

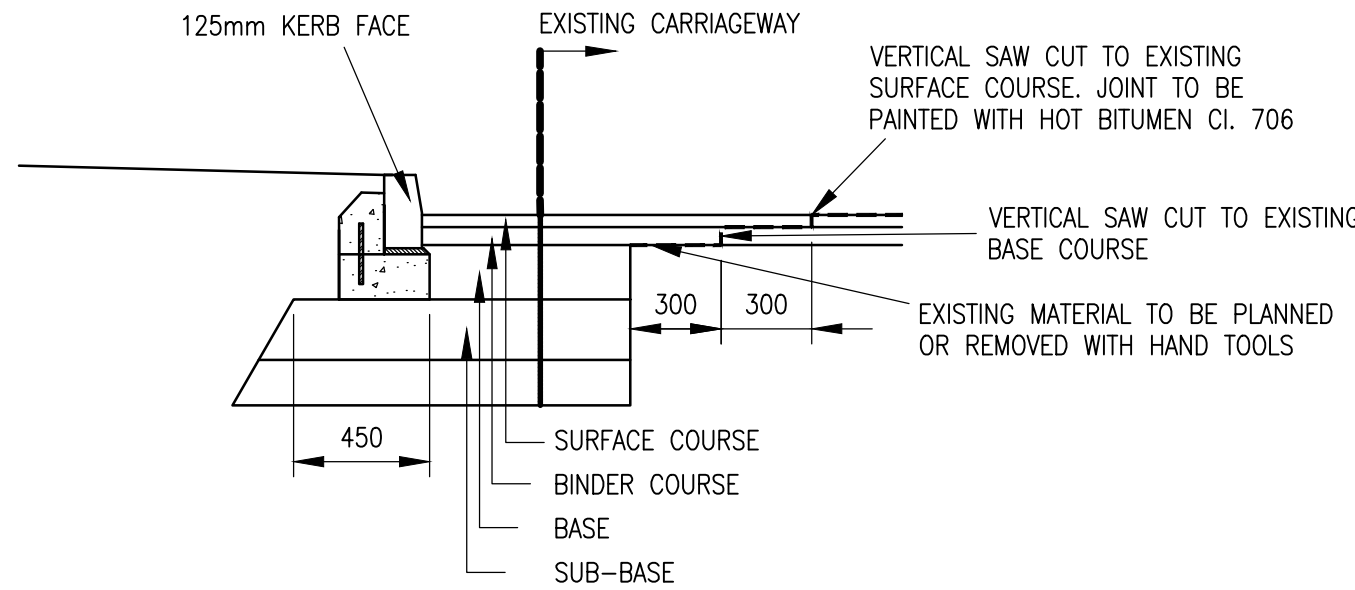
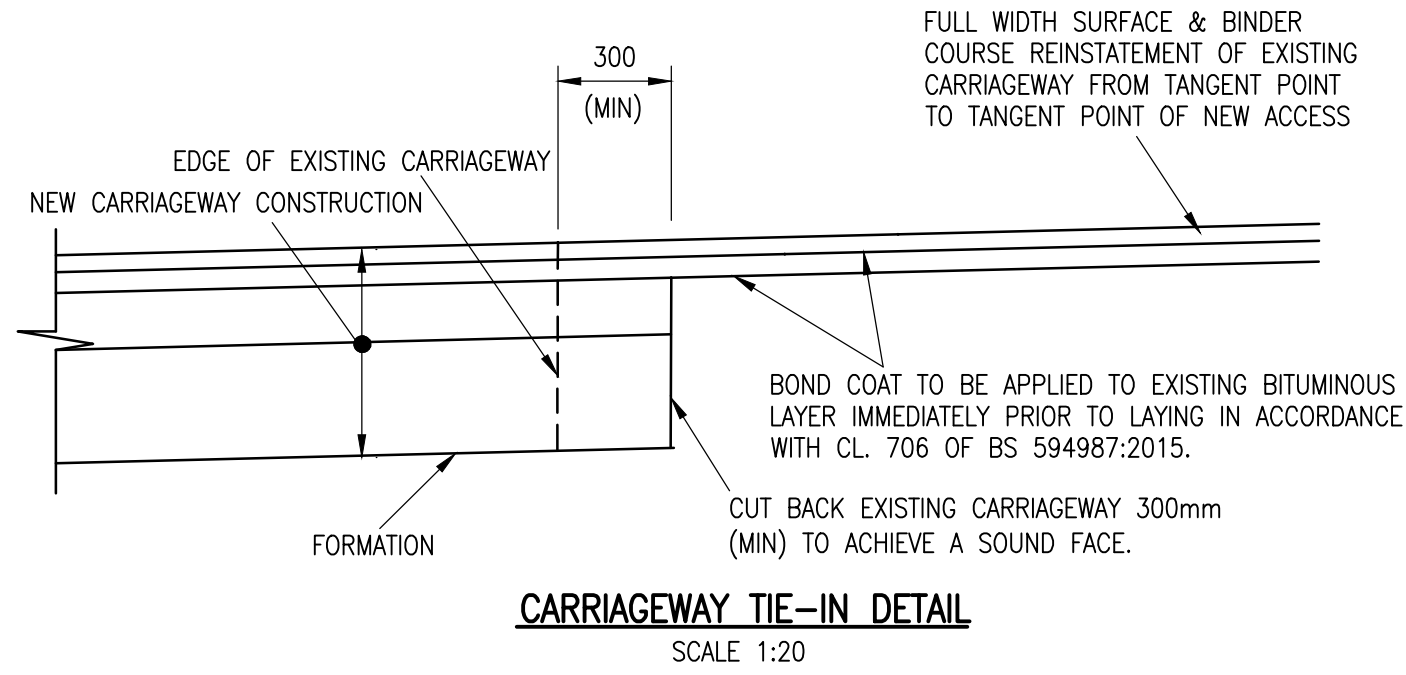
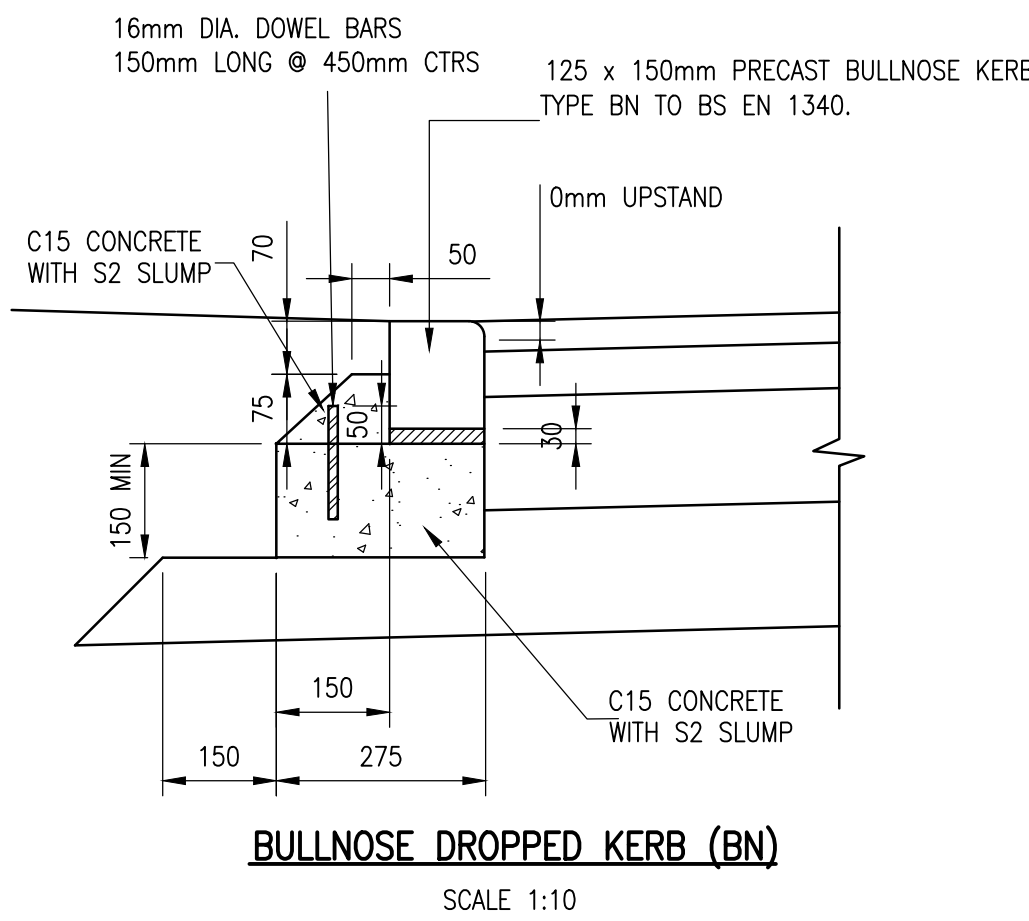
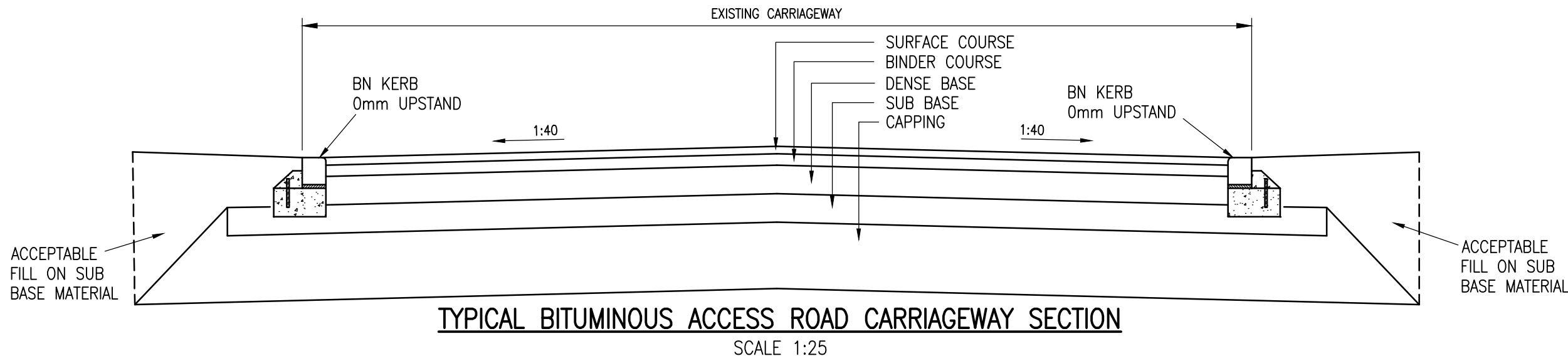


TABLE 34 – SUB-BASE & CAPPING THICKNESSES

| CBR Value | Access Rd. 250mm |          |
|-----------|------------------|----------|
|           | Capping          | Sub base |
| <2%       | 550              | 200      |
| 2         | 400              | 200      |
| 3         | 300              | 200      |
| 4         | 250              | 200      |
| 5%–15%    | 200              | 200      |
| >15%      | –                | 200      |

- A) THE FOUNDATION DESIGN SHOULD NOT VARY FREQUENTLY ALONG THE ROAD. YOU SHOULD SELECT AN APPROPRIATE VALUE FOR EACH SIGNIFICANT CHANGE IN THE SUBGRADE PROPERTIES.
- B) WHERE THE EQUILIBRIUM CBR FALLS BETWEEN VALUES IN THE ABOVE TABLE, YOU SHOULD ROUND DOWN THE VALUE TO THE LOWER VALUE.
- C) WHEN THE SUBGRADE CBR IS SUFFICIENTLY BELOW 2% THAT CAPPING WITH SUB-BASE IS NOT SUFFICIENT TO SUPPORT THE PAVEMENT, SPECIAL MEASURES WILL BE REQUIRED. NOTE THAT THE USE OF GEO-TEXTILE WILL ONLY BE ACCEPTABLE IN CERTAIN SITUATIONS. YOU CAN FIND ADVICE IN DMRB CD 225.
- D) SUB-BASE TO BE DEEPEENED TO PROVIDE A MINIMUM OF 450mm OVERALL CARRIAGEWAY CONSTRUCTION DEPTH. MATERIALS WITHIN 450mm OF THE FINISHED ROAD SURFACE MUST NOT BE FROST SUSCEPTIBLE.

KERBING NOTES:

- KERB FOUNDATIONS FOR TYPES 1–3 SHALL NOT BE LESS THAN 150mm THICK, AND SHOULD BE SEATED ON OR IN THE SUB-BASE. THIS DEPENDING ON PAVEMENT CONSTRUCTION THICKNESS ADOPTED. TYPE 4 KERB FOUNDATION SHALL NOT BE LESS THAN 100mm THICK.
- 50mm DIAMETER WEEPHOLES TO BE FORMED THROUGH THE KERB FOUNDATIONS AT 10m CENTRES ON LOW CHANNELS.
- ALL KERBS SHALL BE LAID ON A 10mm BED OF DESIGNATION (i) MORTAR UNLESS LAID WITH THE FOUNDATION IN ONE OPERATION.
- ADEQUATE BOND MUST BE MADE BETWEEN FOUNDATION AND HAUNCH IF LAID IN MORE THAN ONE OPERATION. PREFERRED METHOD OF BONDING TO BE BY MEANS OF STEEL REINFORCEMENT MESH. ANY OTHER METHOD TO BE APPROVED BY THE ENGINEER.
- PRAM CROSSINGS SHALL BE AS VEHICULAR ACCESSSES, BUT WITH NORMAL FOOTWAY CONSTRUCTION.
- MORTAR JOINTS BETWEEN KERBS NOT TO BE PROVIDED UNLESS SPECIFIED. GAPS BETWEEN KERBS TO BE 1 TO 2mm WHERE MORTAR JOINTING IS SPECIFIED. EXPANSION JOINTS TO BE PROVIDED THROUGH KERBS. BED AND BACKING AT 15mm CENTRES WHEN LAID ADJACENT TO OR ON CONCRETE PAVEMENT.
- KERB BACKING NORMALLY BROUGHT UP TO 50mm BELOW TOP OF KERB, BUT WHERE FINAL SURFACE OF FOOTWAY IS SLAB PAVING, KERB BACKING SHALL FINISH 75mm BELOW TO OF KERB.
- FOR RADIIUSED WORK, KERBS SHALL BE AS FOLLOWS:–  
  
RADIUS 12m OR LESS – KERBS MANUFACTURED TO AN APPROPRIATE RADIUS.  
  
RADIUS 12m TO 20m – STRAIGHT KERBS OF A CONSISTENT LENGTH IN THE RANGE OF 450mm TO 600mm.  
  
RADIUS 20m OR GREATER – STRAIGHT KERBS.

TABLE 35(A) – ROAD CARRIAGEWAY CONSTRUCTION MATERIALS AND DEPTHS

| LAYER          | RESIDENTIAL ACCESS ROAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                          |       |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------|
|                | BITUMINOUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |       |
|                | THICKNESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DETAILS                                                  | NOTES |
| SURFACE COURSE | 40mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SMA 10 SURF 40/60 (PSV 55) (MHA MATERIAL REFERENCE SC2)  | 1,2   |
|                | 40mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | HRA 55/10 F SURF 40/60 DES (MHA MATERIAL REFERENCE SC7)  | 2     |
|                | 40mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AC 10 CLOSE SURF 100/150 (MHA MATERIAL REFERENCE SC11)   | 2     |
| BINDER COURSE  | 60mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AC 20 DENSE BIN 100/150 REC (MHA MATERIAL REFERENCE BC2) |       |
| BASE           | 150mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | AC32 BASE 40/60 REC (MHA MATERIAL REFERENCE B1)          |       |
| NOTES          | <p>1. POLISHED STONE VALUE (PSV) OF COURSE AGGREGATE IN SURFACING COURSE SHALL BE DETERMINED FROM THE TABLE 1.1 POLISHED STONE VALUES FOR SURFACE TREATMENTS ON PAGE 16 OF OUR SKIDDING RESISTANCE PROCEDURE.</p> <p>2. HRA 50/10 BIN 40/60 (MATERIAL REF. REG1) MAY BE USED FOR HAND LAYING SPEED TABLES.</p> <p>3. SUBGRADE ASSESSMENT CAPPING LAYER/SUB BASE DESIGN ARE COVERED IN SECTION MC10 PARAS 4.65–4.7</p> <p>4. HOWEVER FOR LEICESTERSHIRE ANY BINDER COURSE MATERIAL LAID AS RUNNING SURFACE PRIOR TO THE FINAL SURFACE COURSE BEING LAID MUST HAVE A MINIMUM PSV OF 55 AND AAV OF 7. THIS INCLUDES UNDER BLOCK PAVED SURFACES IN CARRIAGEWAYS.</p> |                                                          |       |

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
- CONCRETE BEDS TO KERBS VIBRATED AND THE SURFACE ROUGHENED TO PROVIDE A KEY FOR BACKING. ADEQUATE BOND SHALL BE PROVIDED BETWEEN FOUNDATION AND HAUNCH BY STEEL REINFORCEMENT HOOPS AT 900mm CENTRES OR SIMILAR APPROVED.
- ALL KERBS TO BE LAID ON A 25mm BED OF CLASS 1 SAND/CEMENT MORTAR.
- KERBS TO BE LAID IN SMOOTH VERTICAL AND HORIZONTAL ALIGNMENTS. FOR CURVES OF RADIUS 12m OR LESS PRECAST KERBS OF APPROPRIATE RADIUS SHALL BE USED.
- CBR TESTS SHALL BE CARRIED OUR PRIOR TO CONSTRUCTION TO DETERMINE THE NEED FOR A CAPPING LAYER AND THE THICKNESS OF SUB-BASE.
- SULPHATE RESISTING CEMENT PRODUCTS TO BE USED THROUGHOUT FOR DRAINAGE WORKS.
- THE FRAMES TO GULLY POTS SHALL BE BEDDED ON A FULL MORTAR BED OF 1:3 CEMENT/SAND MORTAR. THEY SHALL BE ACCURATELY SET FOR THE LEVEL AND POSITIONED ON AT LEAST 1 COURSE OF ENGINEERING BRICKS, SO THAT THE TOP OF THE FRAME WILL NORMALLY BE SET BELOW THE FINISHED CHANNEL LEVEL. THE ALLOWABLE TOLERANCE SHALL BE 0 TO –5mm.
- BRICKWORK SHALL COMPLY WITH BS 3921:1995 FOR CLASS B ENGINEERING BRICKS, SET ON 1:3 CEMENT/SAND MORTAR.
- ALL HIGHWAY WORKS TO BE CARRIED OUT IN ACCORDANCE WITH LEICESTERSHIRE COUNTY COUNCIL'S DESIGN GUIDE AND SPECIFICATIONS.
- ALL TRENCHES WITHIN THE ADOPTABLE AREAS SHALL BE BACKFILLED WITH 75mm IRONSTONE.
- THE MINIMUM TOTAL CARRIAGEWAY CONSTRUCTION THICKNESS SHALL NOT BE LESS THAN 450mm. CBR RATIO LESS THAN 2% THE REFER TO CLAUSE 1.2 FROM THE LEICESTERSHIRE COUNTY COUNCIL'S DESIGN GUIDE.
- ALL HARD PAVED AREAS WITHIN 5.0m OF THE HIGHWAY SHALL HAVE A BOUND SURFACING, LOOSE GRAVEL IS NOT PERMITTED.
- GULLIES, STOPCOCK AND METER COVERS SHALL NOT BE LOCATED WITHIN THE VEHICULAR CROSSING EXTENTS OR TACTILE CROSSINGS.
- BOND COAT TO BE APPLIED BETWEEN BITUMINOUS LAYERS IMMEDIATELY PRIOR TO LAYING IN ACCORDANCE WITH CL. 706 OF BS 594987:2015.

ALL WORK TO LEICESTERSHIRE COUNTY COUNCILS STANDARDS AND TO THE SATISFACTION OF THE LEICESTERSHIRE COUNTY COUNCIL ENGINEER.

THIS DRAWING IS FOR INFORMATION/ APPROVAL AND SUBJECT TO AMENDMENT. NO RELIANCE SHOULD BE TAKEN UNTIL THE DRAWING STATUS IS CHANGED TO 'FOR CONSTRUCTION'.

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| DRAWING TITLE: S278 HIGHWAY CONSTRUCTION DETAILS   |             |                                                                                       |      |        |          |
| CLIENT: AT CONTRACTING & PLANT HIRE LTD (BEDWORTH) |             |                                                                                       |      |        |          |
| DRAWING NUMBER: 26726_03_080_01                    |             |                                                                                       |      |        |          |
| REVISION:                                          | -           | SHEET SIZE:                                                                           | A1   | SCALE: | AS SHOWN |
| STATUS: FOR INFORMATION / APPROVAL                 |             |                                                                                       |      |        |          |
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