	69.255	314648.812	5844034.052	249.012	202°27'34.26"	
CURVE	73.333	314647.177	5844030.315	249.074	204°47'46.81"	100.000
CURVE	80.000	314644.182	5844024.361	249.173	208°36'57.79"	100.000
CURVE	86.667	314640.796	5844018.619	249.259	212°26'08.78"	100.000
CURVE-CURVE	89.288	314639.361	5844016.425	249.287	213°56'16.28"	100.000
CURVE	93.333	314637.171	5844013.025	249.323	211°37'12.80"	-100.000
CURVE	100.000	314633.868	5844007.235	249.365	207°48'01.81"	-100.000
CURVE	106.667	314630.957	5844001.239	249.398	203°58'50.82"	-100.000
CURVE-TANGENT	109.322	314629.911	5843998.799	249.412	202°27'34.26"	-100.000
STRAIGHT	120.000	314625.831	5843988.931	249.465	202°27'34.26"	
TANGENT-CURVE	134.117	314620.438	5843975.884	249.536	202°27'34.26"	
CURVE	140.000	314618.406	5843970.365	249.565	197°57'56.63"	-75.000
CURVE	146.667	314616.634	5843963.941	249.598	192°52'21.98"	-75.000
CURVE-CURVE	151.123	314615.771	5843959.570	249.621	189°28'06.44"	-75.000
CURVE	153.333	314615.439	5843957.384	249.632	187°46'47.33"	-75.000
CURVE-TANGENT	154.285	314615.317	5843956.440	249.636	187°03'10.00"	-75.000
STRAIGHT	160.000	314614.615	5843950.769	249.665	187°03'10.00"	
STRAIGHT	180.000	314612.159	5843930.920	249.765	187°03'10.00"	
STRAIGHT	200.000	314609.704	5843911.071	249.865	187°03'10.00"	
STRAIGHT	220.000	314607.248	5843891.223	249.965	187°03'10.00"	
STRAIGHT	240.000	314604.792	5843871.374	250.065	187°03'10.00"	
STRAIGHT	260.000	314602.337	5843851.525	250.165	187°03'10.00"	
STRAIGHT	280.000	314599.881	5843831.677	250.265	187°03'10.00"	
STRAIGHT	300.000	314597.425	5843811.828	250.365	187°03'10.00"	
STRAIGHT	320.000	314594.970	5843791.979	250.465	187°03'10.00"	
STRAIGHT	340.000	314592.514	5843772.131	250.580	187°03'10.00"	
STRAIGHT	360.000	314590.058	5843752.282	250.797	187°03'10.00"	
STRAIGHT	380.000	314587.603	5843732.433	251.118	187°03'10.00"	

HORIZONTAL ALIGNMENT REPORT FOR JOLIMONT AVENUE

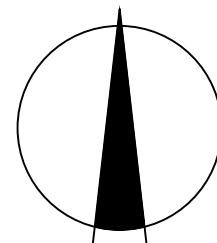
POINT TYPE	CHAINAGE	EASTING	COORDINATES NORTHING	RL	BEARING DEG MIN SEC	RADIUS
STRAIGHT (START ALN)	0.000	314556.118	5844055.874	250.049	202°27'34.26"	
TANGENT-CURVE	15.590	314550.162	5844041.466	250.010	202°27'34.26"	
CURVE	16.000	314550.008	5844041.086	250.012	201°31'13.55"	-25.000
CURVE	20.000	314548.844	5844037.264	250.032	192°21'11.18"	-25.000
CURVE-TANGENT	22.313	314548.455	5844034.985	250.043	187°03'10.00"	-25.000
STRAIGHT	40.000	314546.283	5844017.431	250.132	187°03'10.00"	
STRAIGHT	60.000	314543.827	5843997.583	250.232	187°03'10.00"	
STRAIGHT	80.000	314541.372	5843977.734	250.332	187°03'10.00"	
STRAIGHT	82.392	314541.078	5843975.360	250.344	187°03'10.00"	
STRAIGHT	100.000	314538.916	5843957.895	250.432	187°03'10.00"	
STRAIGHT	120.000	314536.460	5843938.037	250.532	187°03'10.00"	
STRAIGHT	140.000	314534.005	5843918.188	250.632	187°03'10.00"	
STRAIGHT (END ALN)	144.892	314533.404	5843913.333	250.740	187°03'10.00"	

HORIZONTAL ALIGNMENT REPORT FOR ROWENA WAY

POINT TYPE	CHAINAGE	EASTING	COORDINATES NORTHING	RL	BEARING DEG MIN SEC	RADIUS
STRAIGHT (START ALN)	0.000	314640.705	5844018.476	249.261	302°31'59.19"	
TANGENT-CURVE	11.788	314630.767	5844024.816	249.203	302°31'59.19"	
CURVE-TANGENT	13.889	314628.905	5844025.784	249.213	292°27'34.26"	-11.950
STRAIGHT	20.000	314623.258	5844028.119	249.274	292°27'34.26"	
STRAIGHT	40.000	314604.775	5844035.759	249.734	292°27'34.26"	
STRAIGHT	60.000	314586.292	5844043.400	249.886	292°27'34.26"	
STRAIGHT	80.000	314567.809	5844051.041	249.986	292°27'34.26"	
STRAIGHT	100.000	314549.326	5844058.681	250.115	292°27'34.26"	
STRAIGHT	120.000	314530.843	5844066.322	250.295	292°27'34.26"	
STRAIGHT	125.755	314525.526	5844068.525	250.347	292°27'34.26"	
STRAIGHT	140.000	314512.360	5844073.962	250.475	292°27'34.26"	
STRAIGHT	160.000	314493.877	5844081.603	250.655	292°27'34.26"	
TANGENT-CURVE	171.517	314483.234	5844086.003	250.759	292°27'34.26"	
CURVE	175.000	314479.971	5844087.220	250.790	288°28'03.89"	-50.000
CURVE	180.000	314475.157	5844088.565	250.835	282°44'17.41"	-50.000
CURVE-TANGENT	184.961	314470.272	5844089.417	250.880	277°03'10.00"	-50.000
STRAIGHT	200.000	314455.347	5844091.263	251.070	277°03'10.00"	
STRAIGHT	220.000	314435.498	5844093.719	251.460	277°03'10.00"	
STRAIGHT	240.000	314415.650	5844096.175	251.860	277°03'10.00"	
STRAIGHT	260.000	314395.801	5844098.630	252.273	277°03'10.00"	
STRAIGHT (END ALN)	266.187	314389.661	5844099.390	252.459	277°03'10.00"	



AS CONSTRUCTED



merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DANNYBROOK ROAD, MICKLEHAM
STAGE 17
SET OUT DETAILS

Drawing No. 11737SOP01 Rev 1
Sheet No. 05 AS CONSTRUCTED
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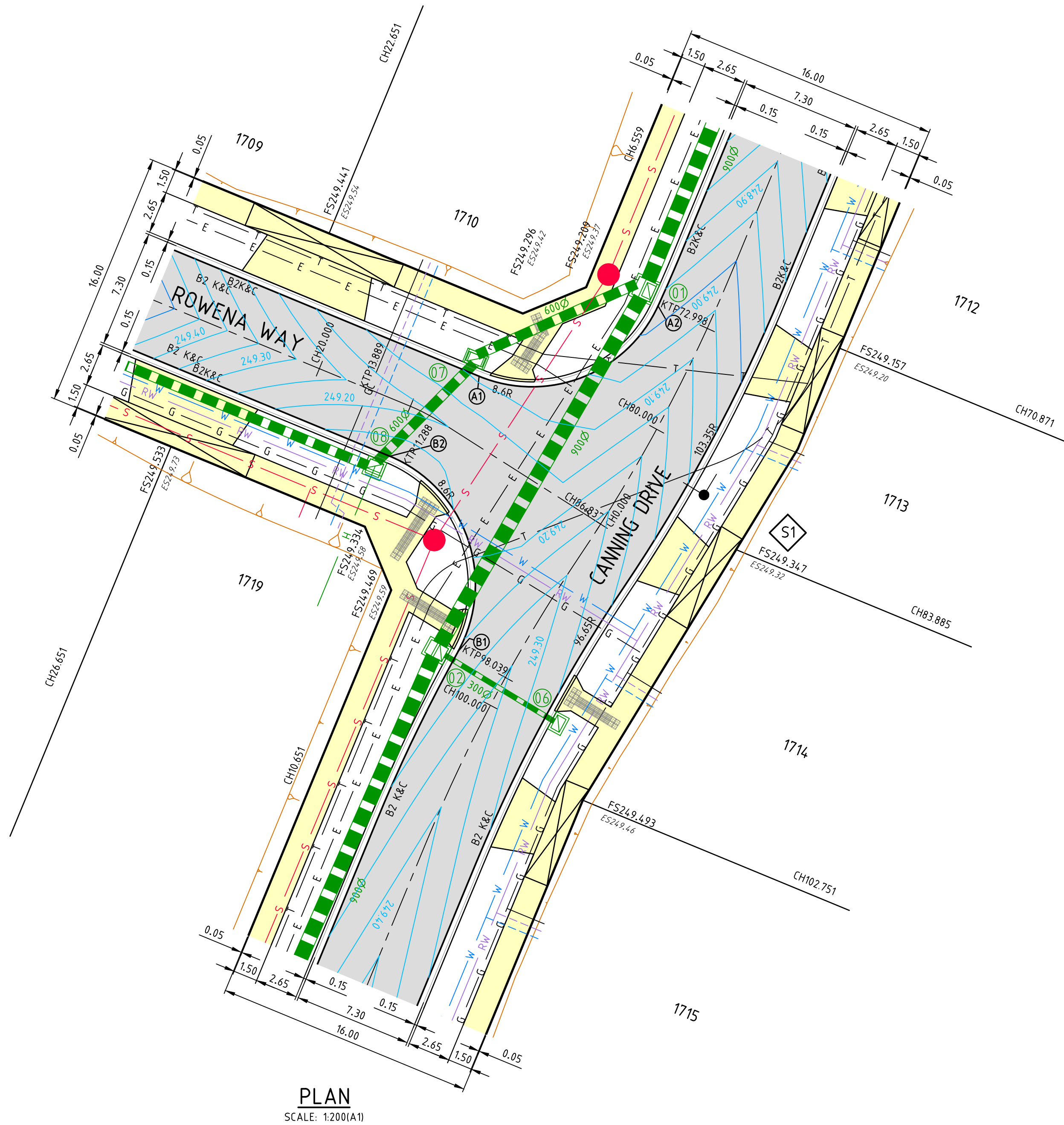


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1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871040
Verified B.GORDON
Date 28/07/15
AN 162399
Audited T.OBOUHOFF
Date 29/01/16
AN 912778
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885100

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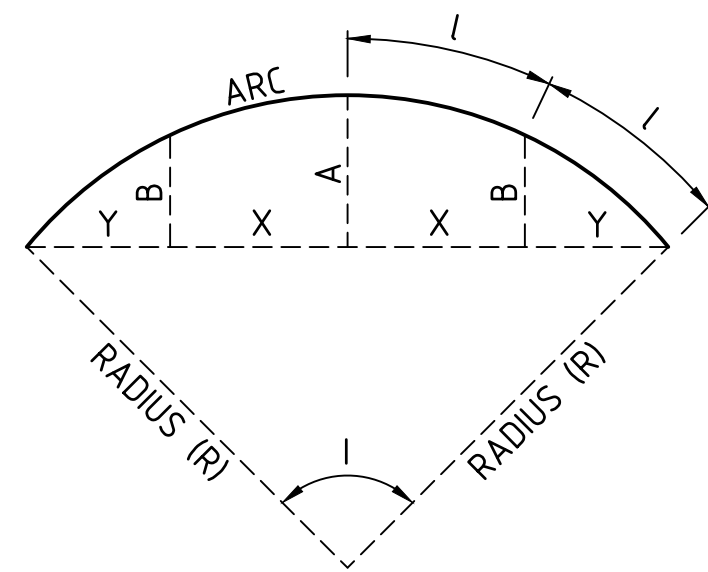


PLAN
SCALE: 1:200(A1)

WARNING!
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SIGNAGE LEGEND
N.T.S.



LIP SETOUT DETAIL
N.T.S.

AS CONSTRUCTED

ALIGNMENT A

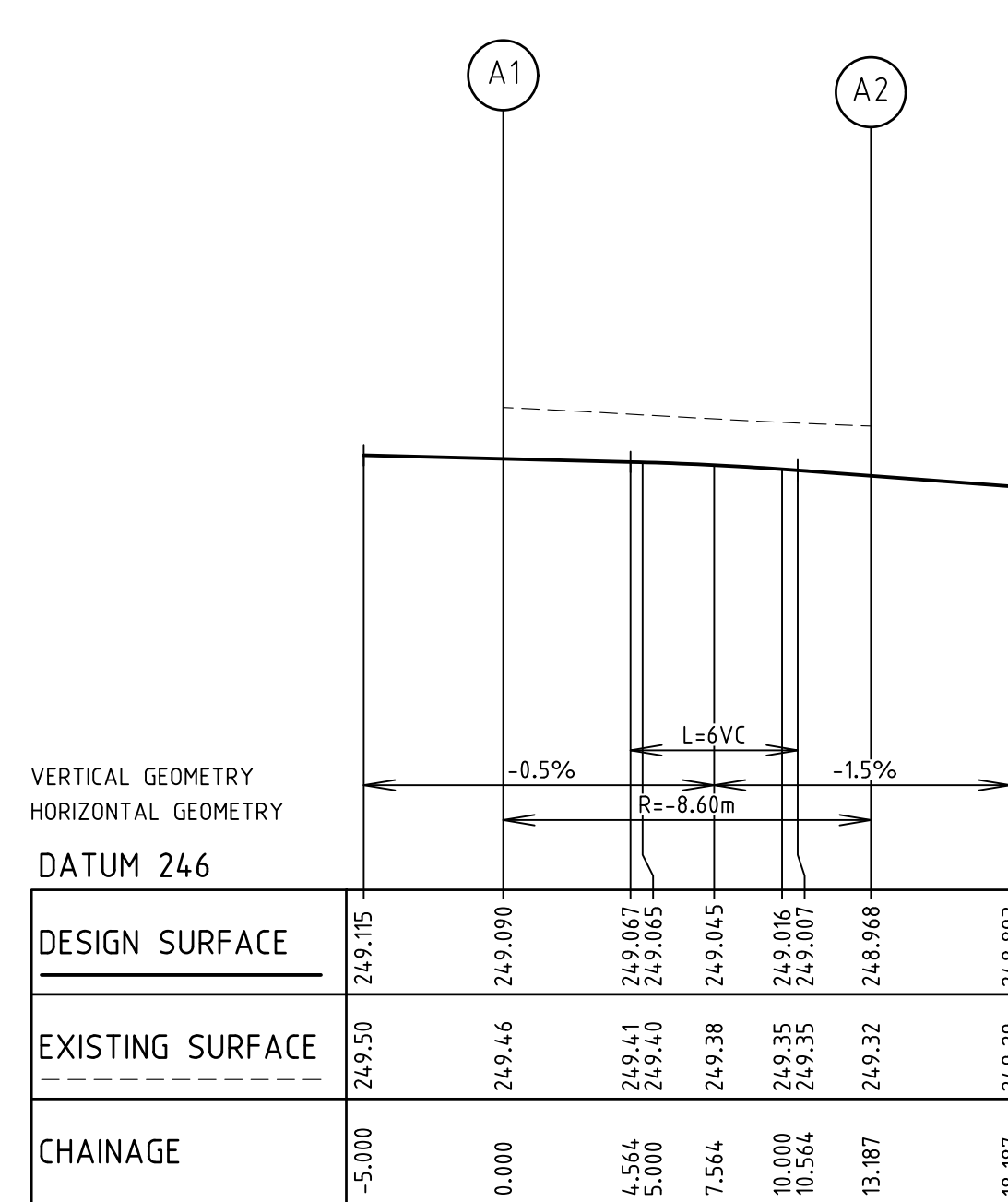
POINT NO	EASTING	NORTHING	RL
A1	314633.167	5844027.648	249.090
A2	314644.272	5844032.015	248.968

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
A1 - A2	87.855	8.600	13.187	2.406	1.782	3.217	2.750	3.297	249.054

ALIGNMENT B

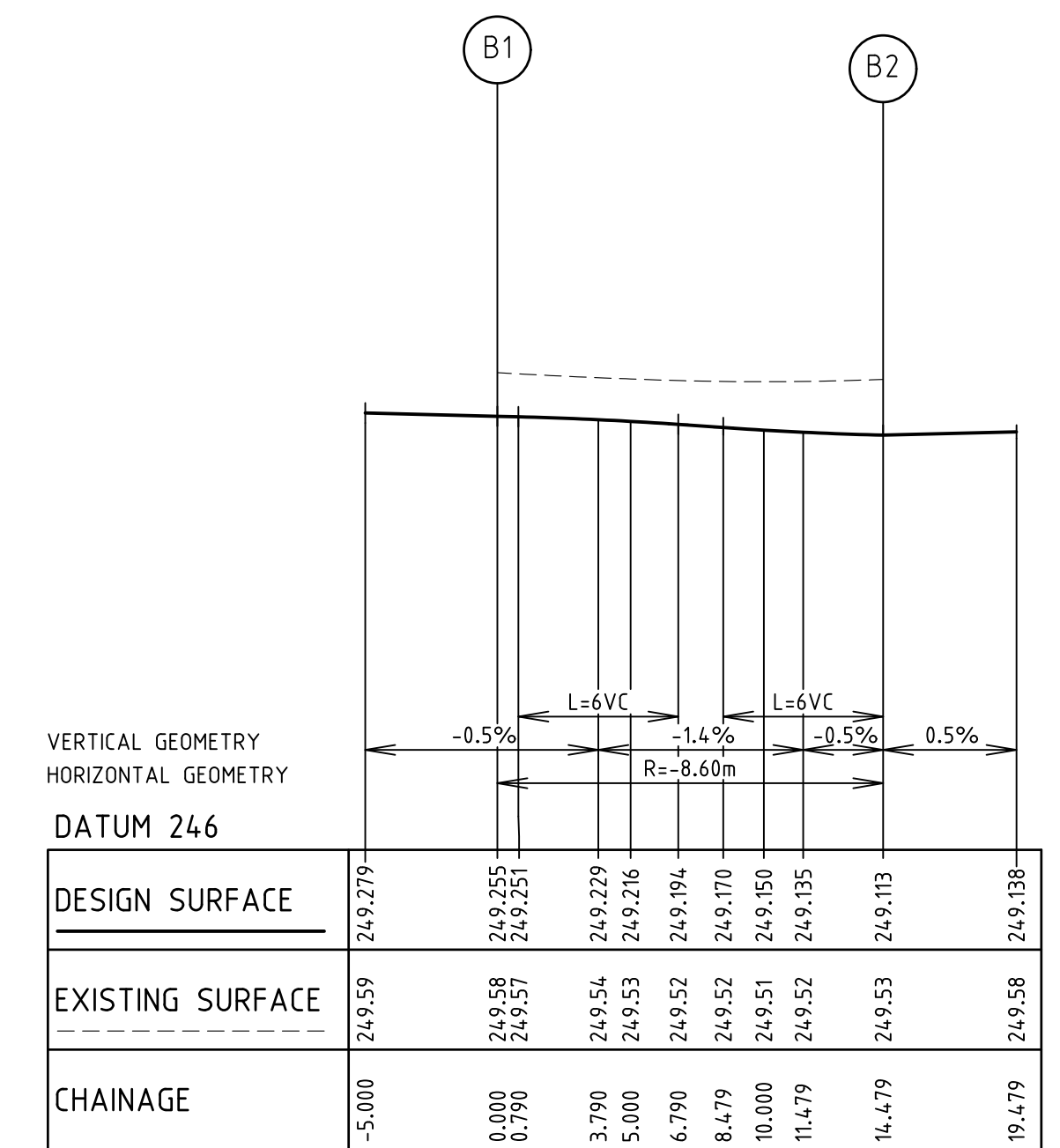
POINT NO	EASTING	NORTHING	RL
B1	314631.867	5844010.581	249.255
B2	314627.626	5844022.688	249.113

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
B1 - B2	96.465	8.600	14.479	2.871	2.121	3.514	2.900	3.620	249.187



LIP PROFILE A

SCALE: 1:250(A1) HORIZONTAL
SCALE: 1:50(A1) VERTICAL



LIP PROFILE B

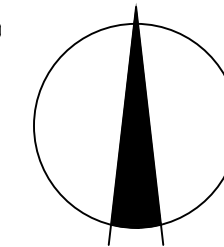
SCALE: 1:250(A1) HORIZONTAL
SCALE: 1:50(A1) VERTICAL

LEGEND

- EXISTING OPTIC FIBRE
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- EXISTING ELECTRICAL CABLE
- EXISTING SEWER MAIN & MANHOLE
- EXISTING TELECOMM. CABLE AND PIT
- EXISTING ELEC. POLE & O'HEAD LINES
- EXISTING STORMWATER DRAIN & PIT
- CONSTRUCTED PRE DEVELOPMENT
- PERMANENT SURVEY MARK

- WATER
- RECYCLED WATER
- TELECOMMUNICATIONS
- ELECTRICITY
- GAS
- STREET NAME SIGN
- DIRECTION OF FALL (MIN 1 IN 150)
- ASPHALT PAVEMENT
- CONC FOOTPATH / DRIVEWAY
- LIMIT OF WORKS
- FINISHED SURFACE CONTOUR

- EXISTING TREES TO BE REMOVED
- EXISTING SURFACE LEVEL
- FINISHED SURFACE LEVEL
- OPEN EARTH DRAIN (O.E.D.)
- FILLING OVER 200mm



merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor 1:200 0m 2m 4m 8m 12m
Scale @ A1/A3 1:200/1:400

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
INTERSECTION DETAILS
SHEET 01 OF 02
Drawing No. 11737ID01 Rev 1
Sheet No. 06 AS CONSTRUCTED
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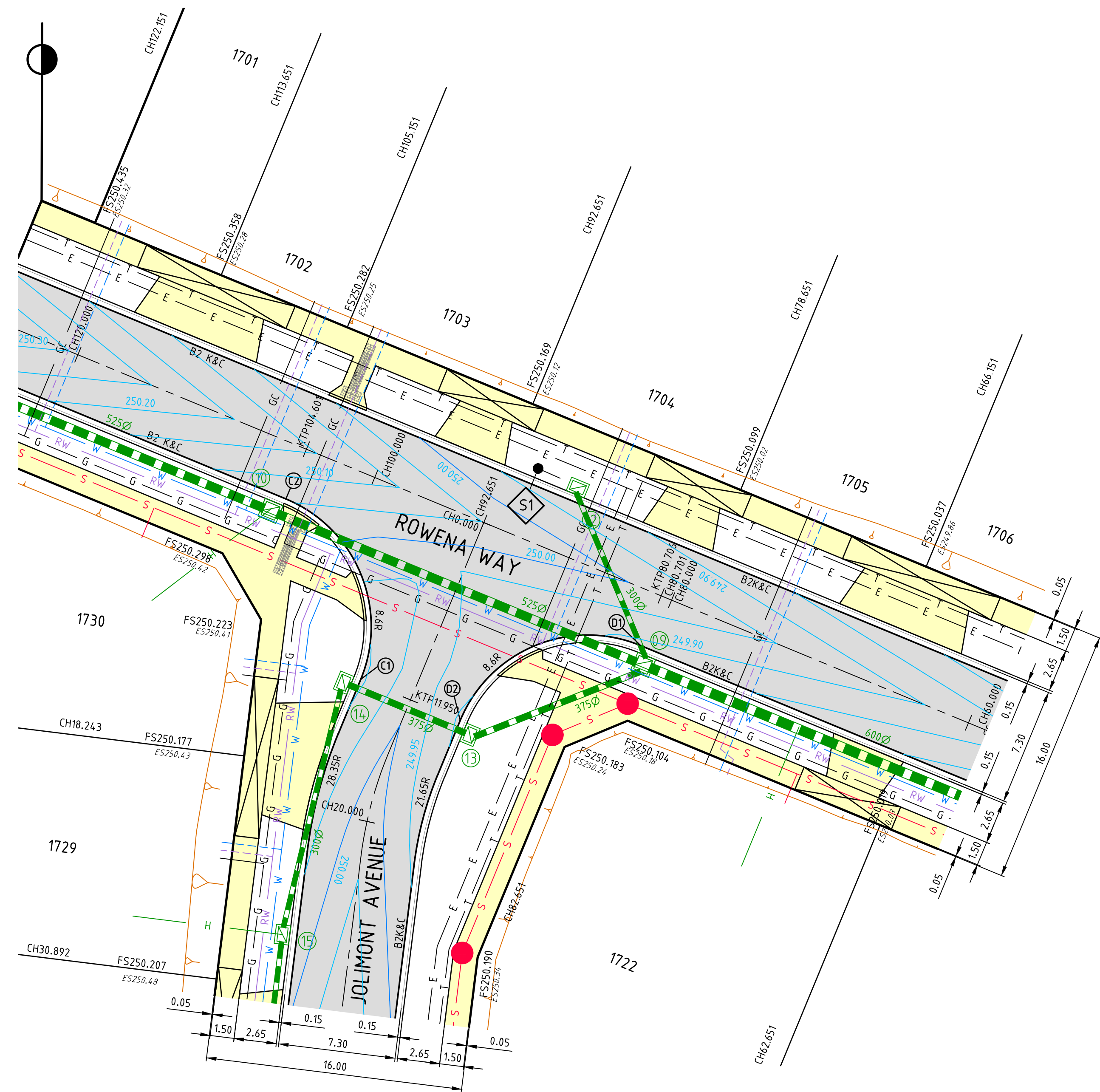
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REV	AMENDMENTS	DATE	APP'D.
1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

Drawn M. CAPALDO
Date 21/07/15
AN 1451041
Designed K. PHAL
Date 28/07/15
AN 1871041
Verified B. GORDON
Date 28/07/15
AN 162400
Audited T. BOUHOFF
Date 29/01/16
AN 912779
Approved T. LIKOPPOULOS
Date 29/01/16
AN 885101

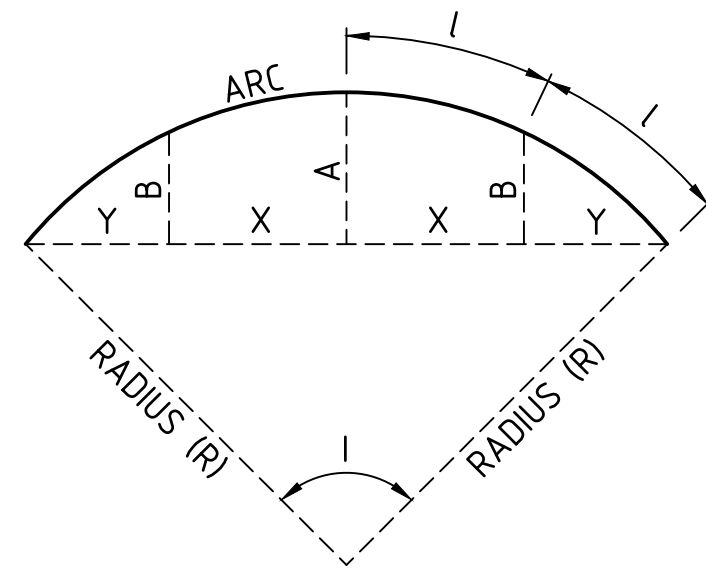
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Date/Time: Thu Jul 21, 2016 - 11:29am - Byron Shire



PLAN
SCALE: 1:200(A1)



SIGNAGE LEGEND
N.T.S.



LIP SETOUT DETAIL
N.T.S.

AS CONSTRUCTED

WARNING!
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TO COMMENCEMENT OF ANY WORKS.

ALIGNMENT C

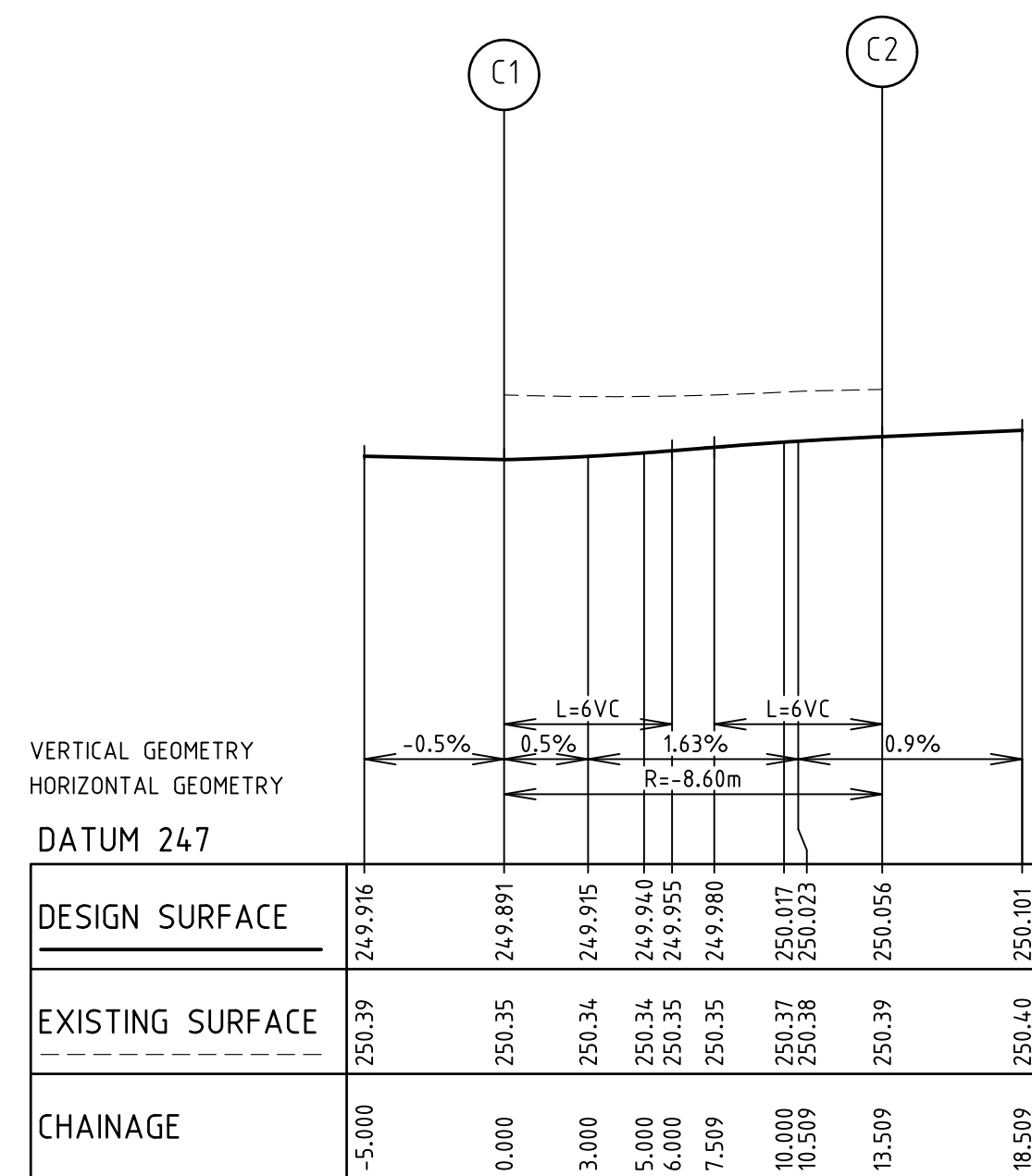
POINT NO	EASTING	NORTHING	RL
C1	314548.457	5844046.110	249.891
C2	314543.794	5844057.343	250.056

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
C1 - C2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	249.968

ALIGNMENT D

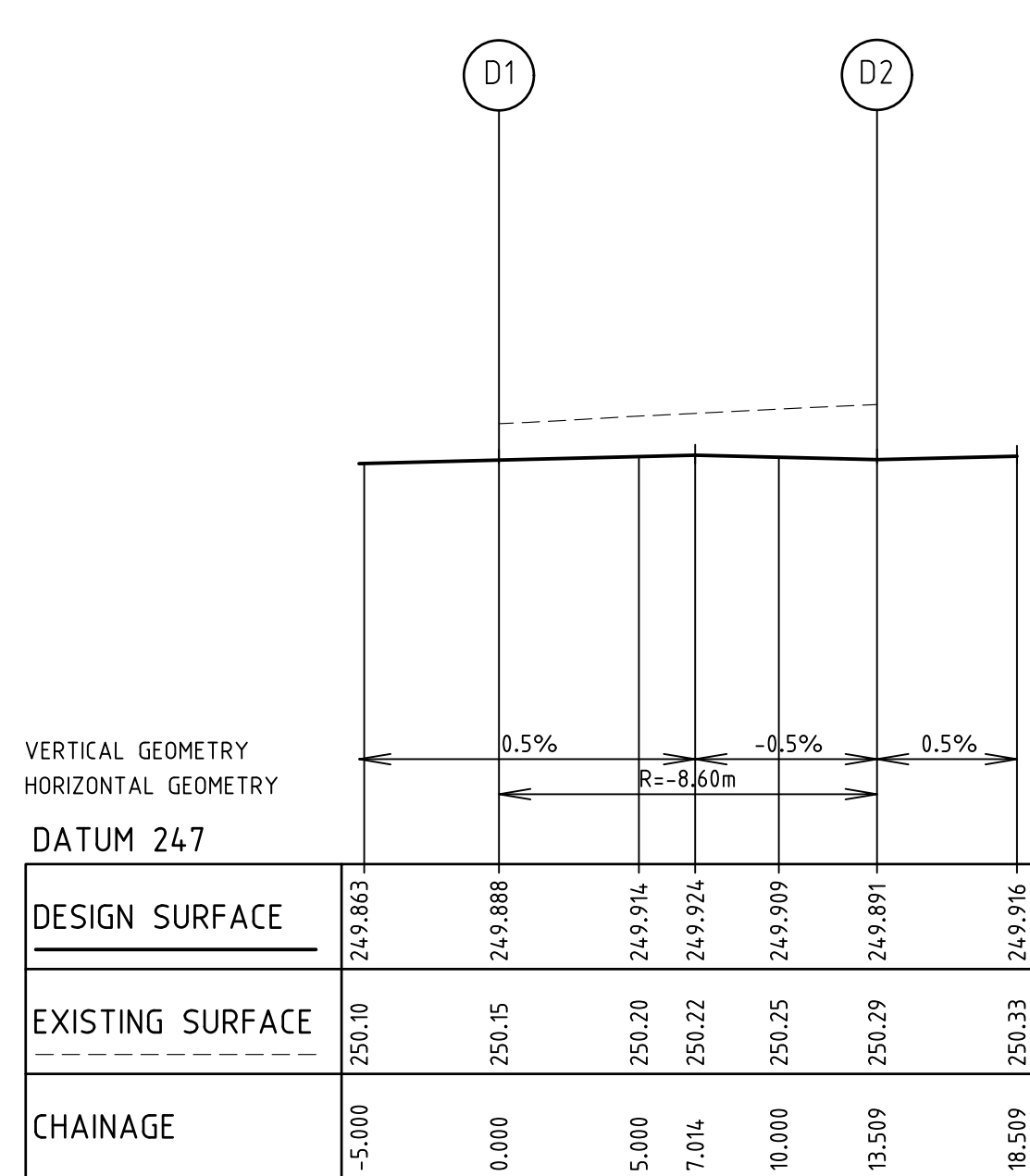
POINT NO	EASTING	NORTHING	RL
D1	314565.881	5844048.213	249.889
D2	314554.648	5844043.550	249.891

CURVE NO	I	RADIUS	ARC	A	B	X	Y	L	MID POINT RL
D1 - D2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	249.922



LIP PROFILE C

SCALE: 1:250(A1) HORIZONTAL
SCALE: 1:50(A1) VERTICAL



LIP PROFILE D

SCALE: 1:250(A1) HORIZONTAL
SCALE: 1:50(A1) VERTICAL

REV	AMENDMENTS	DATE	APP'D.
1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL

Drawn M.CAPALDO Date: 21/07/15 AN 1451041 Designed K.PHAL Date: 28/07/15 AN 1871042 Verified B.GORDON Date: 28/07/15 AN 162401 Audited T.LOBOUHOF Date: 29/01/16 AN 912780 Approved T.LIAKOPOULOS Date: 29/01/16 AN 885102	—Ex OF— EXISTING OPTIC FIBRE —Ex W— EXISTING WATER MAIN —Ex G— EXISTING GAS MAIN —Ex E— EXISTING ELECTRICAL CABLE —Ex S— EXISTING SEWER MAIN & MANHOLE —Ex T— EXISTING TELECOMM. CABLE AND PIT —Ex V— EXISTING ELEC. POLE & O'HEAD LINES —Ex I— EXISTING STORMWATER DRAIN & PIT —Ex P— CONSTRUCTED PRE DEVELOPMENT —Ex M— PERMANENT SURVEY MARK
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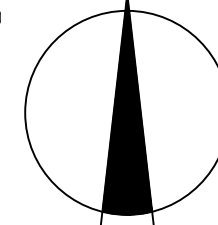
LEGEND

—Ex OF— EXISTING OPTIC FIBRE
—Ex W— EXISTING WATER MAIN
—Ex G— EXISTING GAS MAIN
—Ex E— EXISTING ELECTRICAL CABLE
—Ex S— EXISTING SEWER MAIN & MANHOLE
—Ex T— EXISTING TELECOMM. CABLE AND PIT
—Ex V— EXISTING ELEC. POLE & O'HEAD LINES
—Ex I— EXISTING STORMWATER DRAIN & PIT
—Ex P— CONSTRUCTED PRE DEVELOPMENT
—Ex M— PERMANENT SURVEY MARK

—Ex S— EXISTING 300Ø
—S— SEWER MAIN AND MANHOLE
—S— STORMWATER DRAIN & PIT
—S— SW DRAIN & PIT CONSTRUCTED
—S— IN PREVIOUS STAGES
—P— PROPERTY INLETS
—H— HOUSE DRAIN
—GC— GAS CONDUIT
—WC— WATER CONDUIT
—WVC— RECYCLED WATER CONDUIT
—TC— TELECOMM. CONDUIT

—W— WATER
—RW— RECYCLED WATER
—T— TELECOMMUNICATIONS
—E— ELECTRICITY
—G— GAS
—S— STREET NAME SIGN
—D— DIRECTION OF FALL (MIN 1 IN 150)
—A— ASPHALT PAVEMENT
—C— CONC FOOTPATH / DRIVEWAY
—L— LIMIT OF WORKS
—FS— FINISHED SURFACE CONTOUR

EXISTING TREES TO BE REMOVED
EXISTING SURFACE LEVEL
FINISHED SURFACE LEVEL
OPEN EARTH DRAIN (O.E.D.)
FILLING OVER 200mm



merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor 1:200 0m 2m 4m 8m 12m
Scale @ A1/A3 1:200/1:400

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
INTERSECTION DETAILS
SHEET 02 OF 02
Drawing No. 11737ID02 Rev 1
Sheet No. 07 AS CONSTRUCTED
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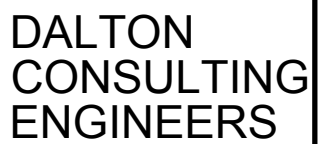
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Levels: AHD

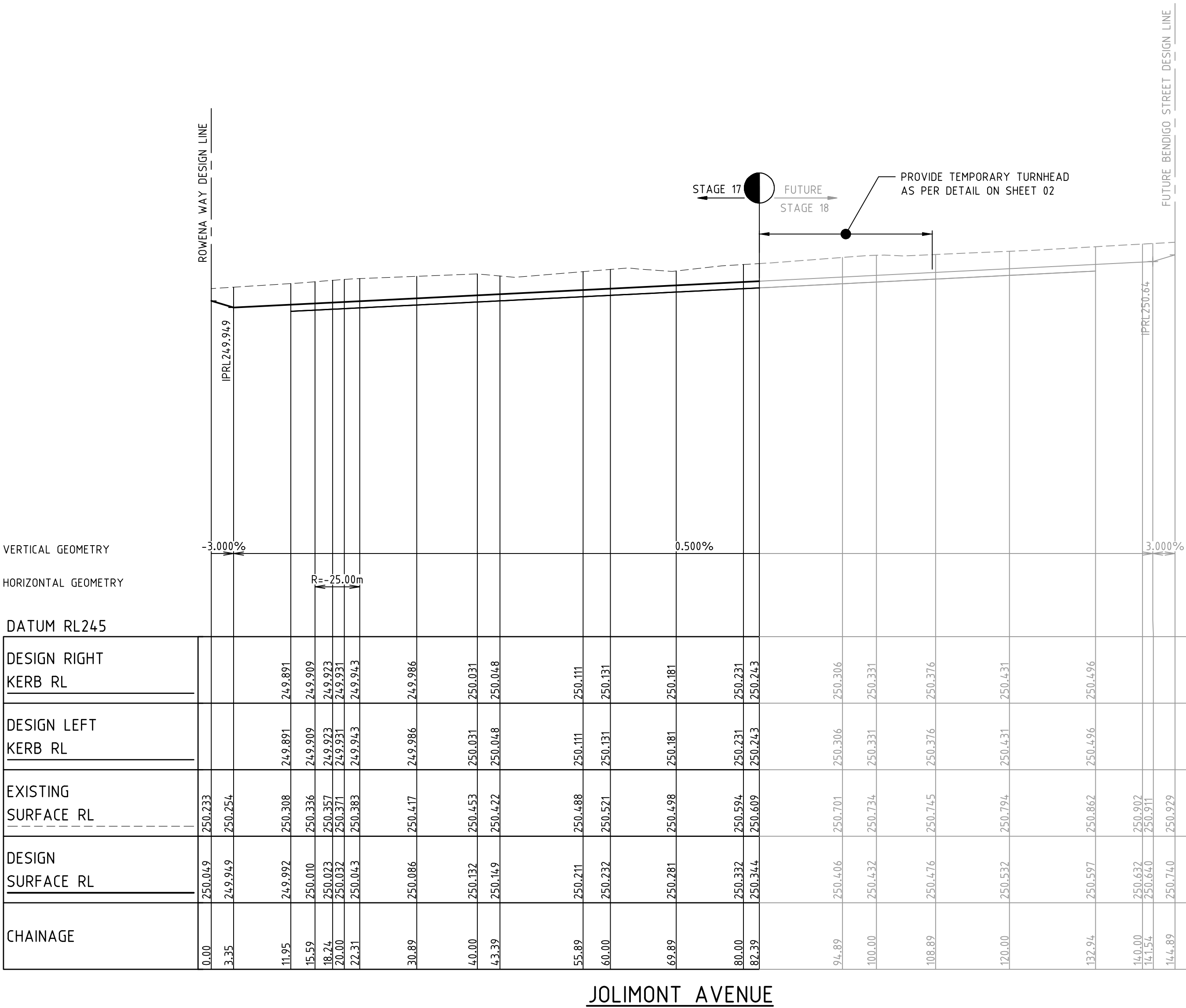
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Scale @ A1/A3 1:500/1:1000



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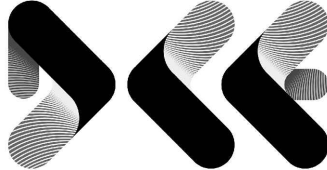
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Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871044
Verified B.GORDON
Date 28/07/15
AN 162403
Audited T.OBOUHOFF
Date 29/01/16
AN 912782
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885104

AS CONSTRUCTED



Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
LONGITUDINAL SECTION
SHEET 02 OF 03
Drawing No. 11737LS02 Rev 1
Sheet No. 09 AS CONSTRUCTED
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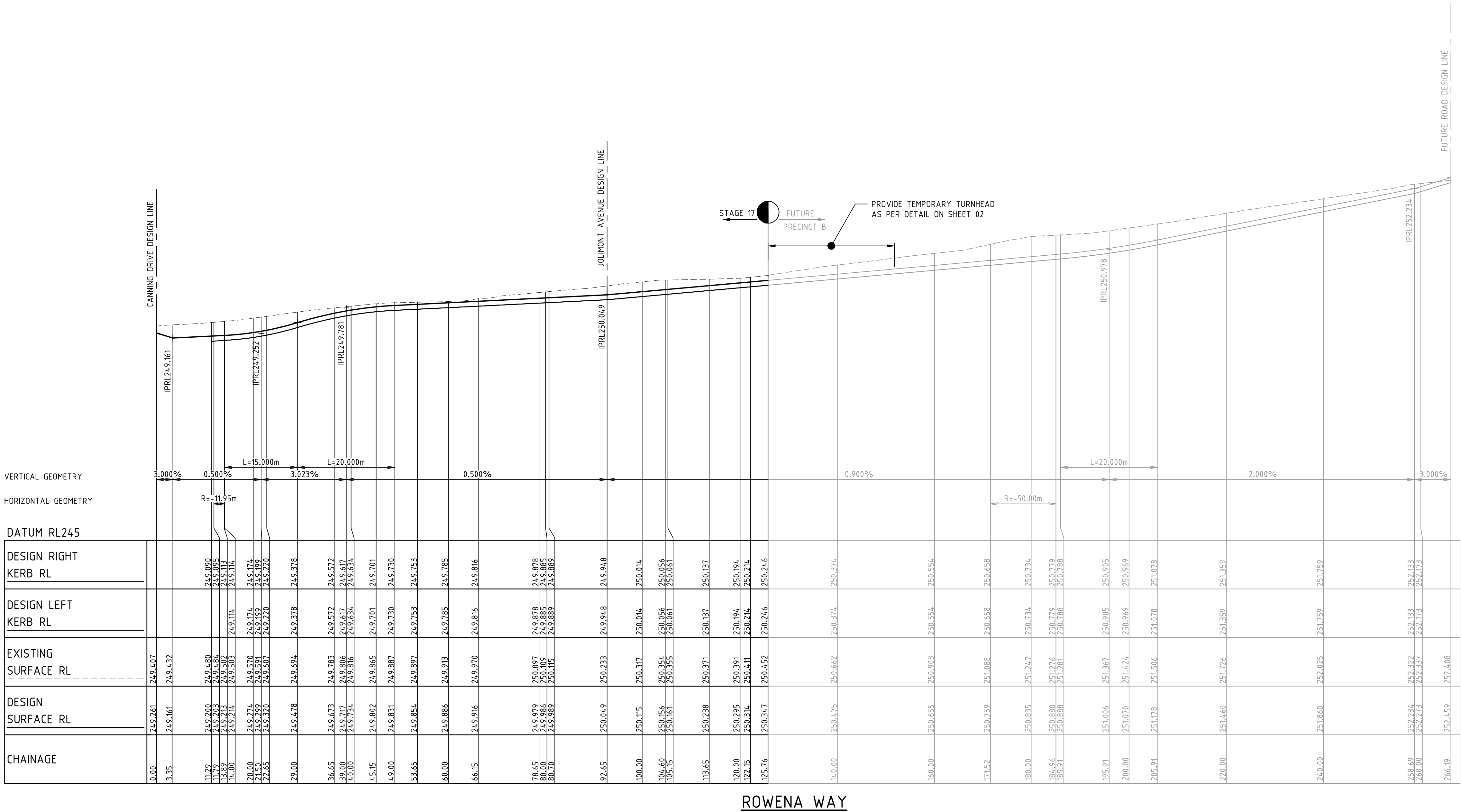


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Designed K.PHAL
Date 28/07/15
AN 1871045
Verified B.GORDON
Date 28/07/15
AN 162404
Audited T.TOBOLHOFF
Date 29/01/16
AN 912783
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885105

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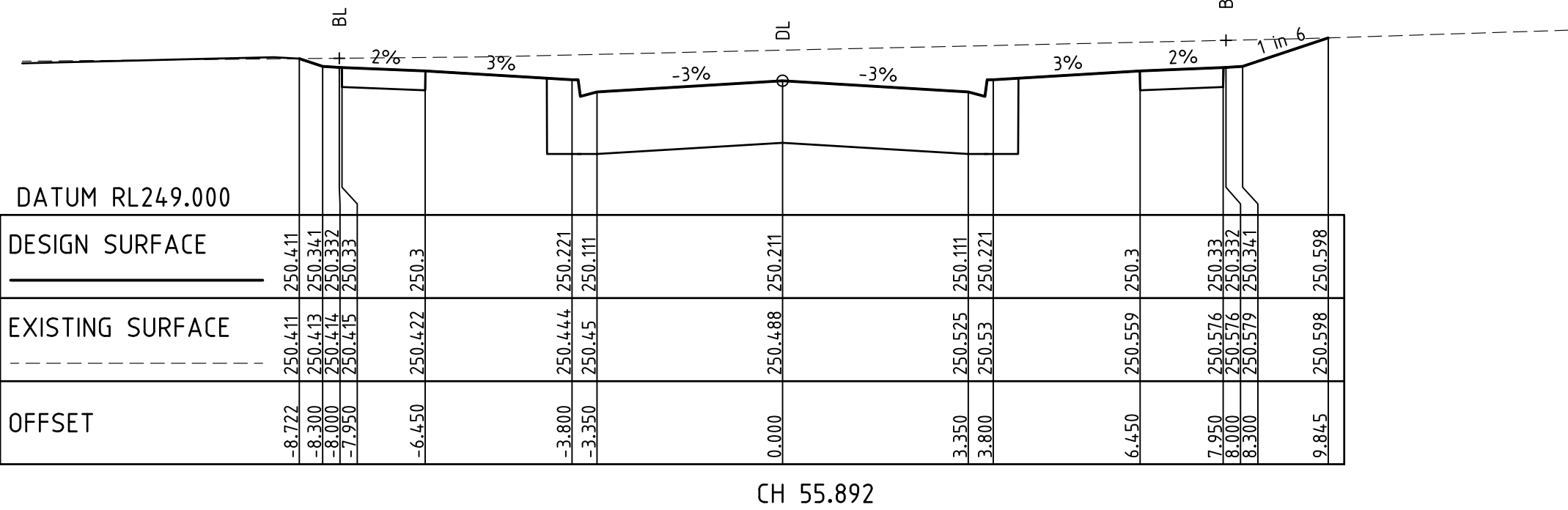
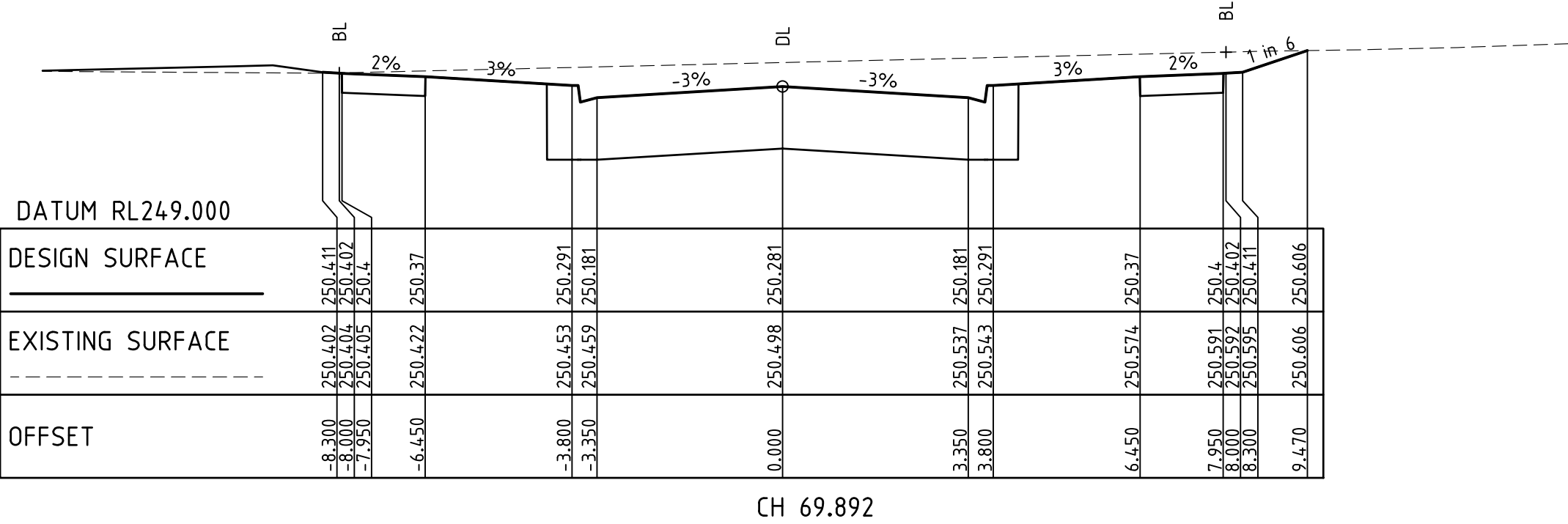
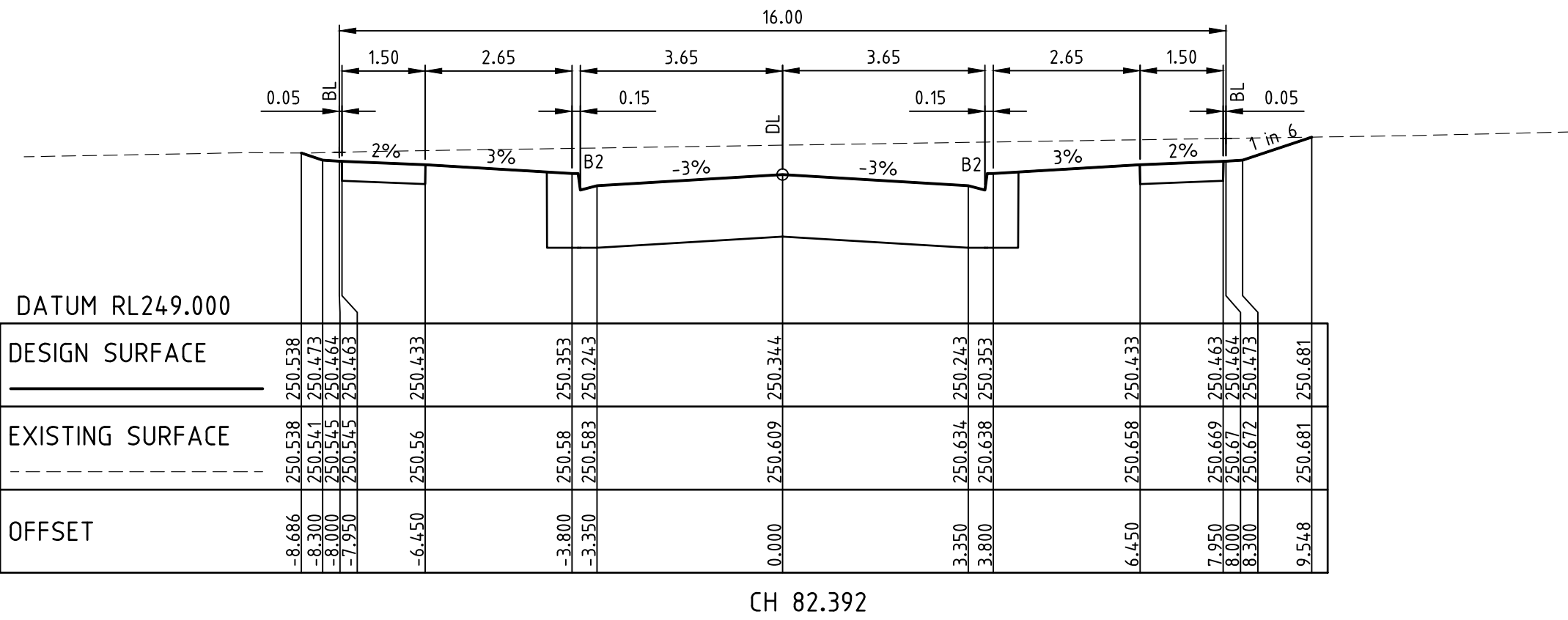
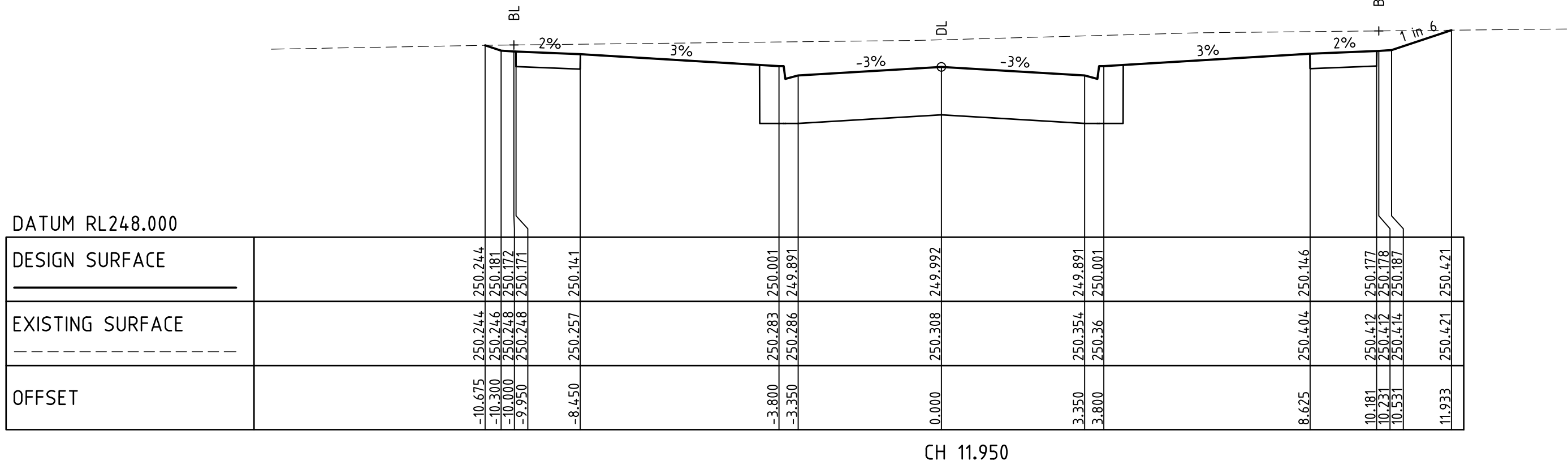
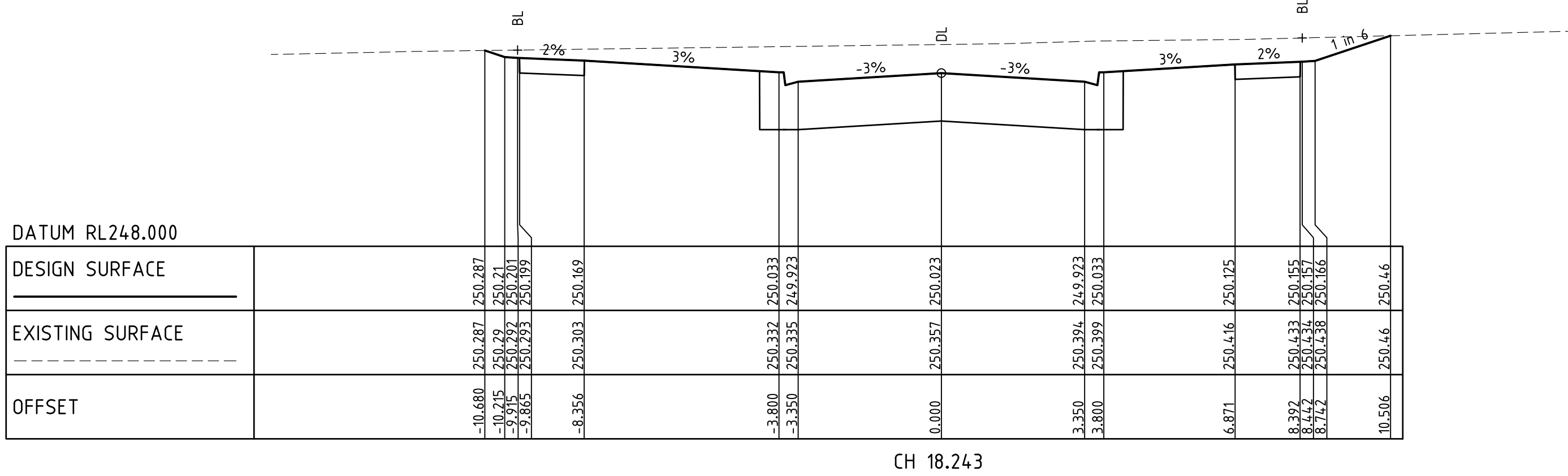
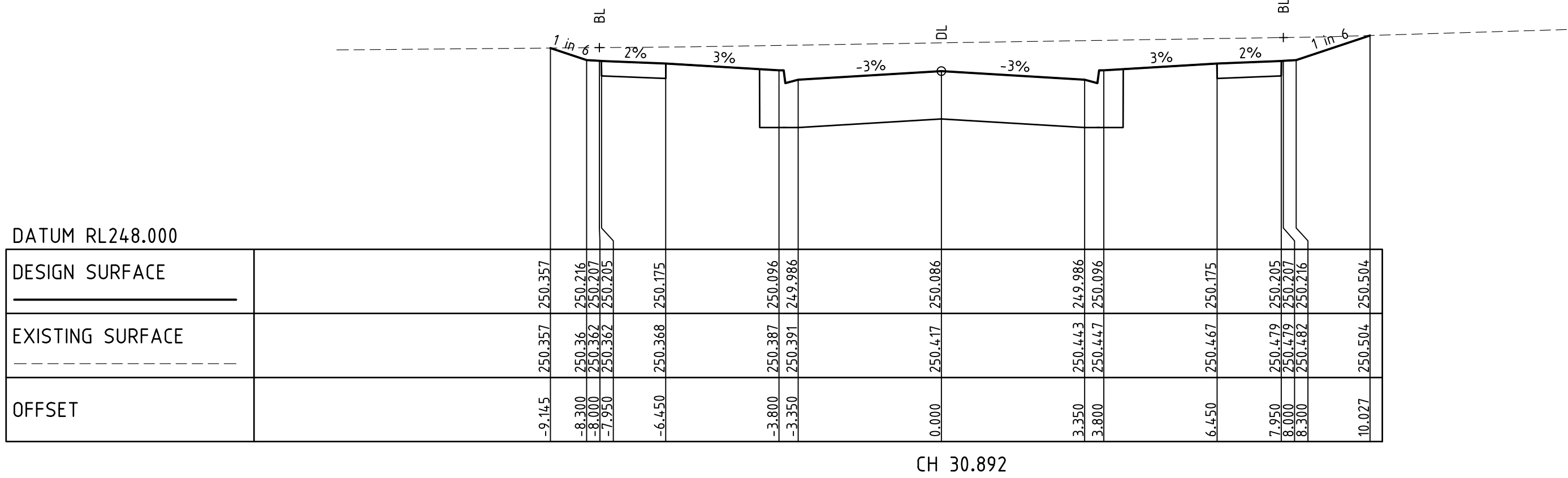
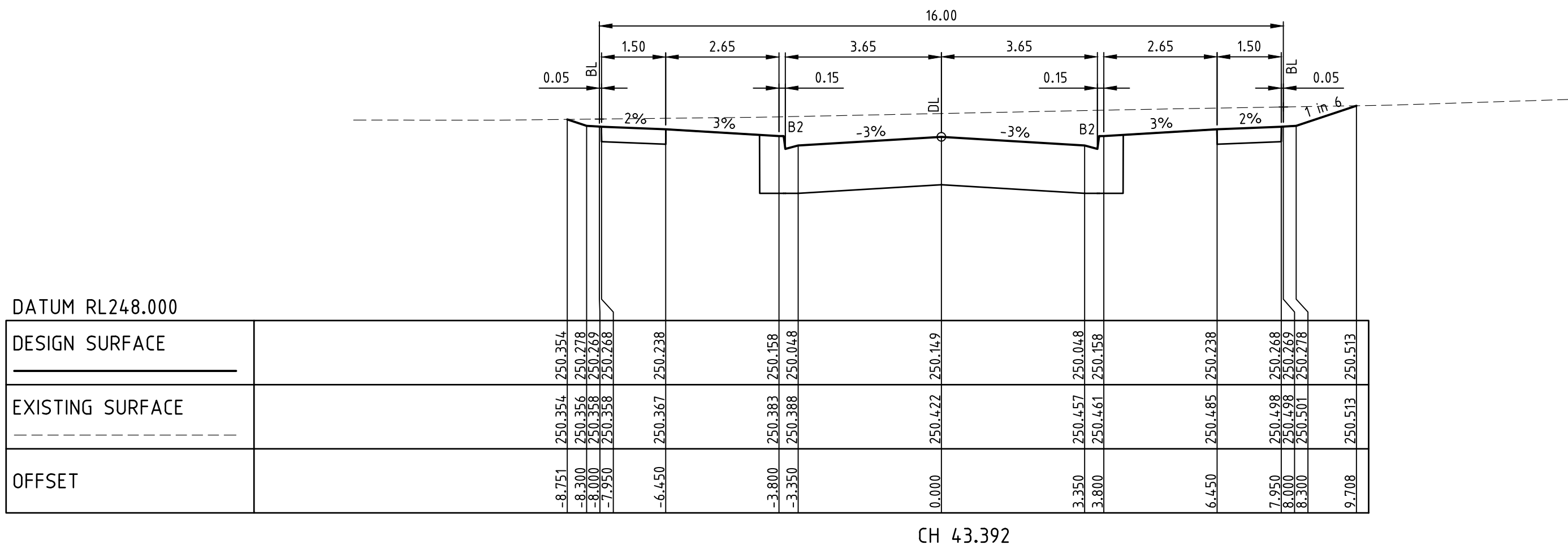
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Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
LONGITUDINAL SECTION
SHEET 03 OF 03
Drawing No. 11737LS03 Rev 1
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JOLIMONT AVENUE

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Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871047
Verified B.GORDON
Date 28/07/15
AN 162406
Audited T.OBOUHOFF
Date 29/01/16
AN 912785
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885107

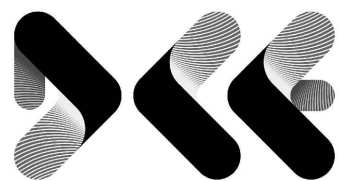
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Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.



Coords: MGA
Levels: AHD
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Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:100/1:200

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
CROSS SECTIONS
SHEET 02 OF 03
Drawing No. 11737XS02 Rev 1
Sheet No. 12 AS CONSTRUCTED
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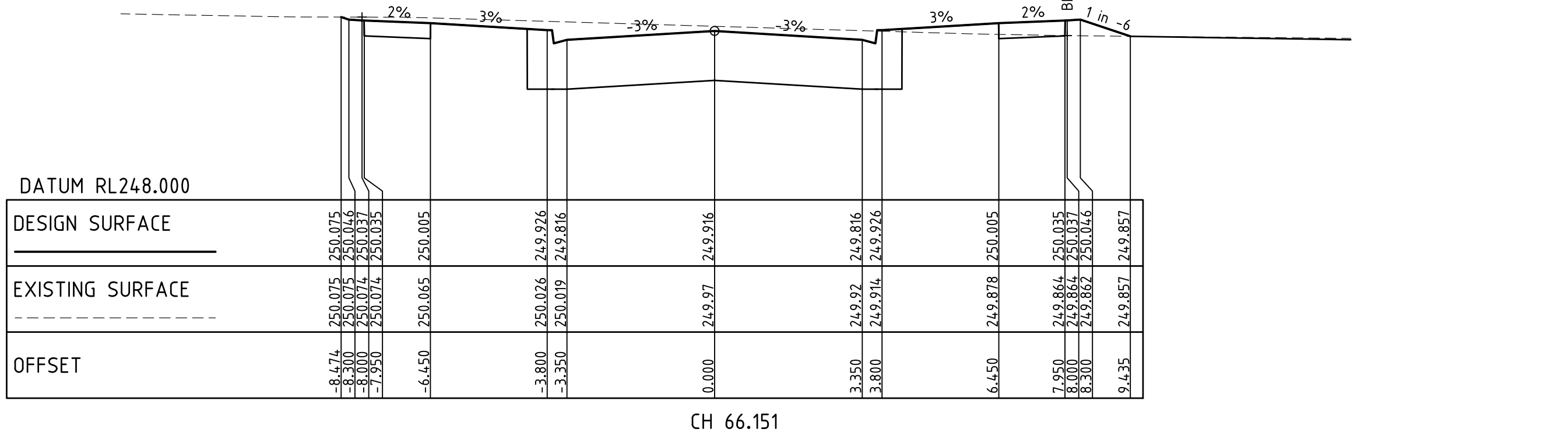
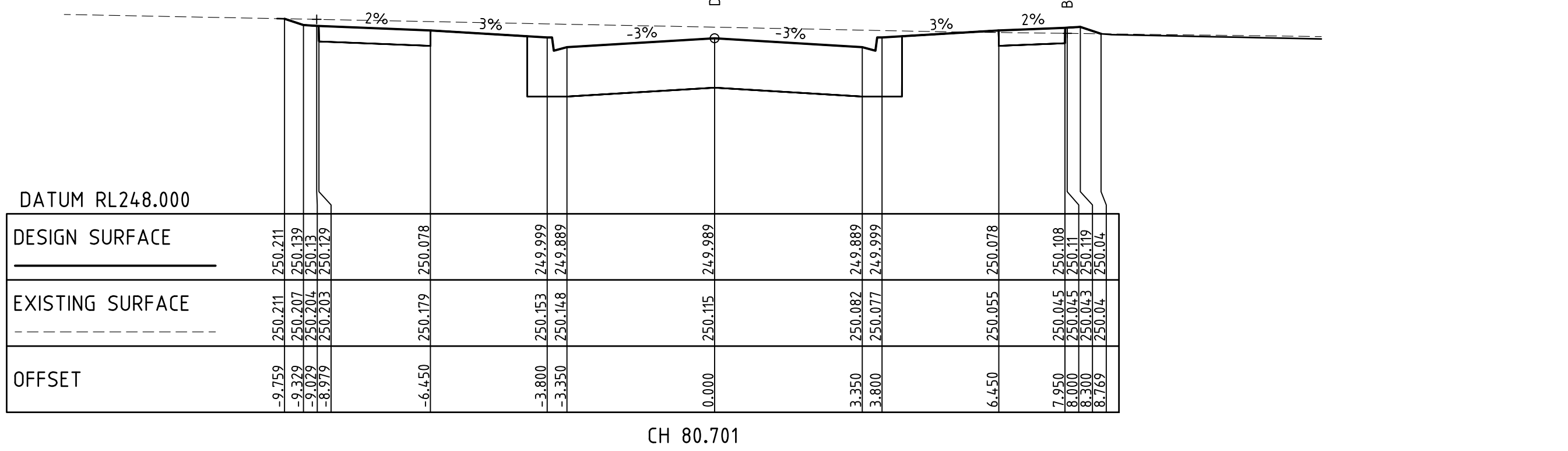
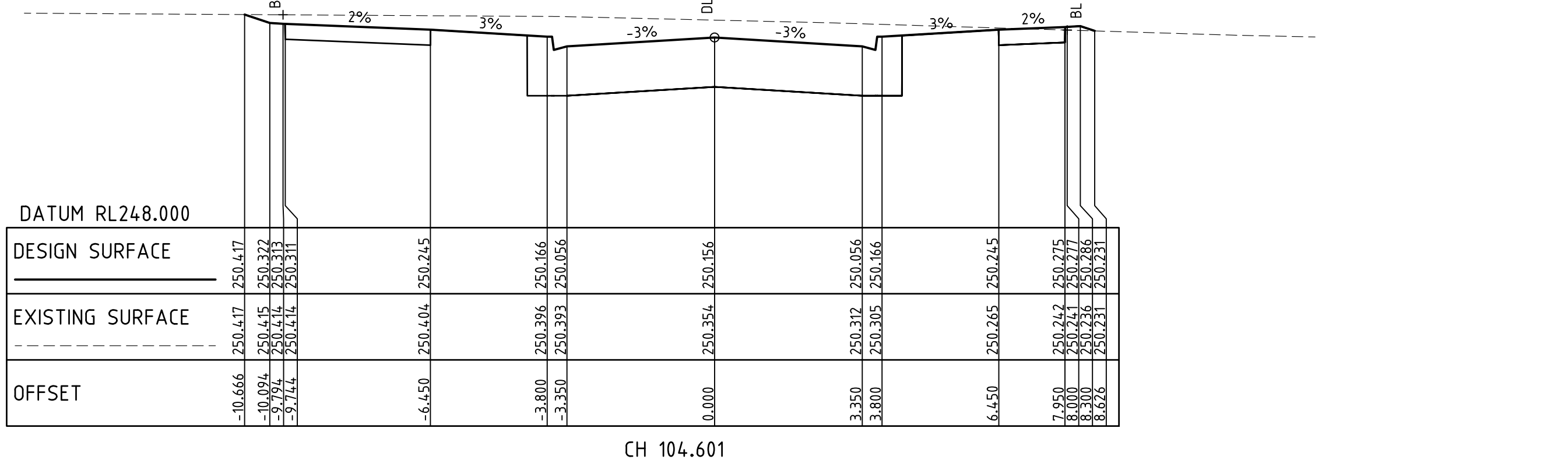
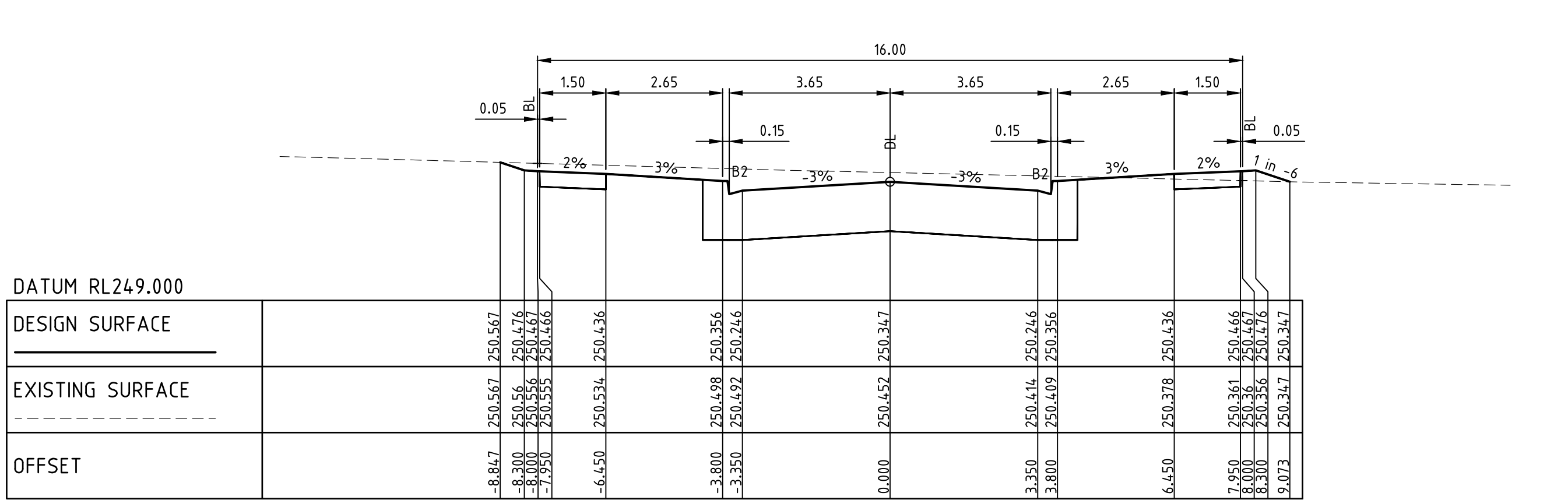
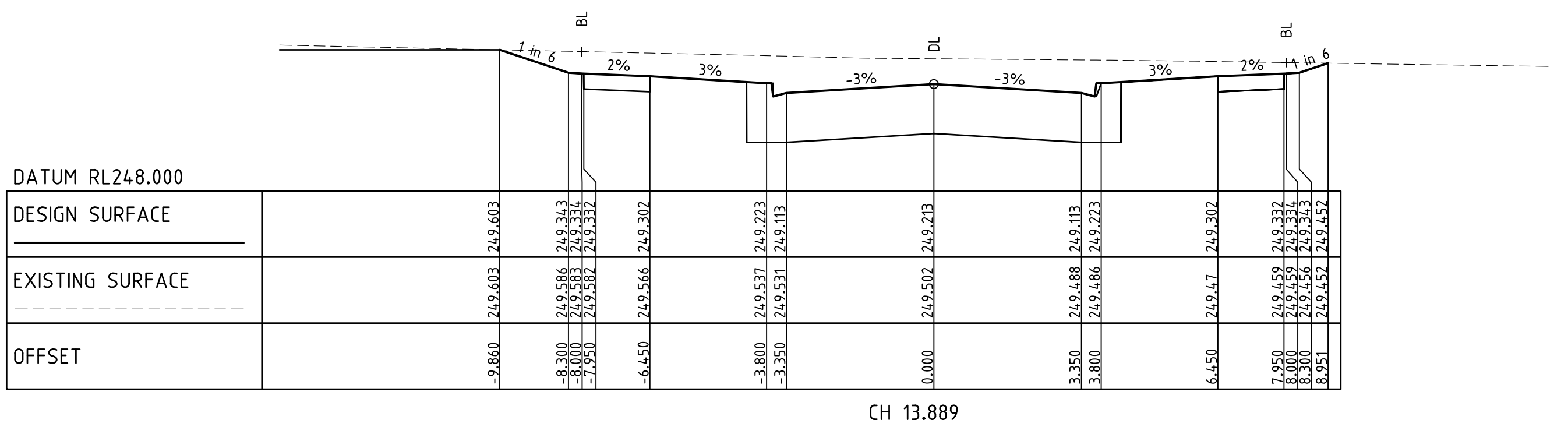
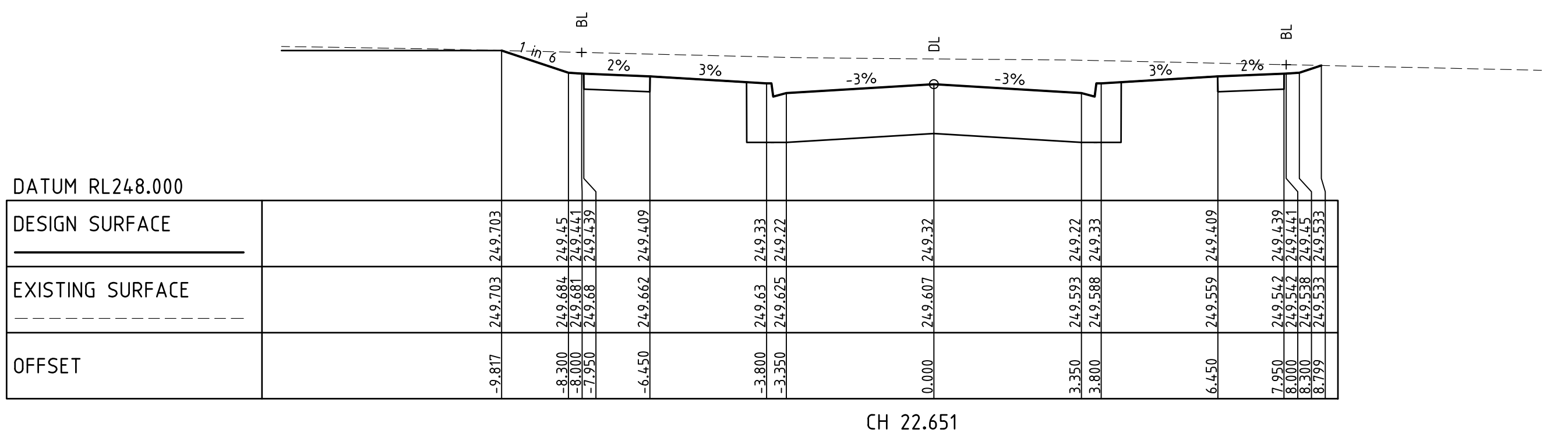
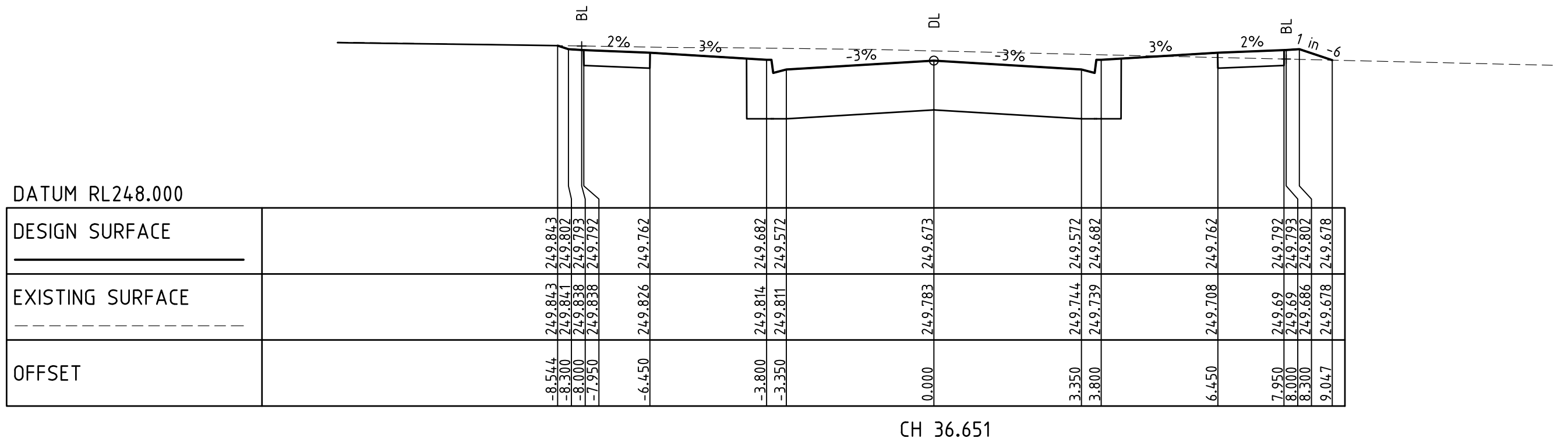
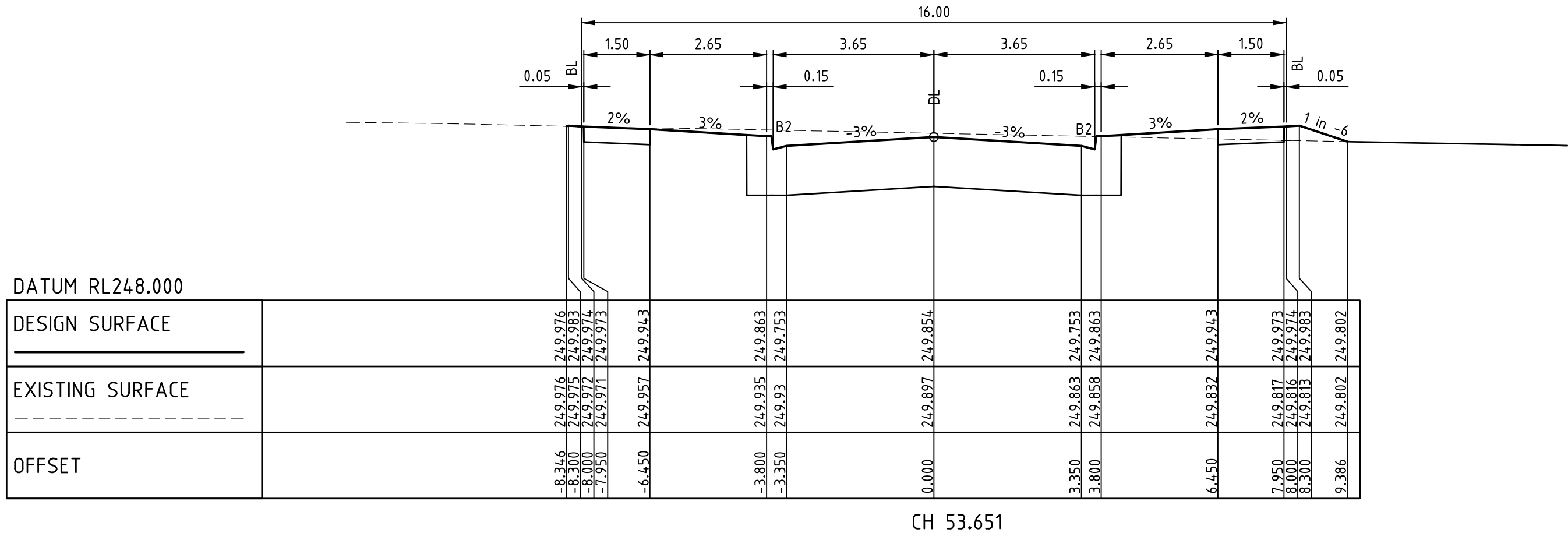


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ROWENA WAY

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Designed K.PHAL
Date 28/07/15
AN 1871048
Verified B.GORDON
Date 28/07/15
AN 162407
Audited T.OBOUHOFF
Date 29/01/16
AN 912786
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885108

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.



Coords: MGA
Levels: AHD
Hor 1:100 0m 1m 2m 4m 6m
Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:100/1:200

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
CROSS SECTIONS
SHEET 03 OF 03
Drawing No. 11737XS03 Rev 1
Sheet No. 13 AS CONSTRUCTED
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Date: 21/07/16
AN 1451041
Designed K.PHAL
Date: 28/07/15
AN 1871154
Verified B.GORDON
Date: 28/07/15
AN 162678
Audited T.OBOUHOFF
Date: 29/01/16
AN 912787
Approved T.LIAKOPOULOS
Date: 29/01/16
AN 885109

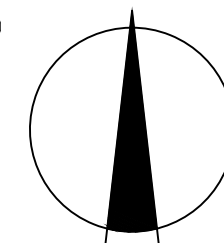
LEGEND

—Ex OF— EXISTING OPTIC FIBRE
—Ex W— EXISTING WATER MAIN
—Ex G— EXISTING GAS MAIN
—Ex E— EXISTING ELECTRICAL CABLE
—Ex S— EXISTING SEWER MAIN & MANHOLE
—Ex T— EXISTING TELECOMM. CABLE AND PIT
—Ex V— EXISTING ELEC. POLE & O'HEAD LINES
—Ex P— EXISTING STORMWATER DRAIN & PIT
—Ex C— EXISTING STORMWATER DRAIN & PIT
—Ex L— EXISTING PRE DEVELOPMENT
—Ex M— EXISTING PERMANENT SURVEY MARK

—S— EXISTING 300Ø BRANCH SEWER MAIN
—S— EXISTING SEWER MAIN AND MANHOLE
—S— EXISTING STORMWATER DRAIN & PIT
—S— EXISTING SW DRAIN & PIT CONSTRUCTED IN PREVIOUS STAGES
—P— PROPERTY INLETS
—H— HOUSE DRAIN
—GC— GAS CONDUIT
—WC— WATER CONDUIT
—WVC— RECYCLED WATER CONDUIT
—TC— TELECOMM. CONDUIT

—W— WATER
—RW— RECYCLED WATER
—T— TELECOMMUNICATIONS
—E— ELECTRICITY
—G— GAS
—S— STREET NAME SIGN
—D— DIRECTION OF FALL (MIN 1 IN 150)
—A— ASPHALT PAVEMENT
—C— CONC FOOTPATH / DRIVEWAY
—L— LIMIT OF WORKS
—FS— FINISHED SURFACE CONTOUR

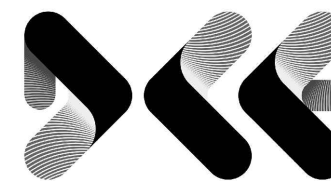
EXISTING TREES TO BE REMOVED
EXISTING SURFACE LEVEL
FINISHED SURFACE LEVEL
OPEN EARTH DRAIN (O.E.D.)
FILLING OVER 200mm



merrifield
MAB gpc

Coords: MGA
Levels: AHD
Hor: 1:500 0m 5m 10m 20m 30m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
OPEN EARTH DRAIN PLAN
SHEET 01 OF 02
Drawing No. 11737OED01 Rev 1
Sheet No. 14 **AS CONSTRUCTED**
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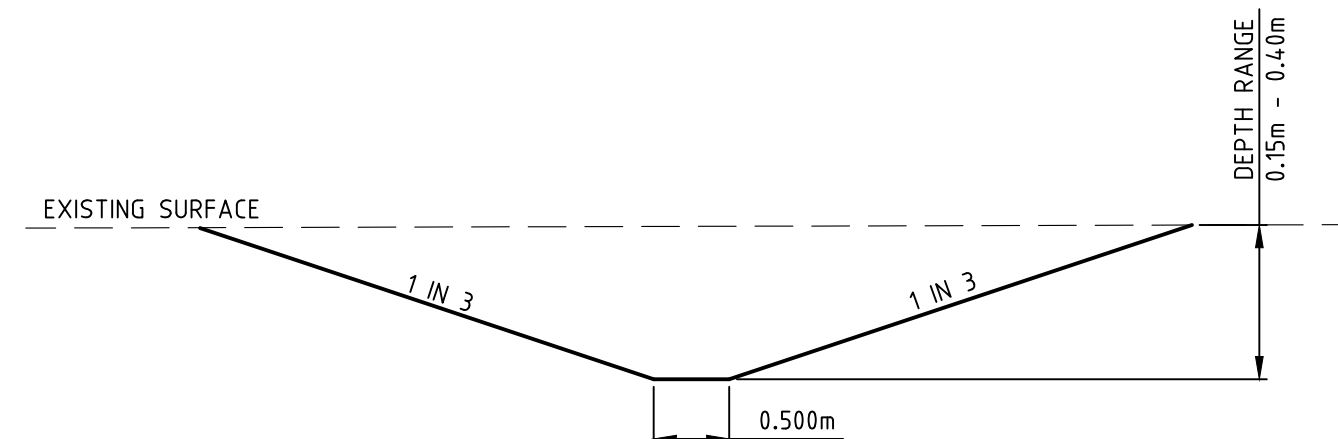
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CONTRACTOR TO LOCALLY R-SHAPE BUND TO ALLOW NEW OPEN EARTH DRAIN TO ENTER EXISTING STAGE 15 OPEN EARTH DRAIN

EXISTING STAGE 15 OPEN EARTH DRAIN AND BUND TO BE RETAINED

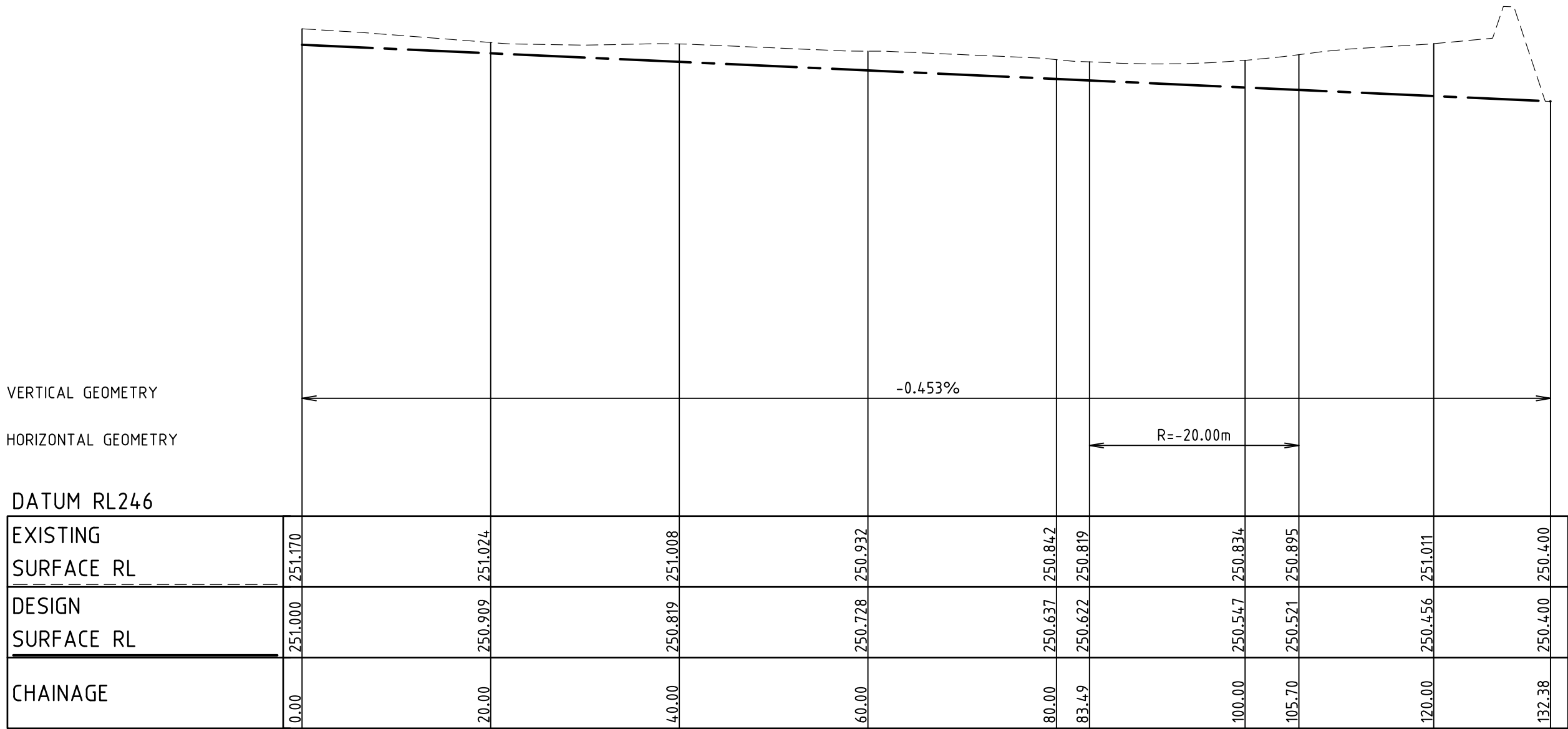


TYPICAL SECTION
TEMPORARY OPEN EARTH DRAIN
SCALE: 1:50

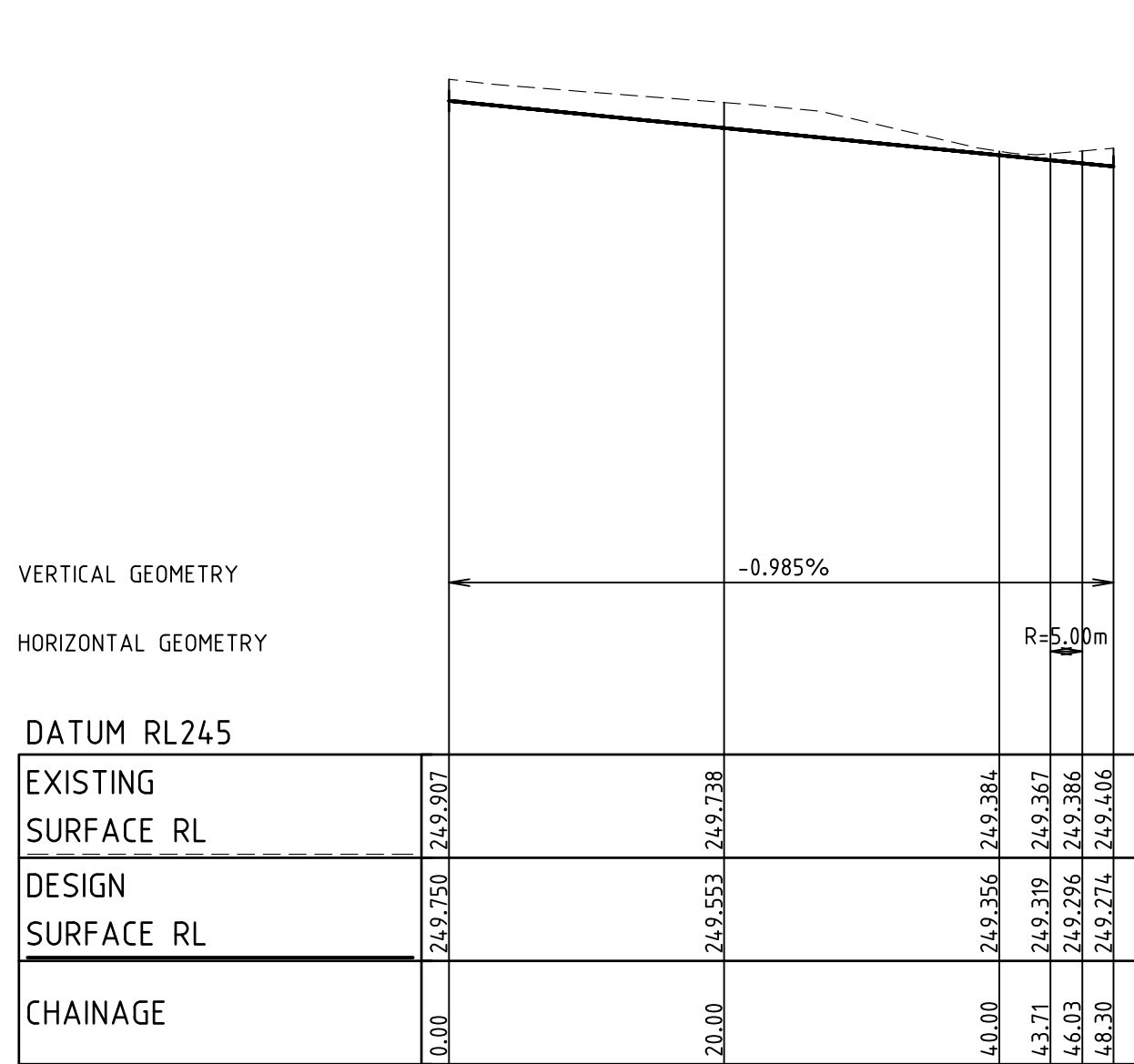
OPEN EARTH DRAINS TO BE GRADED TO V-NOTCH 200mm FROM TOP OF PITS. SEE PAGE 20 FOR DETAILS

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LONGITUDINAL SECTION OED 1 DESIGN LINE



LONGITUDINAL SECTION OED 3 DESIGN LINE

HORIZONTAL ALIGNMENT REPORT FOR OPEN EARTH DRAIN 1

POINT TYPE	CHAINAGE	COORDINATES		RL	BEARING DEG MIN SEC	RADIUS
		EASTING	NORTHING			
STRAIGHT (START ALN)	0.000	314502.465	5843956.458	251.000	7°03'10.00"	
STRAIGHT	20.000	314504.921	5843976.307	250.909	7°03'10.00"	
STRAIGHT	40.000	314507.376	5843996.155	250.819	7°03'10.00"	
STRAIGHT	60.000	314509.832	5844016.004	250.728	7°03'10.00"	
STRAIGHT	80.000	314512.288	5844035.853	250.637	7°03'10.00"	
TANGENT-CURVE	83.495	314512.717	5844039.321	250.622	7°03'10.00"	
CURVE	84.000	314512.772	5844039.823	250.619	5°36'21.41"	-20.000
CURVE	88.000	314512.764	5844043.817	250.601	354°08'48.45"	-20.000
CURVE	92.000	314511.962	5844047.729	250.583	342°41'15.49"	-20.000
CURVE	96.000	314510.399	5844051.403	250.565	331°13'42.53"	-20.000
CURVE	100.000	314508.137	5844054.694	250.547	319°46'09.57"	-20.000
CURVE	104.000	314505.266	5844057.470	250.529	308°18'36.60"	-20.000
CURVE-TANGENT	105.704	314503.886	5844058.468	250.521	303°25'42.73"	-20.000
STRAIGHT	120.000	314491.955	5844066.344	250.456	303°25'42.73"	
STRAIGHT (END ALN)	132.380	314481.622	5844073.164	250.400	303°25'42.73"	

HORIZONTAL ALIGNMENT REPORT FOR OPEN EARTH DRAIN 2

POINT TYPE	CHAINAGE	COORDINATES		RL	BEARING DEG MIN SEC	RADIUS
		EASTING	NORTHING			
STRAIGHT (START ALN)	0.000	314473.336	5843916.482	251.351	97°03'10.00"	
STRAIGHT	20.000	314493.185	5843914.027	251.141	97°03'10.00"	
STRAIGHT	40.000	314513.033	5843911.571	250.931	97°03'10.00"	
STRAIGHT	60.000	314532.882	5843909.115	250.721	97°03'10.00"	
STRAIGHT	80.000	314552.731	5843906.660	250.511	97°03'10.00"	
STRAIGHT	100.000	314572.579	5843904.204	250.300	97°03'10.00"	
STRAIGHT	120.000	314592.428	5843901.748	250.090	97°03'10.00"	
TANGENT-CURVE	121.750	314594.165	5843901.533	250.072	97°03'10.00"	
CURVE	122.500	314594.912	5843901.469	250.064	92°45'20.14"	-10.000
CURVE	125.000	314597.398	5843901.661	250.038	78°25'53.94"	-10.000
CURVE	127.500	314599.759	5843902.461	250.012	64°06'27.74"	-10.000
CURVE	130.000	314601.849	5843903.821	249.985	49°47'01.53"	-10.000
CURVE	132.500	314603.538	5843905.656	249.959	35°27'35.33"	-10.000
CURVE	135.000	314604.720	5843907.852	249.933	21°08'09.13"	-10.000
CURVE-TANGENT	137.458	314605.317	5843910.230	249.907	7°03'10.00"	-10.000
STRAIGHT	140.000	314605.629	5843912.753	249.880	7°03'10.00"	
STRAIGHT (END ALN)	144.258	314606.152	5843916.978	249.836	7°03'10.00"	

HORIZONTAL ALIGNMENT REPORT FOR OPEN EARTH DRAIN 3

POINT TYPE	CHAINAGE	COORDINATES		RL	BEARING DEG MIN SEC	RADIUS
		EASTING	NORTHING			
STRAIGHT (START ALN)	0.000	314612.840	5843926.576	249.750	70°27'01.53"	
STRAIGHT	20.000	314631.687	5843933.269	249.553	70°27'01.53"	
STRAIGHT	40.000	314650.534	5843939.961	249.356	70°27'01.53"	
TANGENT-CURVE	43.712	314654.032	5843941.203	249.319	70°27'01.53"	
CURVE	44.000	314654.306	5843941.292	249.316	73°45'04.51"	5.000
CURVE	46.000	314656.286	5843941.458	249.297	96°40'10.44"	5.000
CURVE-TANGENT	46.033	314656.318	5843941.454	249.296	97°02'48.31"	5.000
STRAIGHT (END ALN)	48.301	314658.570	5843941.175	249.274	97°02'48.31"	

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REV	AMENDMENTS	DATE	APP'D.

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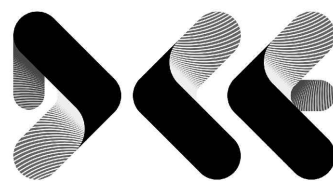
Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871155
Verified B.GORDON
Date 28/07/15
AN 162679
Audited T.OBOUHOFF
Date 29/01/16
AN 912788
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885110

AS CONSTRUCTED



Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
OPEN EARTH DRAIN PLAN
SHEET 02 OF 02
Drawing No. 11737OED02 Rev 1
Sheet No. 15 AS CONSTRUCTED
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WARNING:
NO DRAINAGE WORKS SHALL
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CONFIRMS THE I.L. OF ALL EXISTING
DRAINS, AND CONFIRMS IN WRITING
WITH THE ENGINEERING SUPERVISOR.

VELOCITY (m/s)	3.088	3.059	2.145	2.134	2.030	1.996	2.025	2.025	
PIPE GRADE VELOCITY	2.847	2.847	2.013	2.013	1.787	1.754	1.782	1.783	
PIPE GRADE %	1.000%	1.000%	0.500%	0.500%	0.502%	0.484%	0.500%	0.500%	
PIPE FLOW (m3/s)	1.286	1.229	0.837	0.818	0.737	0.737	0.737	0.737	
PIPE CAPACITY AT GRADE	1.811	1.811	1.280	1.281	0.789	0.775	0.787	0.788	
PIPE SIZE (mm)	900	900	900	900	750	750	750	750	
DATUM	238.000								
DEPTH TO INVERT									
HYDRAULIC GRADE LINE									
INVERT LEVEL									
DESIGN SURFACE LEVEL									
EXISTING SURFACE LEVEL									
CHAINAGE	0.000	13.763	21.541	35.305	25.893	61.08	25.591	86.789	10.300

1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871049
Verified B.GORDON
Date 28/07/15
AN 162408
Audited T.OBOUHOFF
Date 29/01/16
AN 912789
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885111

LEGEND



Denotes CLASS 2 CRUSHED ROCK BACKFILL

AS CONSTRUCTED

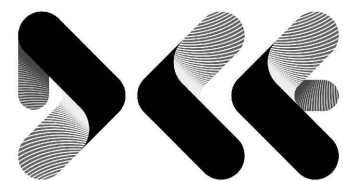
Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.



Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
DRAINAGE LONGITUDINAL SECTION
SHEET 01 OF 04
Drawing No. 11737DR01 Rev 1
Sheet No. 16 AS CONSTRUCTED

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Drawing File: G:\Design\11700\11737-MERRIFIELD - Prelim 1 - Stage 17\Acad\DWG\11737DR02.dwg - 11737DR02
Date/Time: Thu Jul 21, 2016 - 11:30am --byron.shade--

WARNING:
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VELOCITY (m/s)	1.957	1.345
PIPE GRADE VELOCITY	1.793	2.164
PIPE GRADE %	1.000%	2.500%
PIPE FLOW (m ³ /s)	0.014	0.208
PIPE CAPACITY AT GRADE	0.285	0.153
PIPE SIZE (mm)	450	300
DATUM	239.000	239.000
DEPTH TO INVERT	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
HYDRAULIC GRADE LINE		
INVERT LEVEL	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
DESIGN SURFACE LEVEL	250.531 250.531 250.531 250.531 250.531 250.531 250.531 250.531 250.531	250.009 250.009 250.009 250.009 250.009 250.009 250.009 250.009 250.009
EXISTING SURFACE LEVEL	250.531 250.531 250.531 250.531 250.531 250.531 250.531 250.531 250.531	250.009 250.009 250.009 250.009 250.009 250.009 250.009 250.009 250.009
CHAINAGE	133.972 28.197 135.970 164.171	0.000 11.653 11.653 164.171

247.703 248.303 2.306 247.928 248.326 2.081 247.946	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
0.000 11.738 11.738 8.500 20.238 16.139 36.376 38.000 74.376 17.750 92.126 26.700 118.826	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755

247.703 248.303 2.306 247.928 248.326 2.081 247.946	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
0.000 11.738 11.738 8.500 20.238 16.139 36.376 38.000 74.376 17.750 92.126 26.700 118.826	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755

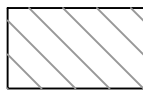
248.475 248.775 1.808 248.525 248.788 1.758 248.640 248.940 1.682 250.488 250.322	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
0.000 11.536 11.536 164.171	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755

246.147 247.047 2.610 246.532 247.092 2.235 246.582	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755
0.000 76.750 76.750 120.250	248.305 248.830 2.226 248.380 248.893 2.151 250.562 248.905 2.167	248.303 2.306 248.003 248.326 2.006 248.294 248.594 1.755

1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M. CAPALDO
Date 21/07/16
AN 1451041
Designed K. PHAL
Date 28/07/15
AN 1871050
Verified B. GORDON
Date 28/07/15
AN 162409
Audited T. BOUHOFF
Date 29/01/16
AN 912790
Approved T. LIAKOPOULOS
Date 29/01/16
AN 885112

LEGEND



Denotes CLASS 2 CRUSHED ROCK BACKFILL

AS CONSTRUCTED



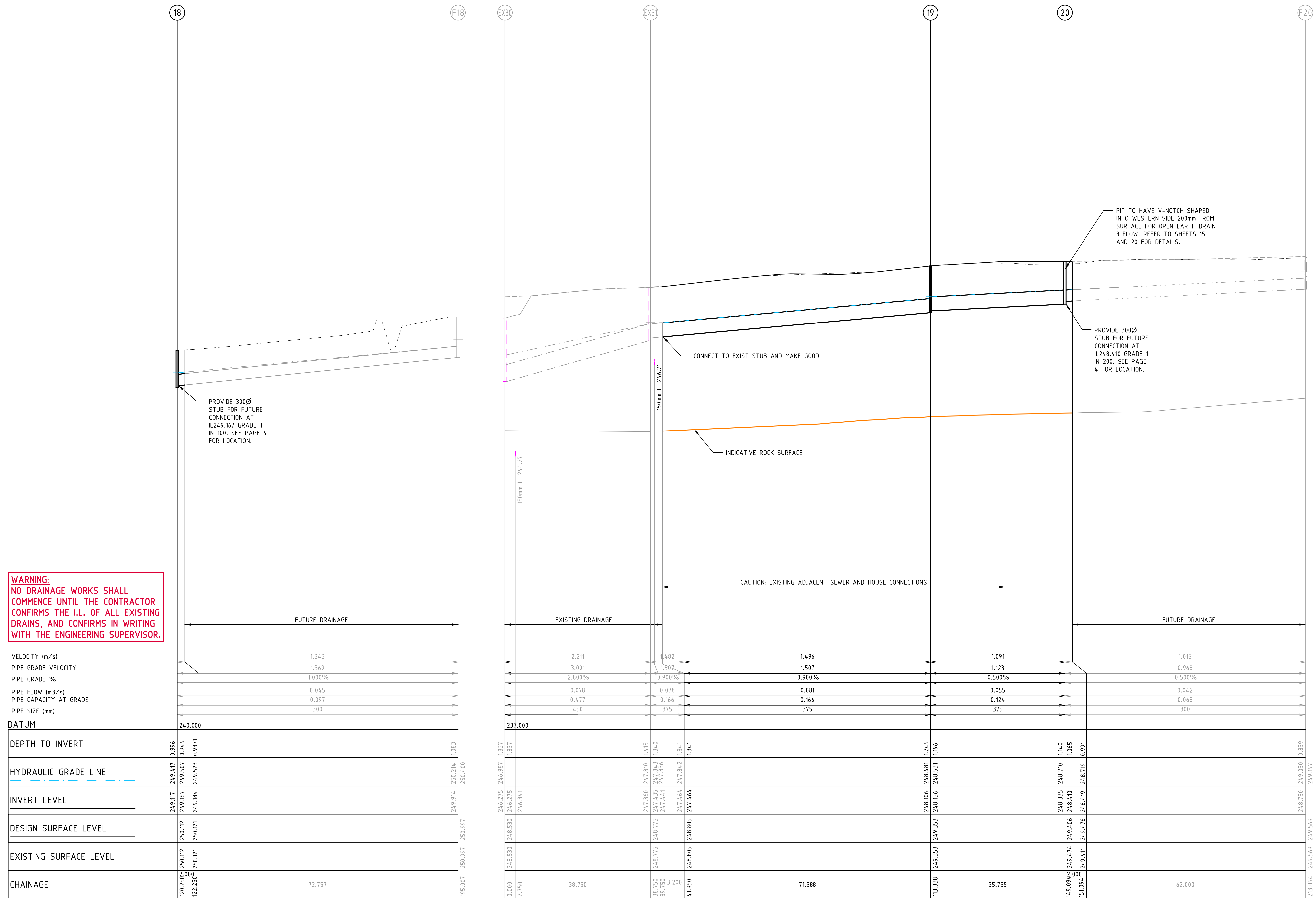
Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
DRAINAGE LONGITUDINAL SECTION
SHEET 02 OF 04
Drawing No. 11737DR02 Rev 1
Sheet No. 17 AS CONSTRUCTED
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VELOCITY (m/s)			1.343
PIPE GRADE VELOCITY			1.369
PIPE GRADE %			1.000%
PIPE FLOW (m3/s)			0.045
PIPE CAPACITY AT GRADE			0.097
PIPE SIZE (mm)			300
DATUM		240.000	
DEPTH TO INVERT	0.99%	0.946	1.083
HYDRAULIC GRADE LINE	249.417	249.507	250.214
INVERT LEVEL	249.171	249.167	249.914
DESIGN SURFACE LEVEL	250.112	250.121	250.997
EXISTING SURFACE LEVEL	250.112	250.121	250.997
CHAINAGE	120.250	122.250	72.757

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871051
Verified B.GORDON
Date 28/07/15
AN 162410
Audited T.OBOUHOFF
Date 29/01/16
AN 912791
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885113

LEGEND

Drawing File: G:\Design\11700\11737-MERRIFIELD - Prelim 1 - Stage 17\Acad\RD\11737DR04.dwg - 11737DR04
Date/Time: Thu Jul 21, 2016 - 11:30am - ByronShade

WARNING:
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

VELOCITY (m/s)	1.991	1.130	0.938	0.920
PIPE GRADE VELOCITY	2.420	1.117	1.117	1.350
PIPE GRADE %	3.126%	0.667%	0.667%	1.429%
PIPE FLOW (m ³ /s)	0.041	0.041	0.020	0.007
PIPE CAPACITY AT GRADE	0.171	0.079	0.079	0.054
PIPE SIZE (mm)	300	300	300	225
DATUM	238.000			
DEPTH TO INVERT	246.770 247.670 2.737 2.137	248.726 249.026 1.386 1.336	249.202 249.502 1.159 1.084	249.202 249.502 1.159 1.084
HYDRAULIC GRADE LINE	247.370 247.683 2.137 2.137	248.776 249.072 1.336 1.336	249.277 249.574 1.084 1.084	249.277 249.574 1.084 1.084
INVERT LEVEL	247.370 247.683 2.137 2.137	248.776 249.072 1.336 1.336	249.277 249.574 1.084 1.084	249.277 249.574 1.084 1.084
DESIGN SURFACE LEVEL	249.507 249.507	250.112 250.112	250.361 250.361	250.361 250.361
EXISTING SURFACE LEVEL	249.659 249.659	250.112 250.112	250.361 250.361	250.361 250.361
CHAINAGE	0.000 2.747 43.372	43.372 2.000 45.372	54.467	99.838 2.000 101.838 14.000 115.838 250.176 250.176

PROVIDE 225Ø STUB FOR FUTURE CONNECTION AT IL 249.277 GRADE 1 IN 70. SEE PAGE 4 FOR LOCATION.

PROVIDE 225Ø STUB FOR FUTURE CONNECTION AT IL 249.277 GRADE 1 IN 30. SEE PAGE 4 FOR LOCATION.

PROVIDE 225Ø STUB FOR FUTURE CONNECTION AT IL 250.203 GRADE 1 IN 50. SEE PAGE 4 FOR LOCATION.

PROVIDE 225Ø STUB FOR FUTURE CONNECTION AT IL 250.203 GRADE 1 IN 50. SEE PAGE 4 FOR LOCATION.

VELOCITY (m/s)	1.287	1.555	1.039	0.964
PIPE GRADE VELOCITY	1.063	1.767	1.130	1.598
PIPE GRADE %	3.333%	1.667%	1.000%	2.000%
PIPE FLOW (m ³ /s)	0.408	0.038	0.016	0.005
PIPE CAPACITY AT GRADE	0.882	0.125	0.045	0.064
PIPE SIZE (mm)	225	300	225	225
DATUM	240.000			
DEPTH TO INVERT	249.202 249.502 1.159 1.084	248.305 248.830 2.226 2.001	250.153 250.378 0.942 0.892	250.153 250.378 0.942 0.892
HYDRAULIC GRADE LINE	249.277 249.574 1.084 1.084	248.571 248.893 1.285 1.285	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
INVERT LEVEL	249.277 249.574 1.084 1.084	248.571 248.893 1.285 1.285	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
DESIGN SURFACE LEVEL	250.361 250.361	250.898 250.898	251.096 251.096	251.096 251.096
EXISTING SURFACE LEVEL	250.361 250.361	250.898 250.898	251.096 251.096	251.096 251.096
CHAINAGE	0.000 2.000 10.000 12.000 250.457 250.457	60.499	54.000	17.000 19.000 251.333 251.333

VELOCITY (m/s)	1.555	1.039	0.964
PIPE GRADE VELOCITY	1.767	1.130	1.598
PIPE GRADE %	1.667%	1.000%	2.000%
PIPE FLOW (m ³ /s)	0.038	0.016	0.005
PIPE CAPACITY AT GRADE	0.125	0.045	0.064
PIPE SIZE (mm)	300	225	225
DATUM	239.000		
DEPTH TO INVERT	248.305 248.830 2.226 2.001	250.153 250.378 0.942 0.892	250.153 250.378 0.942 0.892
HYDRAULIC GRADE LINE	248.571 248.893 1.285 1.285	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
INVERT LEVEL	248.571 248.893 1.285 1.285	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
DESIGN SURFACE LEVEL	250.898 250.898	251.096 251.096	251.096 251.096
EXISTING SURFACE LEVEL	250.898 250.898	251.096 251.096	251.096 251.096
CHAINAGE	0.000 2.853 60.499	54.000	17.000 19.000 251.333 251.333

VELOCITY (m/s)	1.209	1.598	2.000%
PIPE GRADE VELOCITY	1.598	2.000%	2.000%
PIPE GRADE %	2.000%	2.000%	2.000%
PIPE FLOW (m ³ /s)	0.011	0.005	0.005
PIPE CAPACITY AT GRADE	0.064	0.064	0.064
PIPE SIZE (mm)	225	225	225
DATUM	240.000		
DEPTH TO INVERT	250.153 250.378 0.942 0.892	250.153 250.378 0.942 0.892	250.153 250.378 0.942 0.892
HYDRAULIC GRADE LINE	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
INVERT LEVEL	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892	250.203 250.401 0.892 0.892
DESIGN SURFACE LEVEL	251.096 251.096	251.096 251.096	251.096 251.096
EXISTING SURFACE LEVEL	251.096 251.096	251.096 251.096	251.096 251.096
CHAINAGE	0.000 2.000 17.000 19.000 251.333 251.333		

LEGEND



Denotes Class 2 Crushed Rock Backfill

AS CONSTRUCTED



Coords: MGA
Levels: AHD
Hor 1:500 0m 5m 10m 20m 30m
Ver 1:50 0m 0.5m 1m 2m 3m
Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
DRAINAGE LONGITUDINAL SECTION
SHEET 04 OF 04
Drawing No. 11737DR04 Rev 1
Sheet No. 19 AS CONSTRUCTED
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1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871052
Verified B.GORDON
Date 28/07/15
AN 162411
Audited T.OBOUHOFF
Date 29/01/16
AN 912792
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885114

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

Drawing File: G:\DesignData\11700\11737-MERRIFIELD - Precinct 1 - Stage 17\Acad\DWG\11737DR05.dwg - 11737DR05
Date/Time: Thu Jul 21, 2016 - 11:30am --byron.shade--

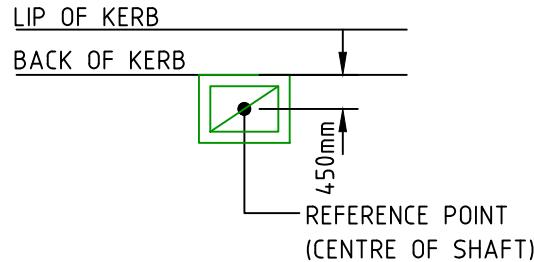
PIT		EASTING	NORTHING	INTERNAL		INLET		OUTLET		PIT		REMARKS
NAME	TYPE			WD	LEN	DIA	INV LEV	DIA	INV LEV	SETOUT RL	DEPTH	
EX.46	GSEP	314657.231	5844065.542	600	900	900	246.009			249.029	3.02	EXIST HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
EX.47	GSEP	314651.973	5844052.823	600	900	900	246.197	900	246.147	248.757	2.61	EXIST HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
1	GSEP	314643.699	5844032.934	T600 B1200	T900 B1200	900	246.463	900	246.412	249.082	2.67	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
2	GSEP	314630.791	5844010.487	T600 B1200	T900 B900	900	246.642	900	246.592	249.379	2.787	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
3	GSEP	314620.461	5843987.074	T600 B1200	T900 B900	750	246.92	900	246.77	249.507	2.737	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245. PIT TO HAVE HEAVY DUTY COVER.
TP	BEND	314616.529	5843977.554			750	246.972	750	246.972	249.558	2.587	CURVED PIPE SECTION (START)
TP2	BEND	314611.020	5843956.323			750	247.078	750	247.078	249.532	2.453	CURVED PIPE SECTION (END)
4	JP	314609.375	5843943.030	T600 B1000	T900 B900	750	247.195	750	247.145	249.467	2.322	HAUNCHED TEMP. JP TO BE CONVERTED TO GSEP IN FUTURE. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245. PIT TO BE CONSTRUCTED 150mm BELOW SURFACE AND COVERED WITH CRUSHED ROCK THEN EXTENDED TO DESIGN SURFACE IN FUTURE.
5	JP	314606.152	5843916.978	T600 B1000	T900 B900			750	247.326	250.036	2.709	HAUNCHED TEMP JP TO BE CONVERTED TO GSEP IN FUTURE. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245. PIT TO BUILT TO EXISTING SURFACE LEVEL WITH V-NOTCH 200mm FROM TOP OF PIT CUT IN FOR CUT-OFF DRAIN FLOW. LEVEL TO BE ADJUSTED IN FUTURE STAGE
6	GSEP	314638.083	5844006.103	600	900			300	247.582	249.382	1.799	REFER TO MPA STD DRG FIG.012
7	GSEP	314632.956	5844028.709	T600 B900	T900 B900	600	247.055	600	247.005	249.221	2.216	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
8	GSEP	314626.728	5844022.084	T600 B900	T900 B900	600	247.178	600	247.128	249.24	2.112	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
9	GSEP	314566.092	5844047.152	T600 B900	T900 B900	525 300 375	247.778 248.003 247.928	600	247.703	250.009	2.306	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
10	GSEP	314542.896	5844056.741	T600 B900	T600 B900	525	248.079	525	248.029	250.185	2.156	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
11	JP	314521.987	5844065.384	T600 B900	T600 B900	450	248.38	525	248.305	250.531	2.226	HAUNCHED TEMP. JP TO BE CONVERTED TO GSEP IN FUTURE. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245. LEVEL TO BE ADJUSTED IN FUTURE STAGE.
F11	GSEP	314494.081	5844076.920	600	900			450	248.682	250.928	2.246	FUTURE PIT
12	GSEP	314561.972	5844058.052	600	900			300	248.294	250.049	1.755	REFER TO MPA STD DRG FIG.012
13	GSEP	314555.251	5844042.652	T600 B900	T600 B900	375	248.036	375	247.987	250.018	2.031	HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
14	GSEP	314547.396	5844045.899	600	900	300	248.154	375	248.079	250.018	1.939	REFER TO MPA STD DRG FIG.012. PIT TO HAVE HEAVY DUTY COVER.
15	GSEP	314543.582	5844030.218	600	900	300	248.285	300	248.235	250.093	1.858	REFER TO MPA STD DRG FIG.012
16	GSEP	314538.917	5843992.505	600	900	300 300	248.525 248.525	300	248.475	250.283	1.808	REFER TO MPA STD DRG FIG.012
E16	BEND	314536.737	5843974.890			300	248.702	300	248.702	250.647	1.945	TEMPORARY END. PROVIDE END CAP AND MARKER POST
F16	GSEP	314533.459	5843948.392	600	900			300	248.969	250.807	1.838	FUTURE PIT
17	GSEP	314546.395	5843983.721	600	900			300	248.64	250.322	1.682	REFER TO MPA STD DRG FIG.012
EX.48	JP	314581.044	5844082.144	600	900	300	248.725	525	248.5	249.776	1.276	EXIST JP REFER TO MPA STD DRG FIG.014
18	JP	314540.844	5844098.762	600	600	300	249.167	300	249.117	250.112	0.996	REFER TO MPA STD DRG FIG.014
F18	JP	314471.757	5844127.321	600	900			300	249.914	250.997	1.083	FUTURE PIT
EX.30	GSEP	314727.265	5844030.787	600	900	450	246.275			248.53	2.255	EXIST HAUNCHED GSEP. REFER TO MPA STD DRG FIG.012 & HCC STD DRG SD245
EX.31	JP	314691.455	5844045.591	600	900	375	247.435	450	247.36	248.775	1.415	EXIST JP REFER TO MPA STD DRG FIG.014
19	JP	314662.960	5843976.660	600	900	375	248.156	375	248.106	249.353	1.246	REFER TO MPA STD DRG FIG.014
20	JP	314658.570	5843941.175	600	900	300	248.41	375	248.335	249.474	1.139	REFER TO MPA STD DRG FIG.014. PIT TO HAVE V-NOTCH 200mm FROM TOP OF PIT CUT IN FOR CUT-PFF DRAIN FLOW.
F20	JP	314650.711	5843877.660	600	600			300	248.73	249.569	0.839	FUTURE PIT
21	JP	314580.379	5844003.643	600	900	300	248.776	300	248.726	250.112	1.386	REFER TO MPA STD DRG FIG.014
22	JP	314579.615	5844001.795	600	900	300	248.839	300	248.789	250.123	1.334	REFER TO MPA STD DRG FIG.014
23	JP	314572.928	5843947.741	600	900	225 225	249.277 249.277	300	249.202	250.361	1.159	REFER TO MPA STD DRG FIG.014
F23A	JP	314588.807	5843945.776	600	600			225	249.506	250.176	0.67	FUTURE PIT
F23B	JP	314561.018	5843949.214	600	600			225	249.677	250.457	0.78	FUTURE PIT
24	JP	314514.559	5844005.343	600	900	225	249.613	300	249.538	250.898	1.36	REFER TO MPA STD DRG FIG.014
25	JP	314507.928	5843951.752	600	600	225 225	250.203 250.203	225	250.153	251.096	0.942	REFER TO MPA STD DRG FIG.014
F25A	JP	314513.883	5843951.015	600	600			225	250.323	250.997	0.673	FUTURE PIT
F25B	JP	314489.072	5843954.083	600	600			225	250.583	251.333	0.75	FUTURE PIT

NOTES:

- EASTING, NORTHING SETOUT TO CENTRE OF PIT COVER SHAFT.
- SETOUT LEVEL TO PIT COVER LEVEL.
- EASTING, NORTHING ENDWALL SETOUT POINTS QUOTED TO PIPE BASE CENTRE.
- ALL PIT COVERS TO BE IN ACCORDANCE TO GROWTH AREAS AUTHORITY STD FIGURE 012.
- STEP IRONS REQUIRED FOR ALL PITS GREATER THAN 900mm IN DEPTH.
- PIT FLOOR TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROPS LESS THAN 50mm.
- ALL DRAINAGE WORKS ARE TO BE CONSTRUCTED TO GROWTH AREA AUTHORITY (GAA) SPECIFICATIONS.
- PIT BASE TO BE SHAPED WITH MASS CONCRETE FOR SMOOTH HYDRAULIC FLOW.
- ALL STORMWATER DRAINS ARE TO BE CLASS '2' RC UNLESS OTHERWISE SHOWN. ALL PIPES UP TO AND INCLUDING 750mm IN DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MAY BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS.
- ALL HAUNCHED PITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HUMES CITY COUNCIL STD. DRG. SD245.

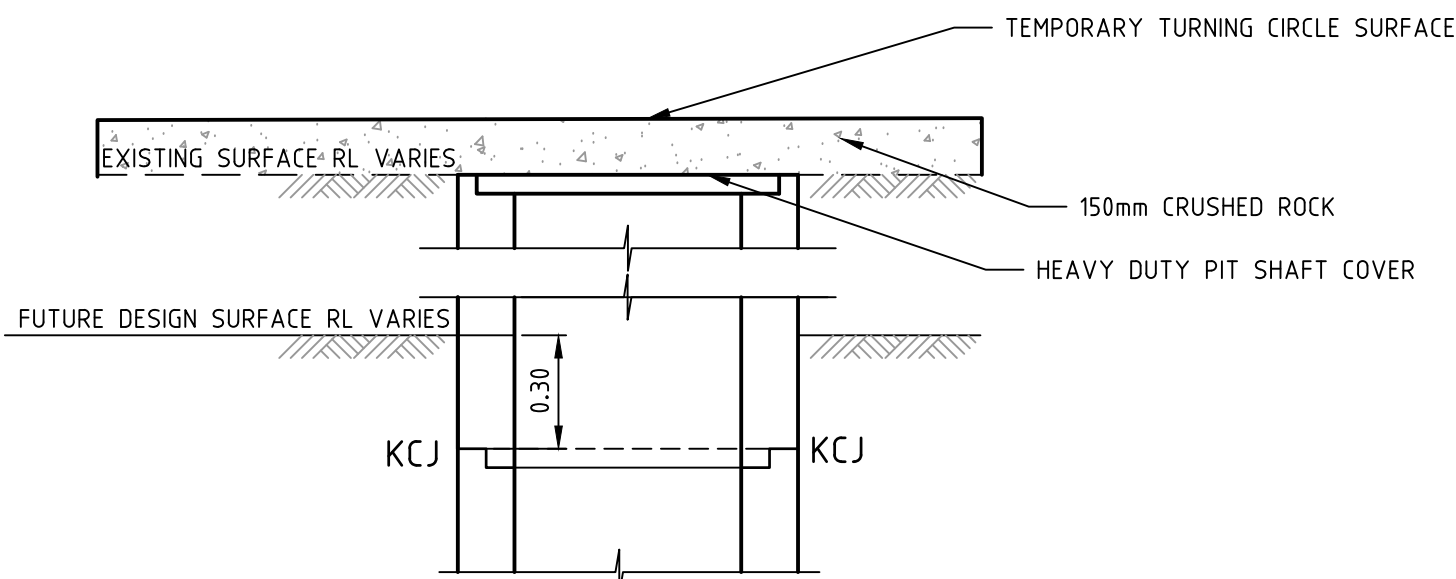
KEY:

- GSEP = GRATED SIDE ENTRY PIT
- JP = JUNCTION PIT
- EW = ENDWALL
- EX = EXISTING PIT
- E = TEMPORARY END OF PIPE (FUTURE STAGE CONNECTION)
- F = FUTURE PIT
- PP = PIPE TO PIPE CONNECTION
- TP = PIPE TANGENT POINT (FOR CURVED SECTIONS)
- T = TOP INTERNAL PIT DIMENSION
- B = BOTTOM INTERNAL PIT DIMENSION (HAUNCHED)

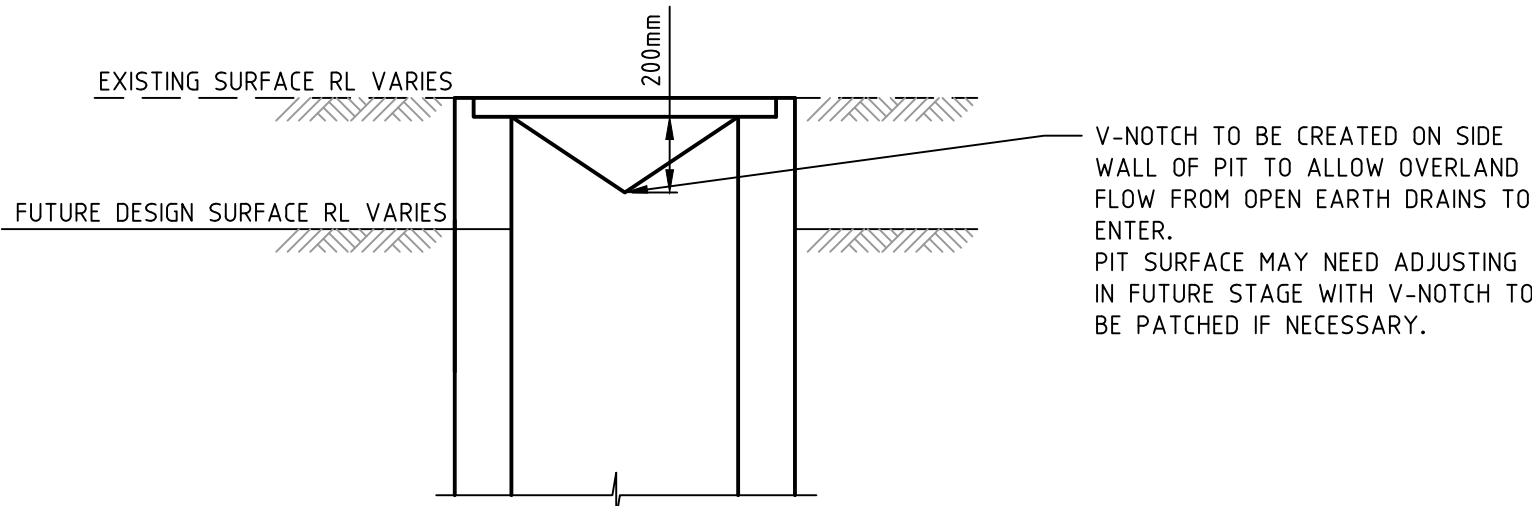


PIT SETOUT POINT
SCALE 1:100

WARNING:
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.



TEMPORARY PIT TOP DETAIL - PIT 04
N.T.S



TEMPORARY PIT TOP DETAIL - PIT 05 AND 20
N.T.S

1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871053
Verified B.GORDON
Date 28/07/15
AN 162412
Audited T.OBOUHOFF
Date 29/01/16
AN 912793
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885115

AS CONSTRUCTED



Scale @ A1/A3 N/A

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
DRAINAGE PIT SCHEDULE AND PIT DETAILS

Drawing No. 11737DR05 Rev 1
Sheet No. 20 AS CONSTRUCTED

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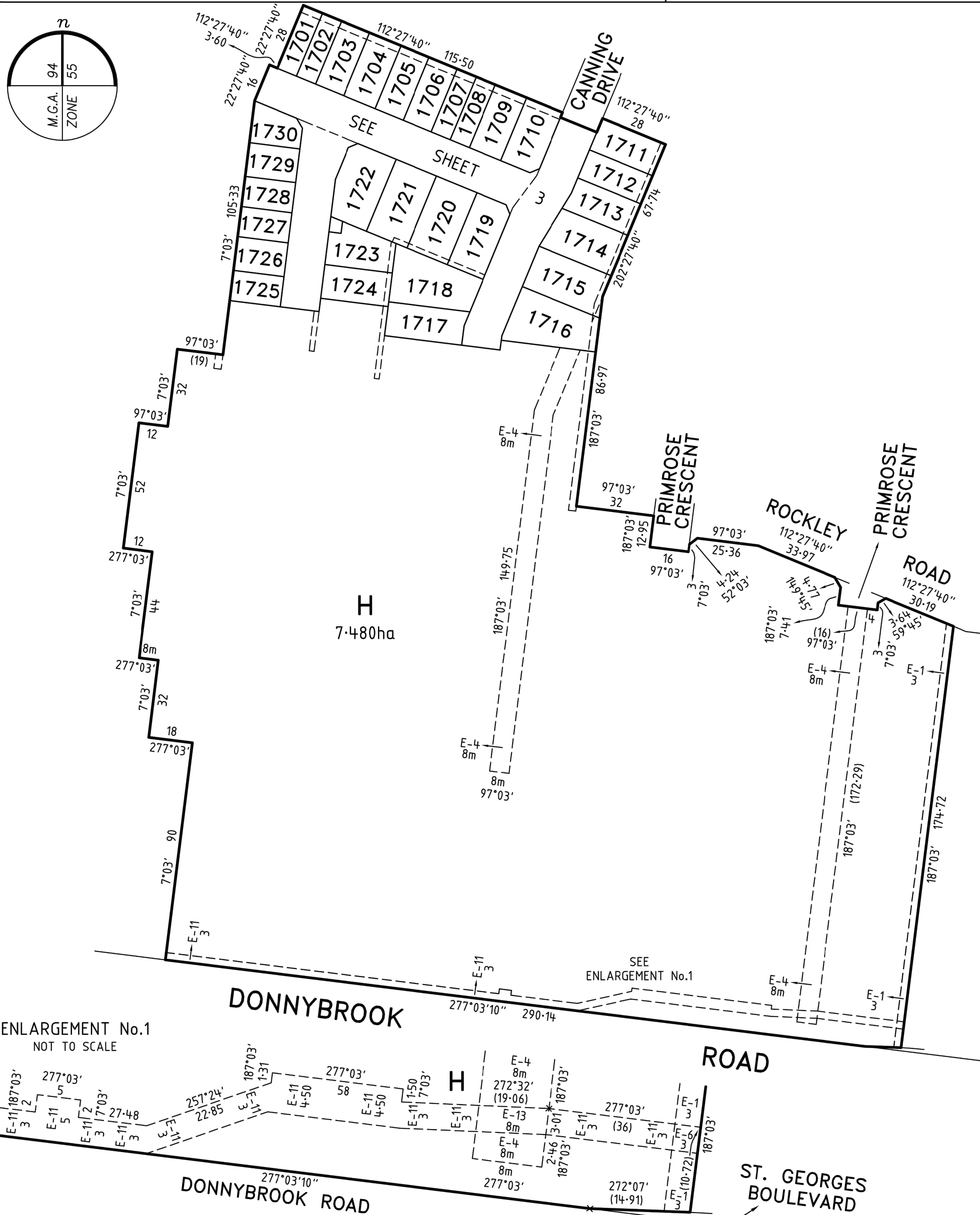
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Drawing File: G:\Design\11700\11737-MERRIFIELD - Prelim 1 - Stage 17\Acad\10\11737POS01.dwg - 11737POS01
Date/Time: Thu Jul 21, 2016 - 11:31am --byron.shade--

PLAN OF SUBDIVISION

PS 742712Y



ENLARGEMENT No.1
NOT TO SCALE

SEE
ENLARGEMENT No.1

MERRIFIELD - 17

Bosco Jonson Pty Ltd
A.B.N 15 169 138 827
P.O. Box 5075, South Melbourne, Vic 3205
16 Eastern Road South Melbourne
Vic 3205 Australia
Tel 03) 9699 1400 Fax 03) 9699 5992



LICENSED SURVEYOR GEOFFREY JAMES TURNER

SCALE
1:1500

15 0 30 60
LENGTHS ARE IN METRES

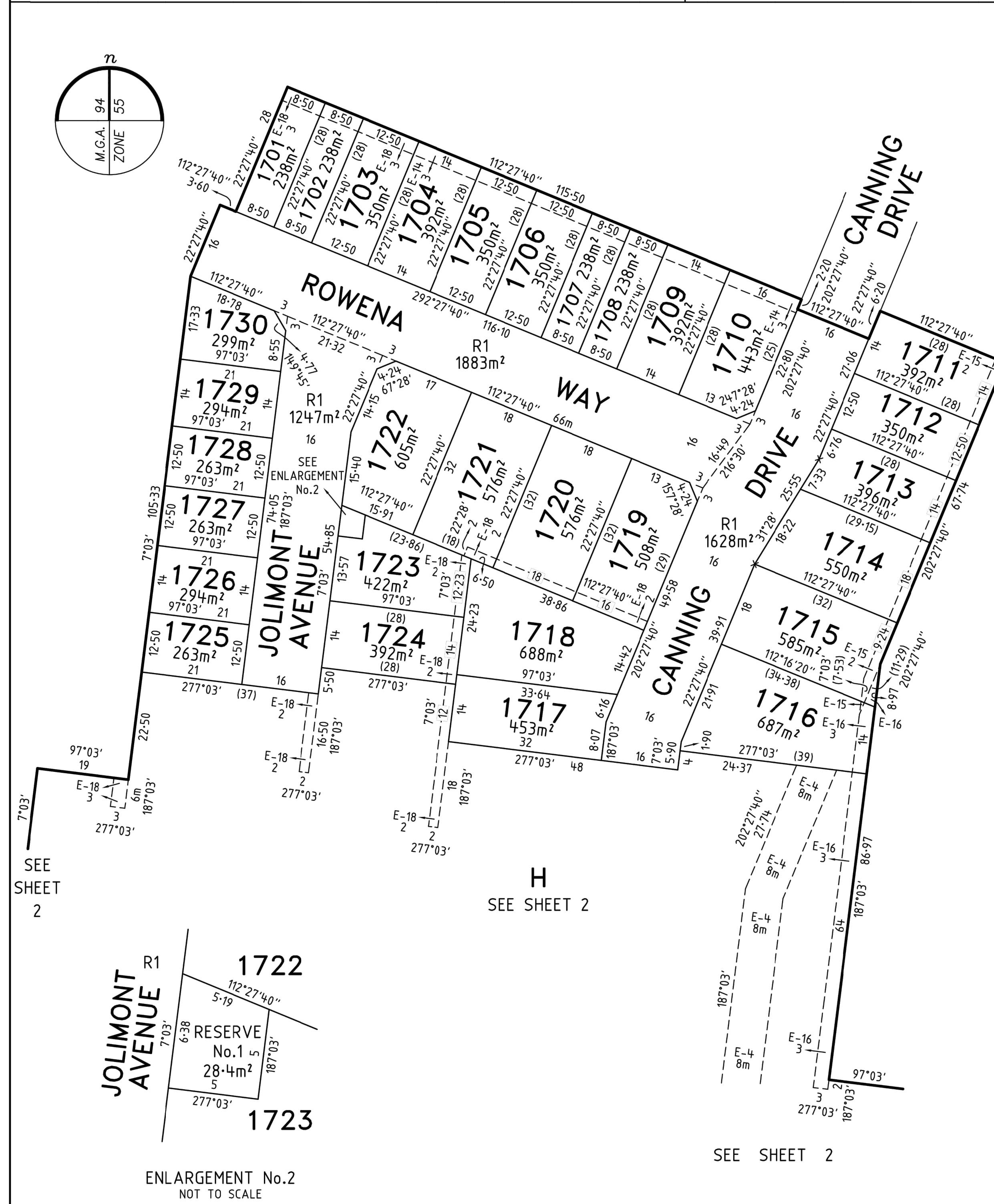
DATE 17/08/15
VERSION D

REFERENCE 29005173
DRAWING 2900517AD

ORIGINAL SHEET SIZE A3
SHEET 2

PLAN OF SUBDIVISION

PS 742712Y



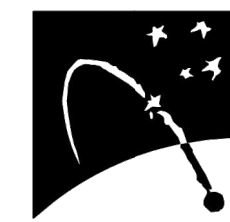
SEE
SHEET
2

H
SEE SHEET 2

SEE SHEET 2

MERRIFIELD - 17

Bosco Jonson Pty Ltd
A.B.N 15 169 138 827
P.O. Box 5075, South Melbourne, Vic 3205
16 Eastern Road South Melbourne
Vic 3205 Australia
Tel 03) 9699 1400 Fax 03) 9699 5992



LICENSED SURVEYOR GEOFFREY JAMES TURNER

SCALE
1:750

7.5 0 15 30
LENGTHS ARE IN METRES

DATE 17/08/15
VERSION D

REFERENCE 29005173
DRAWING 2900517AD

ORIGINAL SHEET SIZE A3
SHEET 3

AS CONSTRUCTED

merrifield
MAB gpc

Coords: MGA
Levels: AHD

Scale @ A1/A3 NTS

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
PLAN OF SUBDIVISION

Drawing No. 11737POS01 Rev 1
Sheet No. 21 **AS CONSTRUCTED**

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1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871054
Verified B.GORDON
Date 28/07/15
AN 162413
Audited T.OBOUHOFF
Date 29/01/16
AN 912794
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885116

Drawing File: G:\Design\11700\11737-MERRIFIELD - Precinct 1 - Stage 17\Acad\10\11737FP01.dwg - 11737FP01
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FILL PLAN NOTES

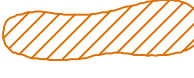
THIS PLAN SHOWS DETAILS OF WORKS AFFECTING THE NATURAL SURFACE OF THE LAND WITHIN THE SUBDIVISION WHICH HAVE BEEN CARRIED OUT OR ARE PROPOSED TO BE CARRIED OUT PRIOR TO REGISTRATION OF THE PLAN OF SUBDIVISION, BEING FILL PLACED ON THE LAND TO THE EXTENT AND DEPTH SHOWN ON THIS PLAN.

THIS PLAN DOES NOT SHOW ANY OTHER FILL WHICH MAY HAVE BEEN PLACED ON THE LAND PRIOR TO THE CIVIL WORKS BEING UNDERTAKEN.

THIS PLAN HAS BEEN PREPARED FOR THE PURPOSE OF CONSTRUCTING SUBDIVISIONAL WORKS AND IS NOT A RECORD OF 'AS BUILT DETAILS'.

FILLING SHOWN LESS THAN 200mm DEEP IS GRADED OR SPREAD OVER ALLOTMENTS TO CORRECT MINOR SURFACE IRREGULARITIES SUCH AS FURROWS ETC AND LOT GRADING.

IRRESPECTIVE OF THE DEPTH OF FILLING FOUNDATIONS MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH A SOIL CLASSIFICATION AND REPORT PREPARED FOR THE PURPOSE AND IN ACCORDANCE WITH THE APPROPRIATE BUILDING REGULATIONS.

THE AREA MARKED THUS  ON THIS PLAN INDICATES FILL DEEPER THAN 200mm PLACED ON ALLOTMENTS.

THE EXTENT OF AND DEPTH OF FILL MUST BE CONFIRMED BY A PROPER GEOTECHNICAL INVESTIGATION BY AN EXPERIENCED PRACTITIONER.

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

WARNING!
THE LOCATION OF EXISTING SERVICES SHOWN ON THESE PLANS MUST BE PROVEN ON SITE, THE APPROPRIATE AUTHORITY MUST BE CONTACTED AND THE SERVICES LOCATED PRIOR TO COMMENCEMENT OF ANY WORKS.



1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871055
Verified B.GORDON
Date 28/07/15
AN 162414
Audited T.TBOUHOFF
Date 29/01/16
AN 912795
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885117

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

LEGEND

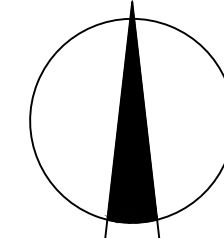
 LIMIT OF WORKS

ES EXISTING SURFACE LEVEL

FS FINISHED SURFACE LEVEL

 DIRECTION OF FALL (1 IN 150)

AS CONSTRUCTED



merrifield
MAB gpc

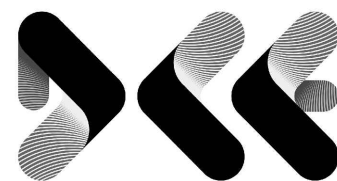
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Levels: AHD
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Scale @ A1/A3 1:500/1:1000

MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
CUT AND FILL PLAN

Drawing No. 11737FP01 Rev 1
Sheet No. 22 AS CONSTRUCTED

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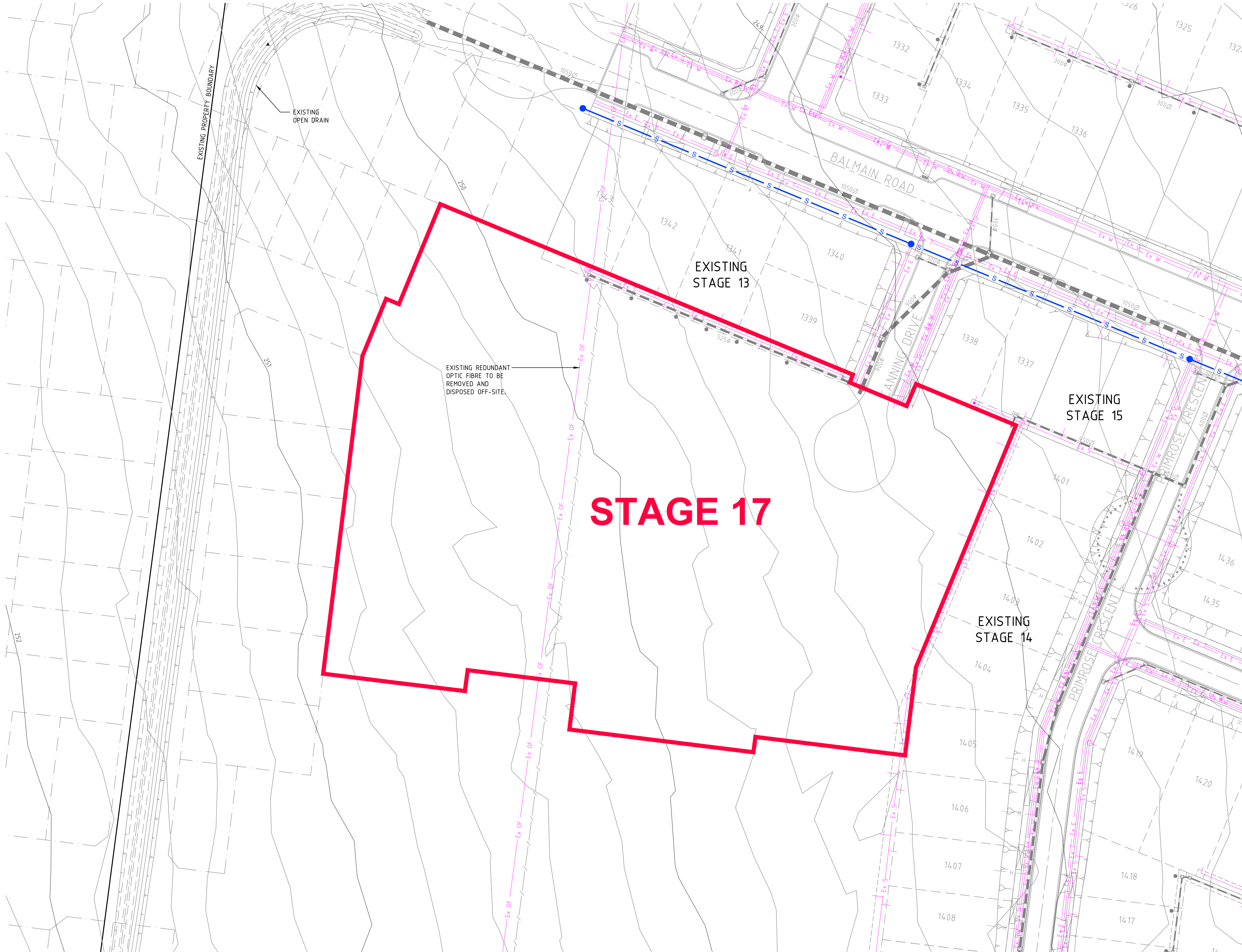
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Date/Time: Thu Jul 21, 2016 - 11:31am - ByronShade

AS CONSTRUCTED

EXISTING SURVEY DATA:
NAME: BOSCO JONSON PTY LTD
JOB NO: 29121
ADDRESS: 16 EASTERN ROAD, SOUTH MELBOURNE
VICTORIA 3205
PHONE: (03) 9699 1400
FAX: (03) 9699 5992

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

WARNING!
THE LOCATION OF EXISTING SERVICES SHOWN ON THESE PLANS MUST BE PROVEN ON SITE, THE APPROPRIATE AUTHORITY MUST BE CONTACTED AND THE SERVICES LOCATED PRIOR TO COMMENCEMENT OF ANY WORKS.



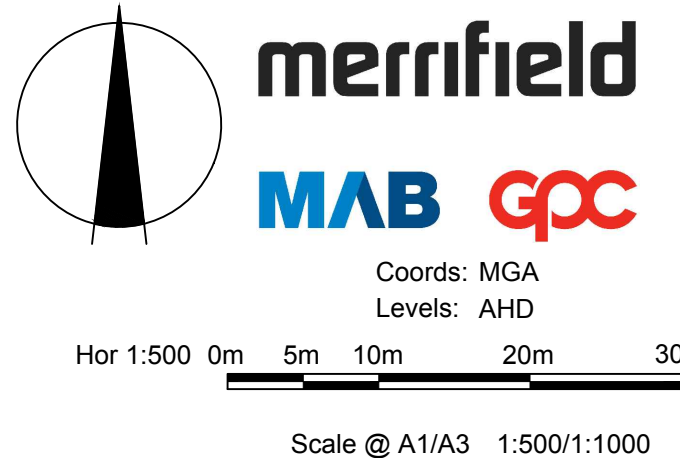
1	AS CONSTRUCTED	21/07/16	TL
0	CONSTRUCTION ISSUE	29/01/16	TL
REV	AMENDMENTS	DATE	APP'D.

Drawn M.CAPALDO
Date 21/07/15
AN 1451041
Designed K.PHAL
Date 28/07/15
AN 1871056
Verified B.GORDON
Date 28/07/15
AN 162415
Audited T.LOBOUHOFF
Date 29/01/16
AN 912796
Approved T.LIAKOPOULOS
Date 29/01/16
AN 885118

- Ex OF EXISTING OPTIC FIBRE
- Ex W EXISTING WATER MAIN
- Ex G EXISTING GAS MAIN
- Ex E EXISTING ELECTRICAL CABLE
- Ex S EXISTING SEWER MAIN & MANHOLE
- Ex T EXISTING TELECOMM. CABLE AND PIT
- V EXISTING ELEC. POLE & O'HEAD LINES
- EXISTING STORMWATER DRAIN & PIT
- CONSTRUCTED PRE DEVELOPMENT SW DRAIN & PIT CONSTRUCTED IN PREVIOUS STAGES

- LEGEND
- EXISTING 300Ø BRANCH SEWER MAIN
 - TELECOMM. CONDUIT
 - PERMANENT SURVEY MARK
 - STREET NAME SIGN
 - DIRECTION OF FALL (MIN 1 IN 150)
 - ASPHALT PAVEMENT
 - CONC FOOTPATH / DRIVEWAY
 - LIMIT OF WORKS
 - FINISHED SURFACE CONTOUR

- EXISTING TREES TO BE REMOVED
- OPEN EARTH DRAIN (O.E.D.)
- FILLING OVER 200mm



MERRIFIELD DEVELOPMENT
DONNYBROOK ROAD, MICKLEHAM
STAGE 17
EXISTING FEATURES PLAN

Drawing No. 11737EF01 Rev 1
Sheet No. 23 AS CONSTRUCTED
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