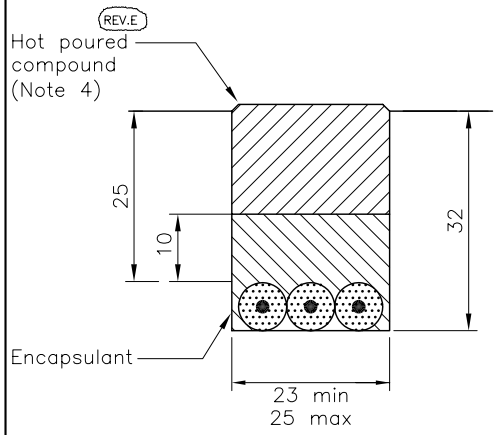
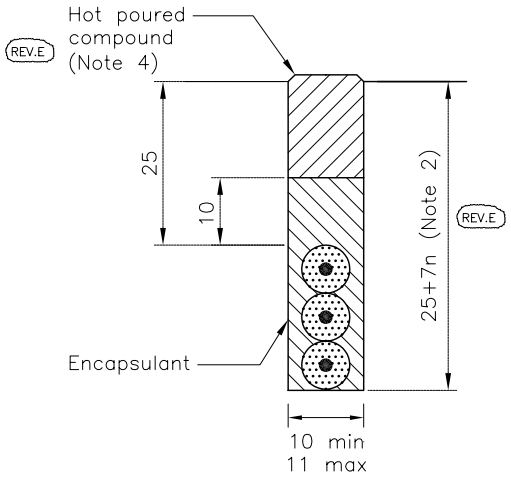
FOR LOOPS LAID IN REINFORCED CONCRETE CONSTRUCTION

TYPE S1



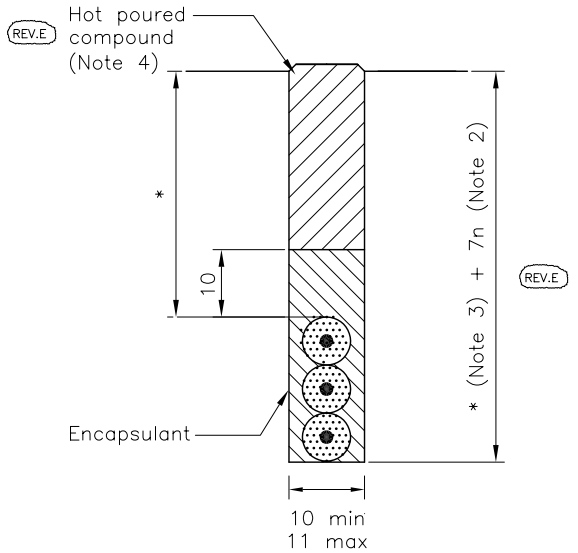
FOR LOOPS LAID IN NON–REINFORCED CONCRETE CONSTRUCTION (REV.E)

TYPE S2



FOR LOOPS LAID IN FLEXIBLE CONSTRUCTION (EXCLUDING POROUS SURFACES) (REV.E)

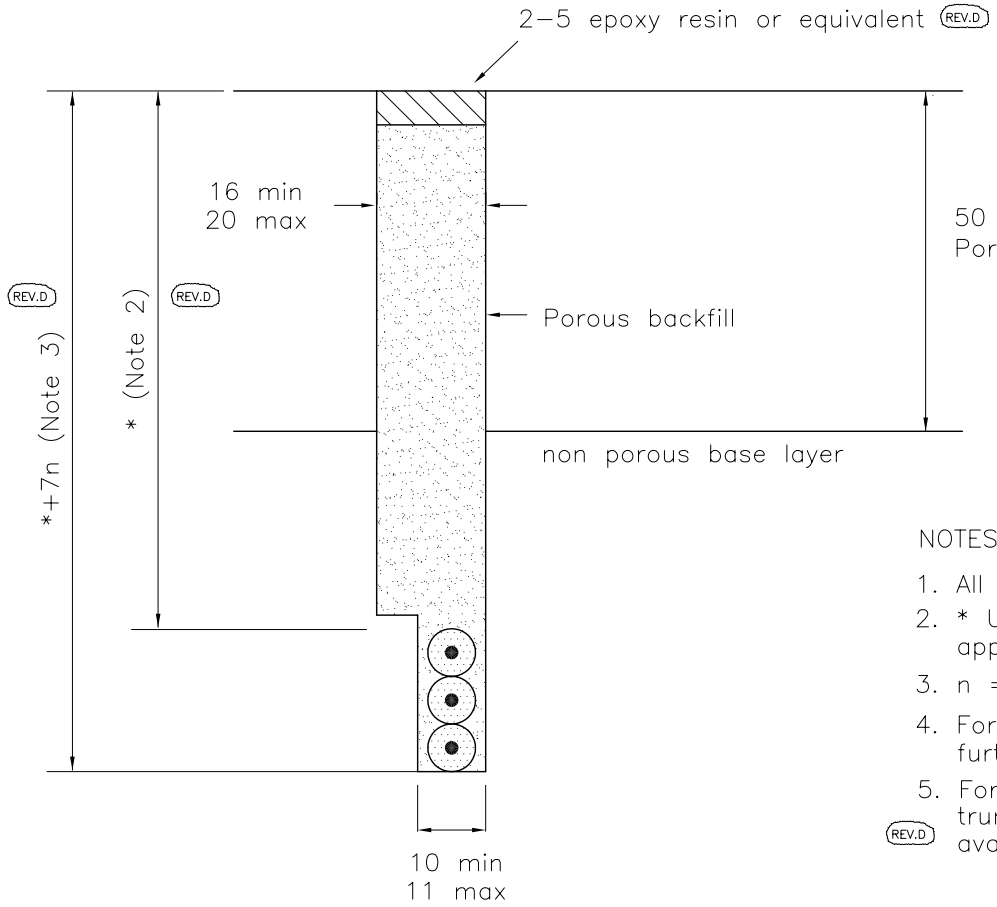
TYPE S3



NOTES

1. All dimensions are in millimetres.
2. n = Number of cables in the slot.
3. * = Unless otherwise specified to be 80 for motorway applications and 65 for all–purpose roads.
4. (REV.E) Hot poured compound shall be oxidised grade bitumen to BS EN 13304 Grade S85/40 or Grade S85/25.
5. Loop tail slot width shall be 16 (+4/–0) where twisted loop tail pairs occupy the slot.
6. NMCS = National Motorway Communications System.
7. (REV.E) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS DETECTOR LOOP SLOT DETAILS–SHEET 1	Drawing No.
		E	Nov 05		G1
		D	Nov 03		
		C	Sept 03		
		A	Dec 91		

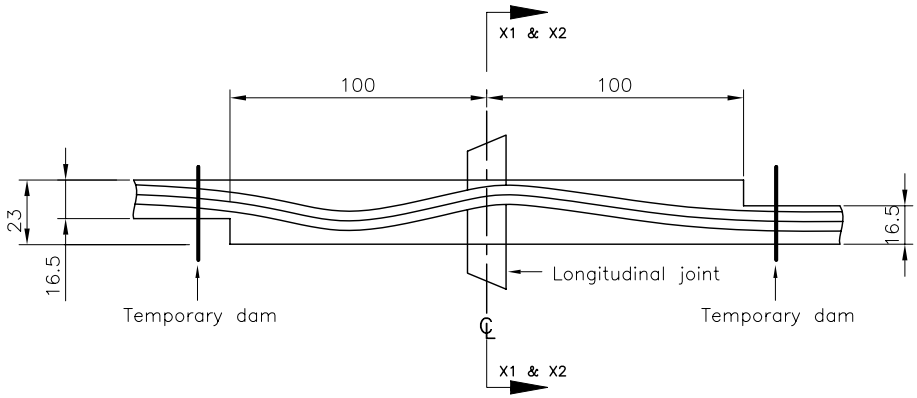


NOTES

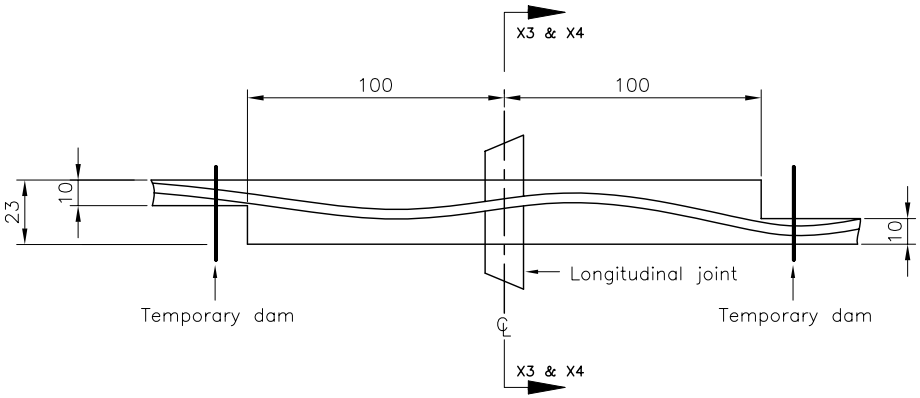
1. All dimensions are in millimetres.
2. * Unless otherwise specified to be 80 for motorway applications and 65 for all–purpose roads.
3. n = number of cables in the slot.
4. For loops used with Automatic Data Collection equipment seek further advice from the Overseeing Organisation.
5. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. REV.D

SLOT PROFILE – POROUS ROAD SURFACES

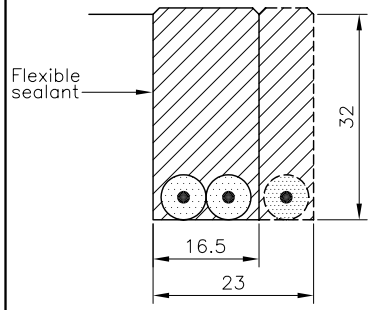
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS DETECTOR LOOP SLOT DETAILS–SHEET 2	Drawing No. G2
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		



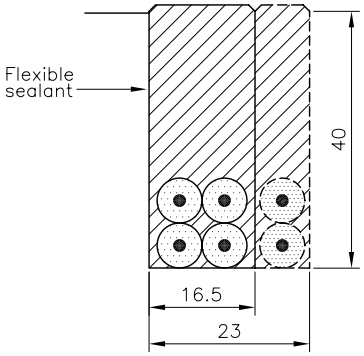
TYPE X1 & X2 (PLAN)



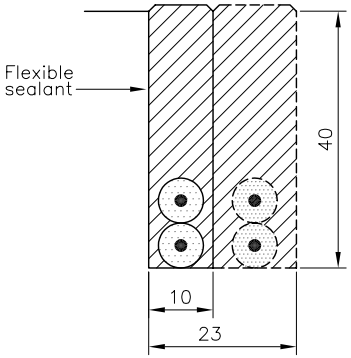
TYPE X3 & X4 (PLAN)



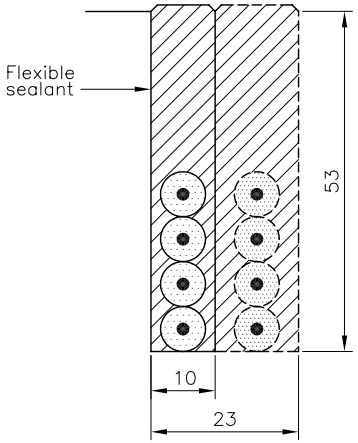
X1 SECTION



X2 SECTION



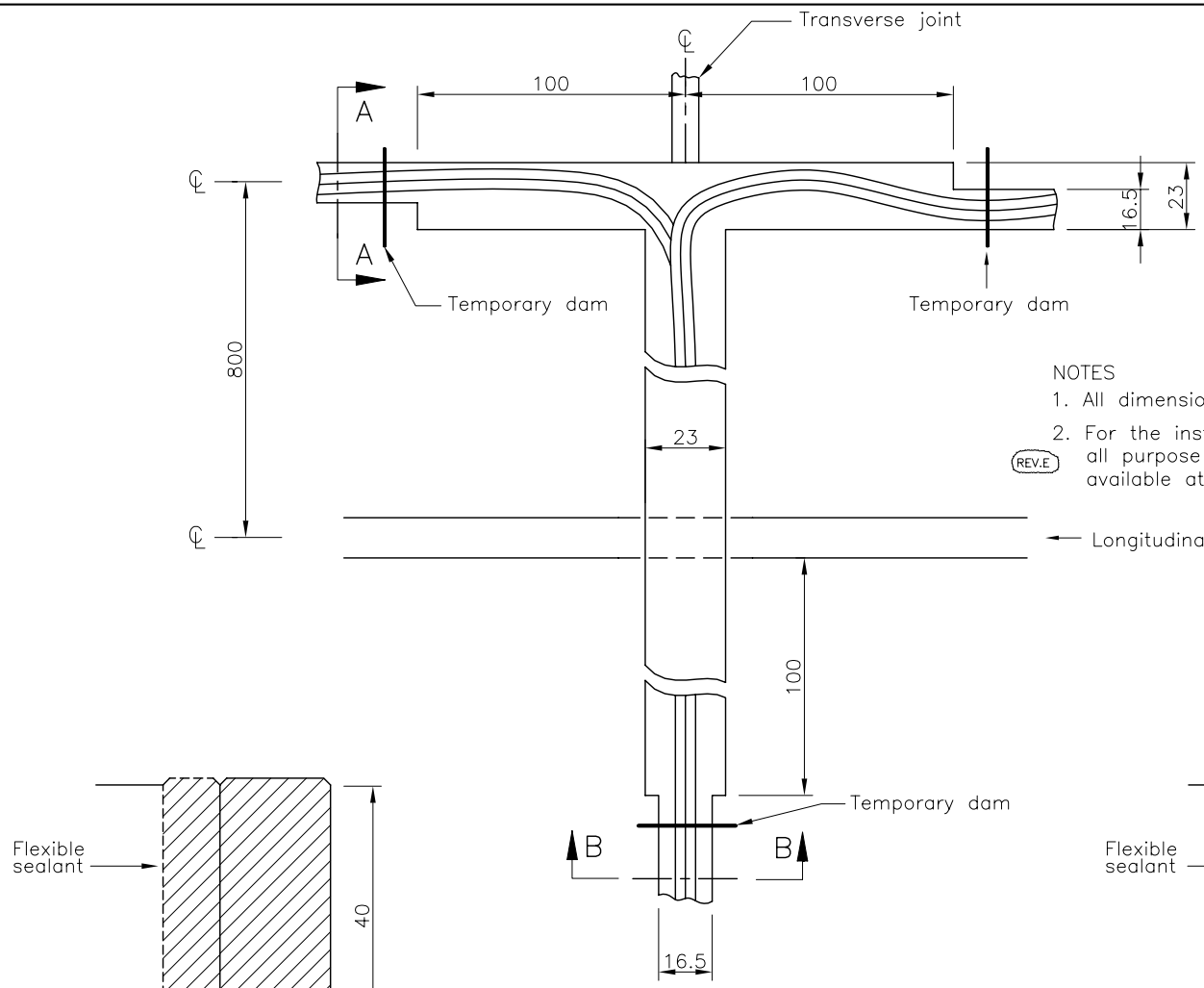
X3 SECTION



X4 SECTION

NOTES
1. All dimensions are in millimetres.
2. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. (REV.E)

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	E	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS DETECTOR LOOP SLOT DETAILS–SHEET 3	Drawing No. G3
		D	Nov 03		
		C	Sept 03		
		A	Dec 91		
		Issue	Date		



NOTES

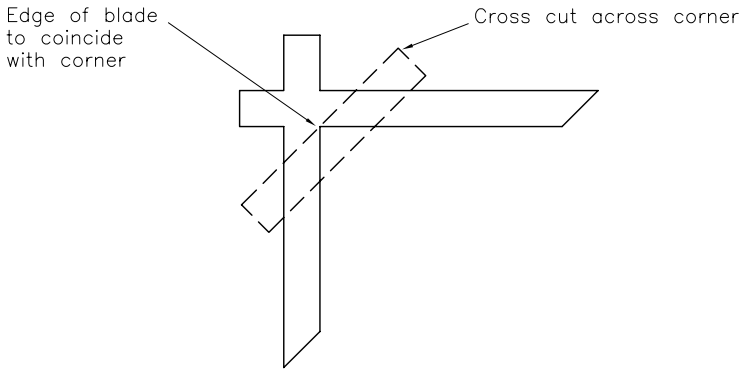
1. All dimensions are in millimetres.
2. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

REV.E

SECTION A – A

SECTION B – B

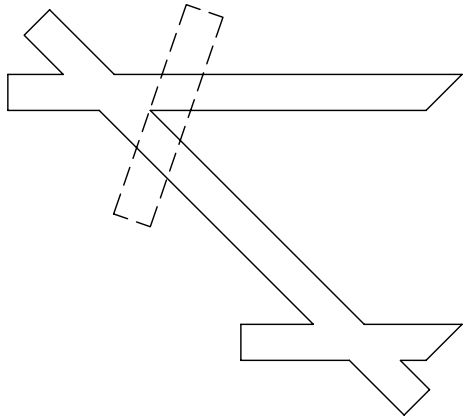
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS DETECTOR LOOP SLOT DETAILS–SHEET 4	Drawing No.
		E	Nov 05		G4
		D	Nov 03		
		C	Sept 03		
		A	Dec 91		



CROSS CUT 90° ANGLE

NOTES

1. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 (REV.D) available at www.tssplansregistry.org.



CROSS CUT 45° ANGLE

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS CROSS CUTTING CORNERS OF SLOTS	Drawing No. G5
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		

INSTALLATION TEST CERTIFICATE FOR INDUCTIVE LOOP DETECTORS

Site address/reference: .....
.....
.....

Contractor: .....
Drawing number: .....
Date tested: .....

Weather Conditions: .....
.....
Temperature: .....

LOOP TESTS	Loop tail length	TEST 1 Series resistance. Measured into loop tails.		TEST 2 Resistance to earth of loop tails. Measured at 500V DC with all conductors connected together.		TEST 3 Inductance. Measured into loop tails.	Calculated Inductance (REV.C)
Designation	metres	Max. 5 Ohms		Min. 100 Megohms		μH	μH
		Reading	Pass/Fail	Reading	Pass/Fail		

COMPLETE CIRCUIT TESTS	Feeder length	TEST 1 Series resistance. Measured into feeder and loop tails.		TEST 2 Resistance to earth of cable armouring (armouring not connected).		TEST 3 Resistance to earth of cable armouring (armouring connected at detector housing).		TEST 4 Resistance to earth of feeder and loop tails. Measured at 500V DC with all conductors connected together.		TEST 5 Inductance. Measured into feeder and loop tails.
Designation	metres	Max. 5 Ohms		Min. 100 Megohms		Max. 0.5 Ohms		Min. 100 Megohms		μH
		Reading	Pass/Fail	Reading	Pass/Fail	Reading	Pass/Fail	Reading	Pass/Fail	

Loop Dimensions

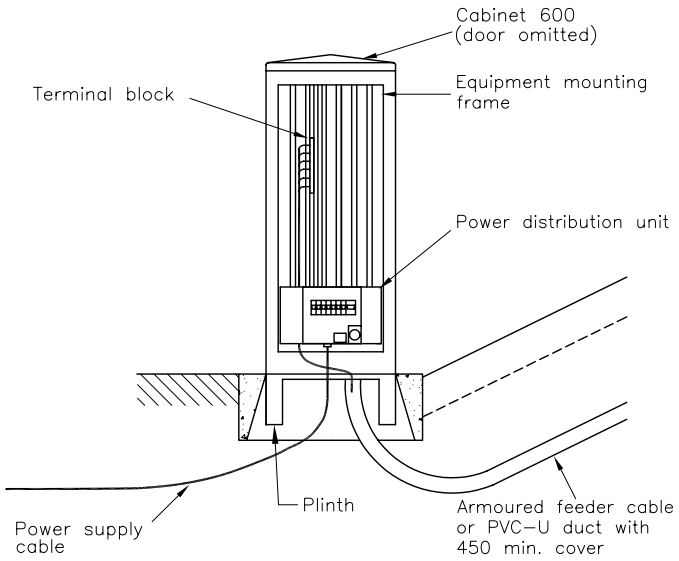
Test equipment used

Resistance Make..... Type.....
Inductance Make..... Type.....

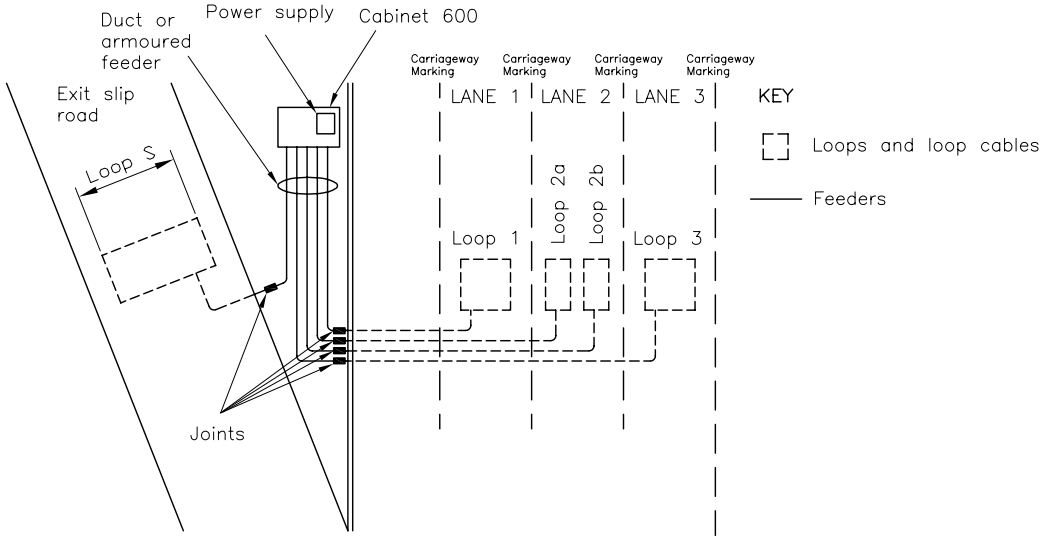
(REV.C) I certify that this equipment has been installed and tested in accordance with specification MCH 1540 available at www.tssplansregistry.org.

(REV.C) Signed on behalf of the Contractor..... Company.....Date.....

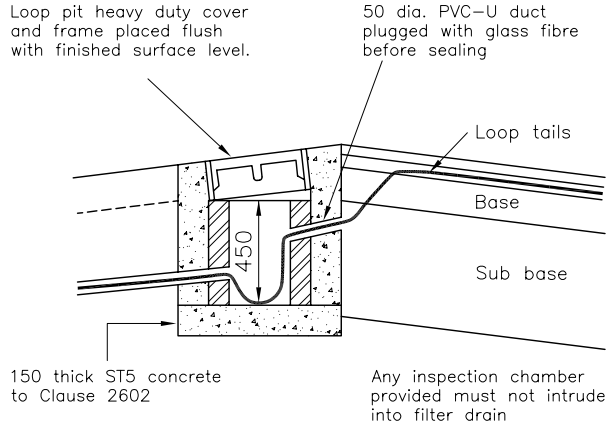
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS TEST CERTIFICATE	Drawing No.
		C	Nov 05		G6
		B	Sept 03		
		A	Aug 02		



CABINET 600 LAYOUT



TYPICAL LAYOUT OF N+1 LOOPS



LOOP PIT
EMBANKMENT ONLY

NOTES

1. All dimensions in millimetres.
2. Where there is a kerb, the cover of the inspection chamber shall be set at kerb level.
3. The feeder cables shall be laid in the inspection chamber with between 0.25m and 0.5m slack.
4. A paved area consisting of 1 No. 900 x 600 x 50 paving slab shall be laid immediately in front of the cabinet 600.
5. Maximum intrusion into filter drain is 25% of drain material within 300 of surface.
6. A 50 dia. hole to be drilled at 45° if duct is to be below surface. A starter hole one slot cutting wheel dia. from end of slot, a 50 dia. PVC–U duct to be inserted and plugged with glass fibre to prevent encapsulant running into PVC–U duct.
7. Where two part loop pit is below surface, a joint marker slab is to be provided.
8. Feeder grooves shall be separated by a distance of 300 in bitumen and 500 in concrete.
9. Loop circuits shall be identified in the cabinet by labelling the feeders in pairs with appropriate loop letters.
10. On concrete roads care must be taken to avoid cutting near longitudinal joints. Loops shall be cut between transverse joints in the concrete slabs.
11. When loops are required, concrete reinforcement shall be omitted at the design and construction stage.
12. Loop widths may vary to accommodate a different lane width. Refer to spec. MCE 0115.
13. (REV.G) Loop tails to be twisted together 5 turns/metre within the inspection/roadside chamber.
14. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540.
15. (REV.G) All specifications available at www.tssplansregistry.org.

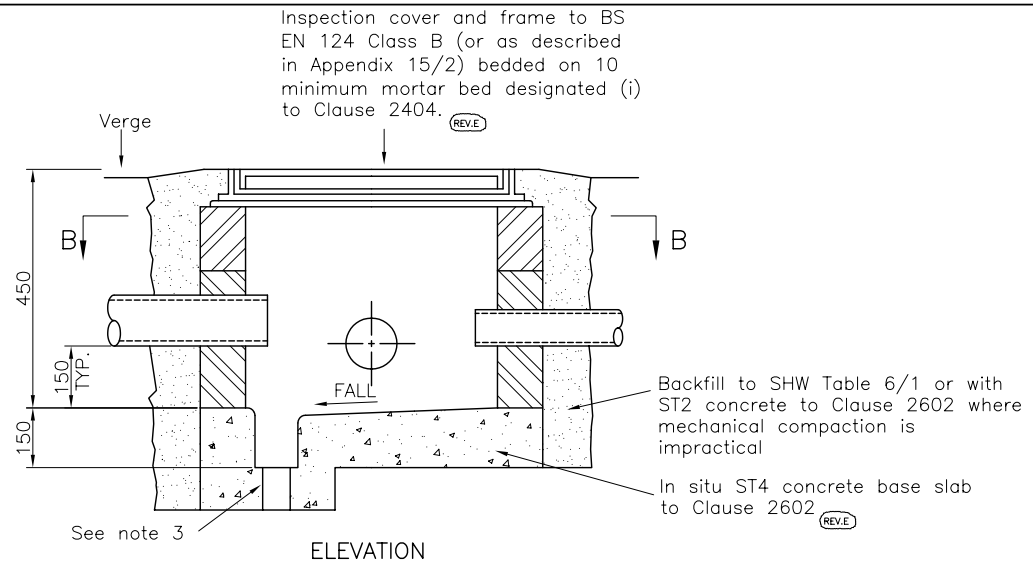
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS

Issue	Date
G	Nov 05
F	Nov 03
E	Sept 03
D	Aug 02
C	May 02
A	Dec 91

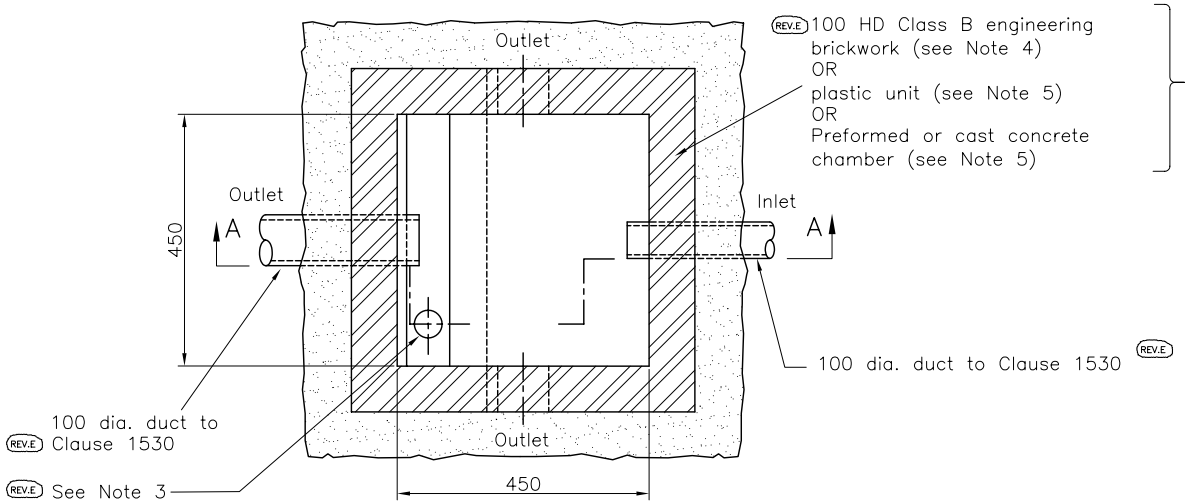
INSTALLATION DRAWING NMCS CABINET 600, LOOP PIT AND N+1 LAYOUT DETAILS

Drawing No.

G7



ELEVATION
SECTION A – A



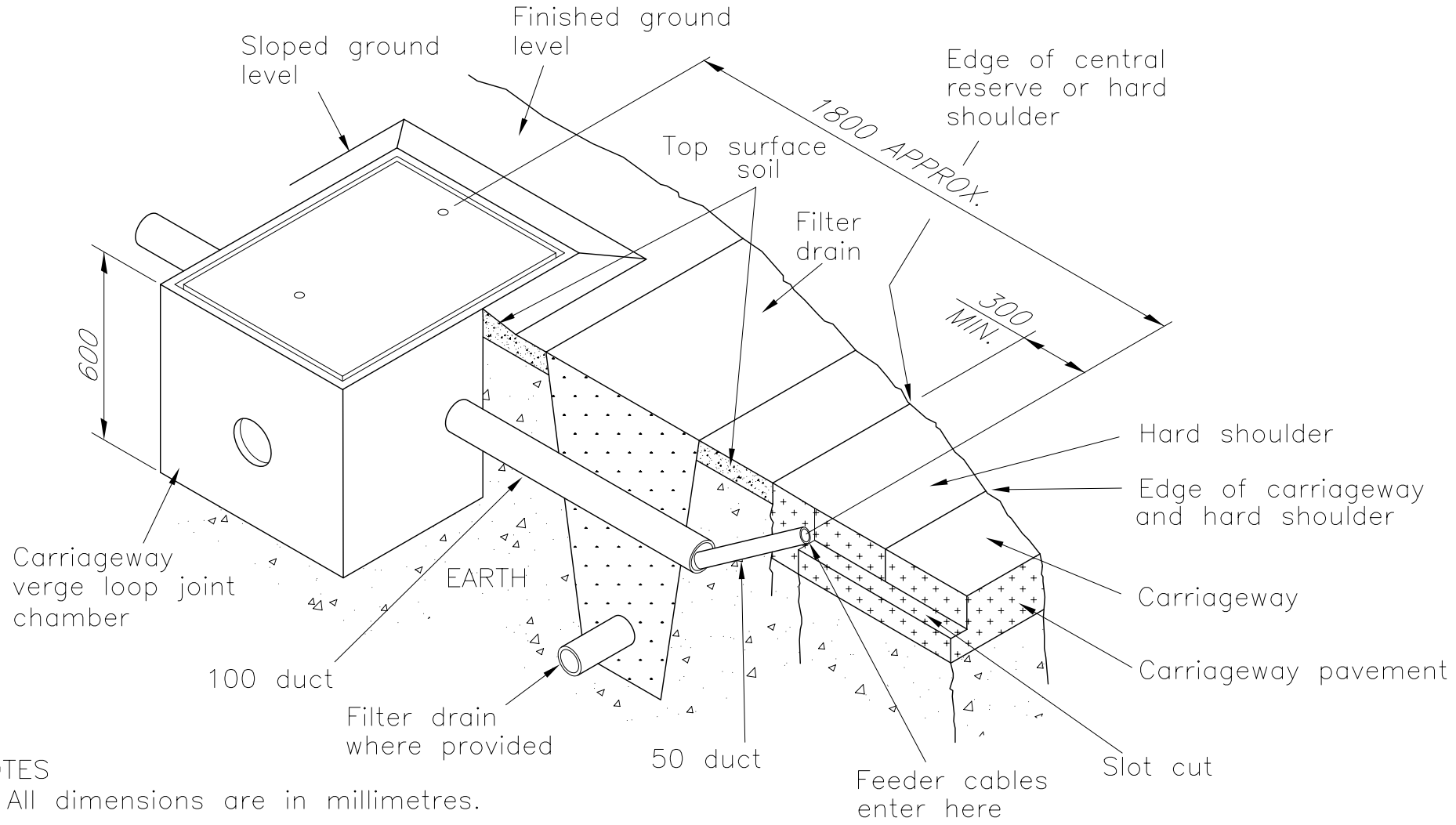
PLAN
SECTION B – B

VERGE LOOP JOINT CHAMBER

NOTES

1. All dimensions are in millimetres.
2. Manufacturing tolerance +5mm unless otherwise stated.
3. Insitu base slab to be cast with a minimum fall of 1:20 towards the sump. Positive drainage in the form of a soakaway or connection to the highway drainage network if required.
4. REV.E 100 HD Class B engineering brickwork to Clause 2406 on 10 minimum mortar bed designated (i) to Clause 2404.
5. REV.E Precast chamber to comply with BS 5911–3 and BS EN 1917 or plastic units or other units in equivalent material.
6. REV.E For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS LOOP JOINT CHAMBER – SHEET 1	Drawing No.
		E	Nov 05		G8
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		



NOTES

1. All dimensions are in millimetres.
2. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

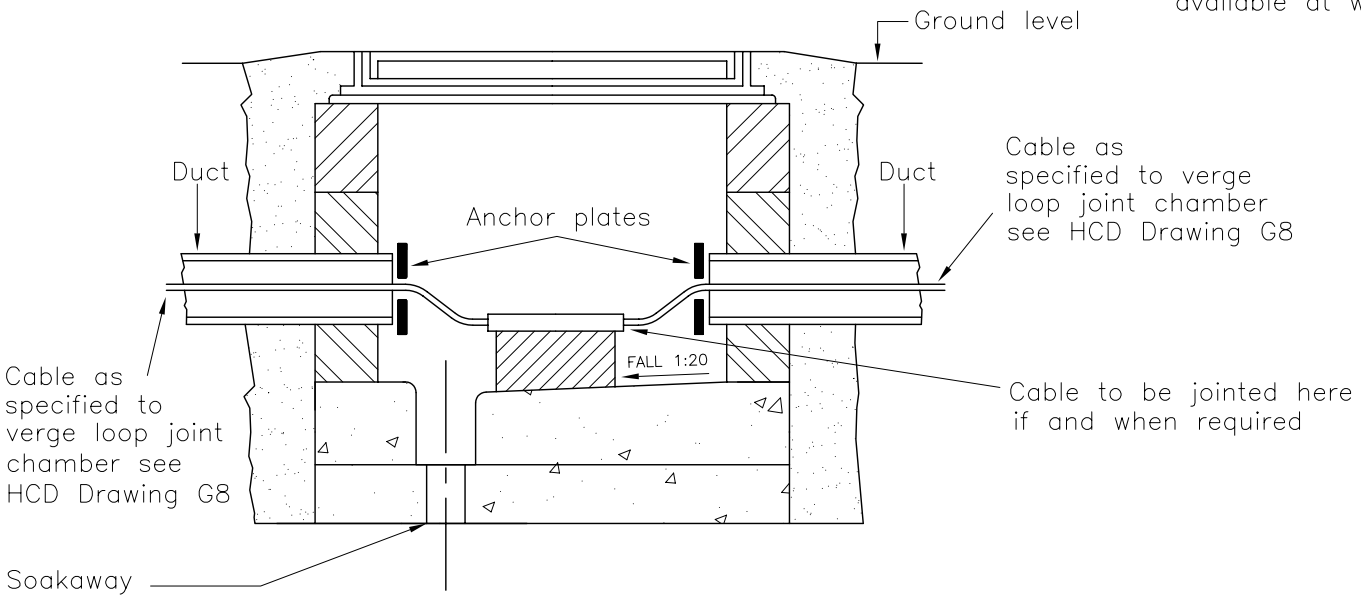
REV.E

MOTORWAY ASSEMBLY

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS LOOP JOINT CHAMBER – SHEET 2	Drawing No.
		E	Nov 05		G9
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		

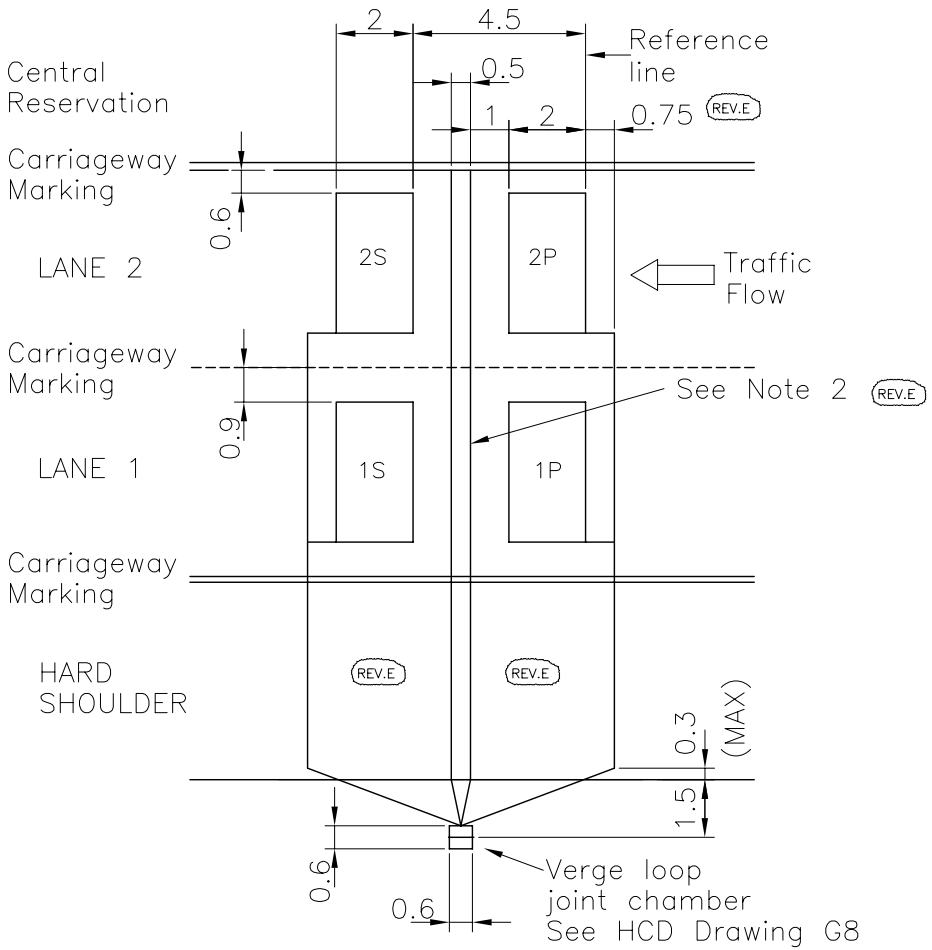
NOTES

1. This arrangement may not be suitable for all site conditions. The scheme designer shall tailor other arrangements to suit individual locations.
2. Cable identification shall be fitted during installation.
3. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. (REV.E)



SECTIONAL ELEVATION OF CENTRAL RESERVE CHAMBER

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	E	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS LOOP JOINT CHAMBER – SHEET 3	Drawing No. G10
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		
		Issue	Date		

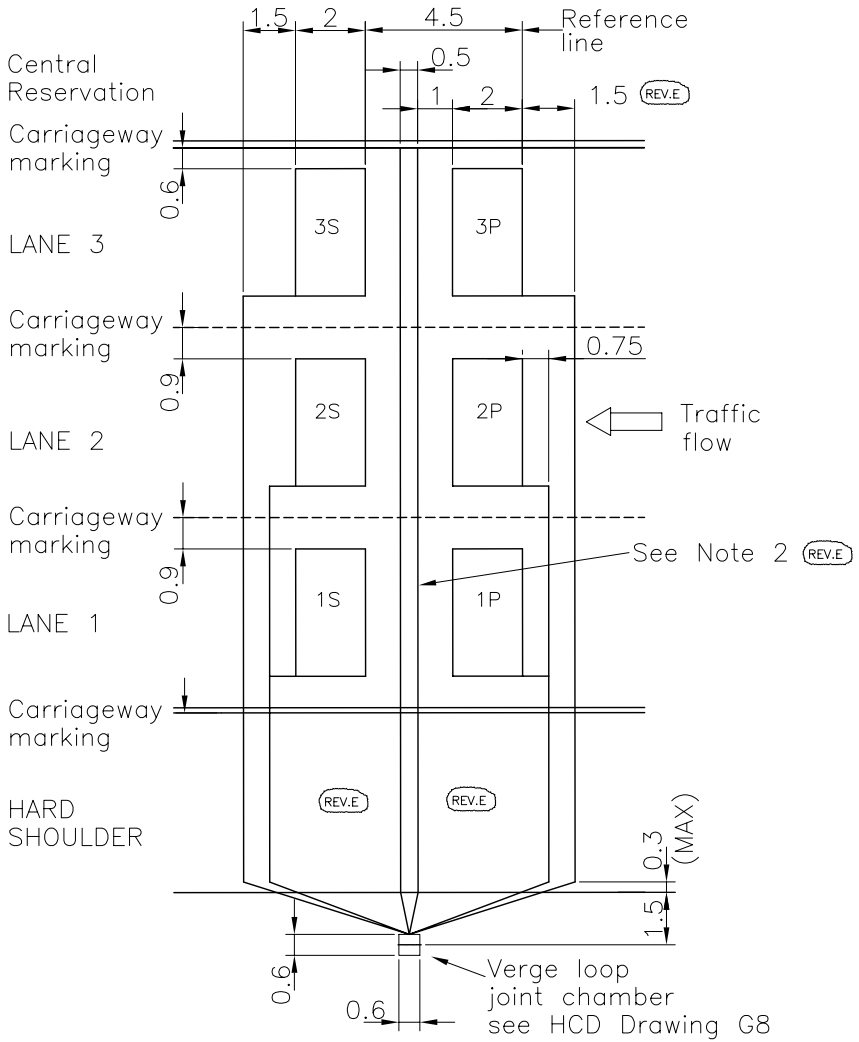


NOTES

1. All dimensions are in metres.
2. (REV.E) Slots for loop feeder cable to be minimum 0.3 apart.
3. (REV.E) All loops to be 3 turns.
4. (REV.E) Tolerance ±0.02 metres unless otherwise stated.
5. (REV.E) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

2 LANE CARRIAGEWAY & HARD SHOULDER IN FLEXIBLE ROAD CONSTRUCTION FOR SLOTTED LOOP FEEDERS

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL-PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 1	Drawing No.
		E	Nov 05		G11
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		

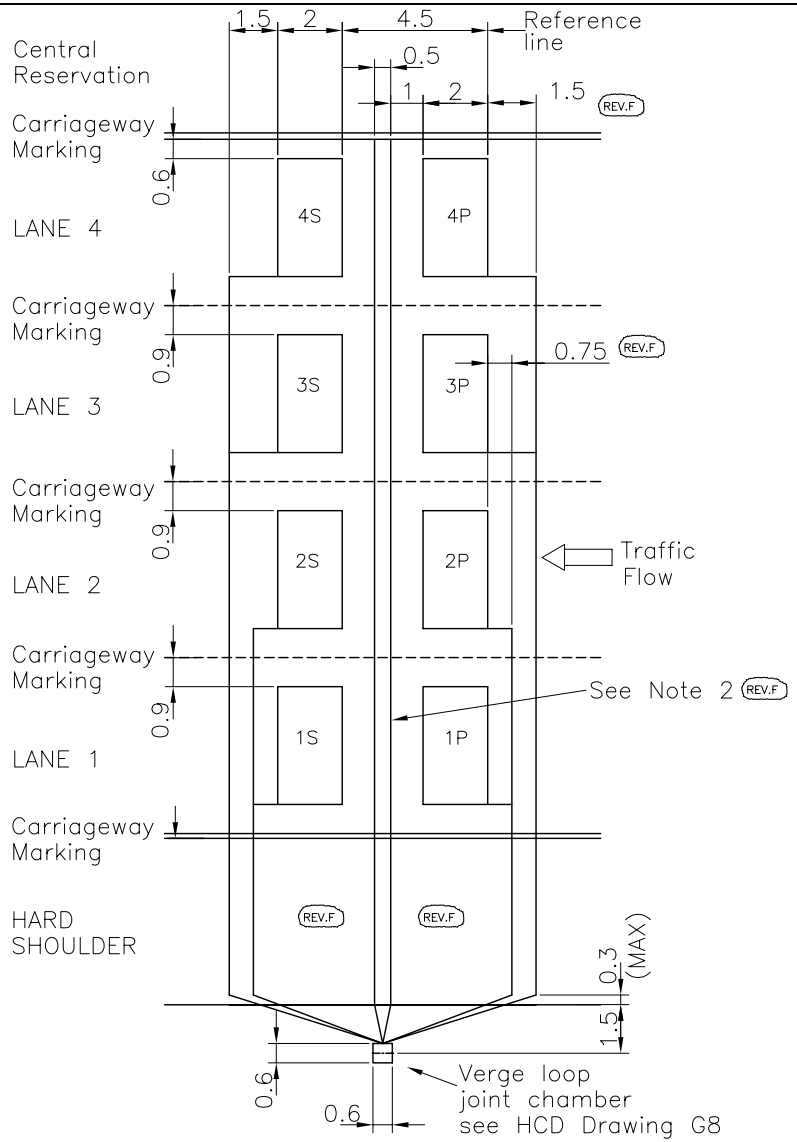


3 LANE CARRIAGEWAY & HARD SHOULDER IN FLEXIBLE ROAD CONSTRUCTION FOR SLOTTED LOOP FEEDERS

NOTES

1. All dimensions are in metres.
2. (REV.E) Slots for loop feeder cable to be minimum 0.3 apart.
3. (REV.E) All loops to be 3 turns.
4. (REV.E) Tolerance ±0.02 metres unless otherwise stated.
5. (REV.E) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 2	Drawing No. G12
		E	Nov 05		
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		

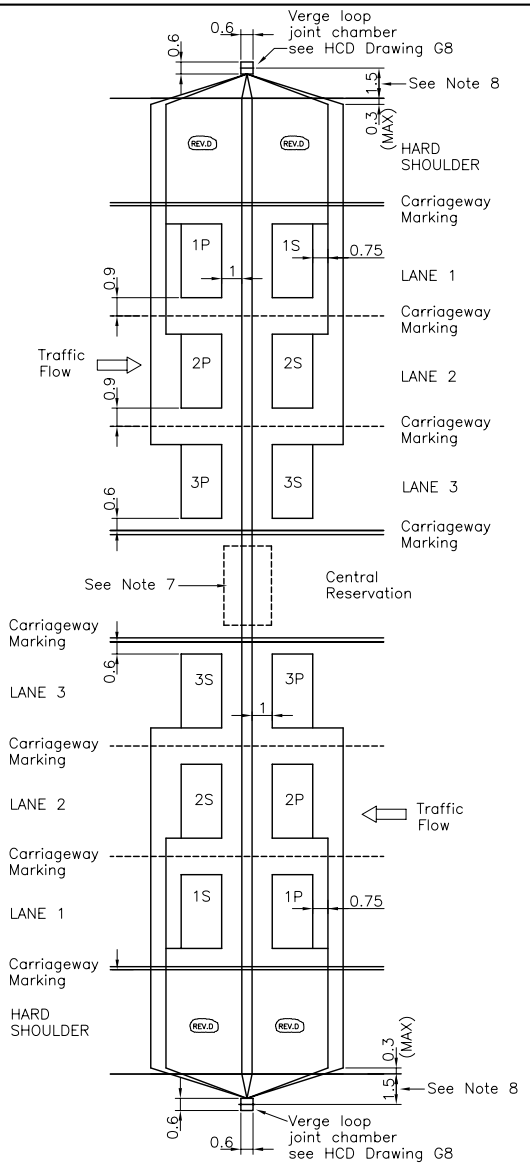


4 LANE CARRIAGEWAY & HARD SHOULDER
IN FLEXIBLE ROAD CONSTRUCTION
FOR SLOTTED LOOP FEEDERS

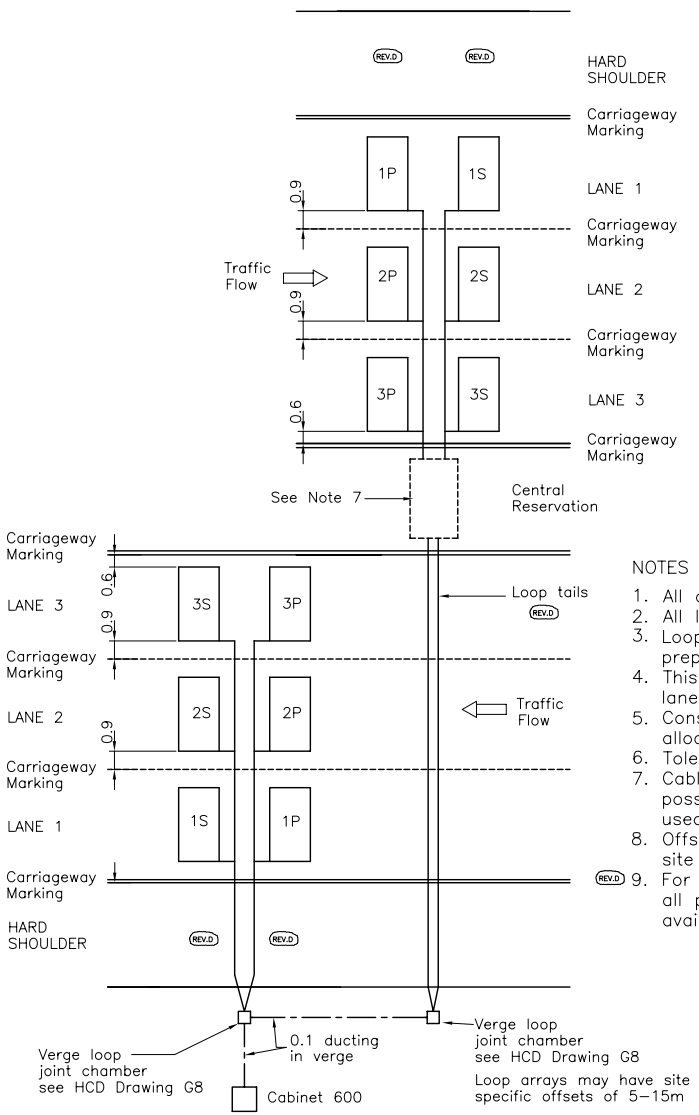
NOTES

1. All dimensions are in metres.
2. (REV.F) Slots for loop feeder cable to be minimum 0.3 apart.
3. (REV.F) All loops to be 3 turns.
4. (REV.F) Tolerance ±0.02 metres unless otherwise stated.
5. (REV.F) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 3	Drawing No.
		F	Nov 05		G13
		E	Nov 03		
		D	Aug 02		
		C	May 02		
		B	Aug 94		
		A	Dec 91		



3 LANE & HARD SHOULDER IN FLEXIBLE ROAD
CONSTRUCTION ILLUSTRATING DUAL CARRIAGEWAY
FOR SLOTTED LOOP FEEDERS

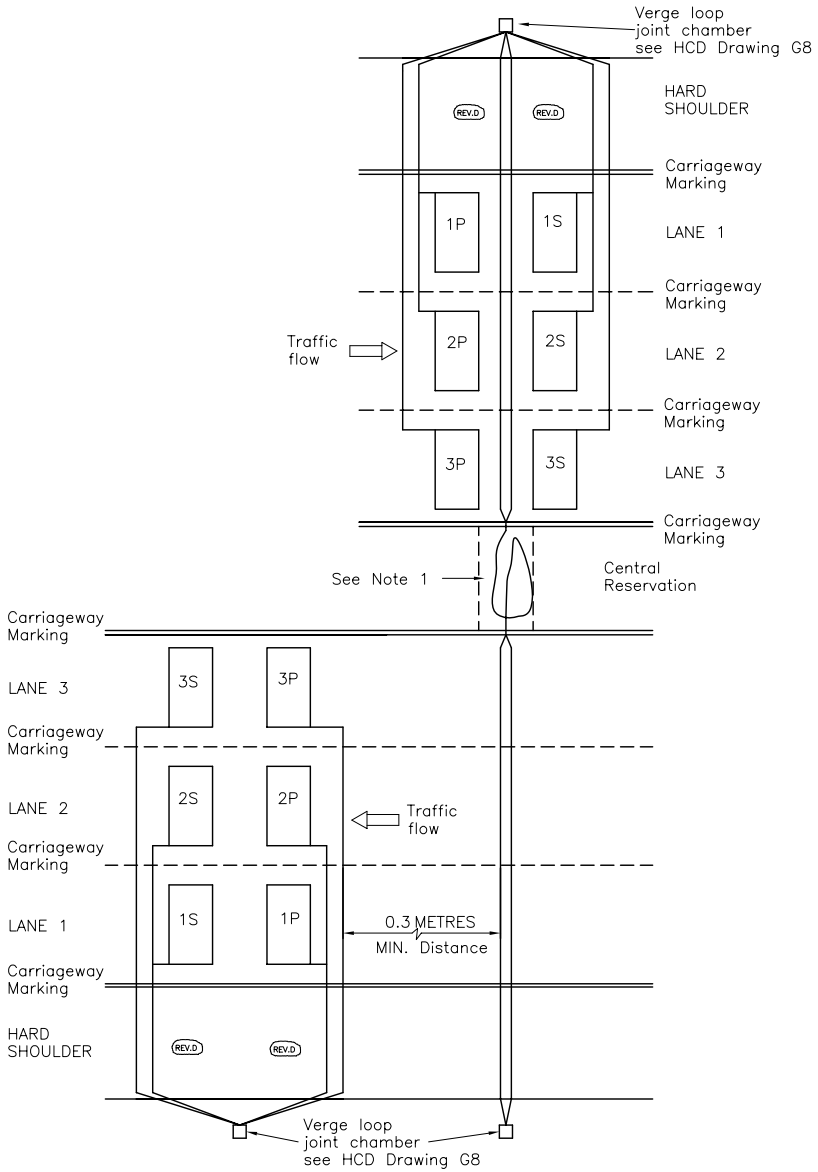


3 LANE & HARD SHOULDER IN FLEXIBLE ROAD
CONSTRUCTION WITH NO CROSS CARRIAGEWAY DUCTS

NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.
6. Tolerance ±0.02 metres unless otherwise stated.
7. Cables to be installed in either trough or chamber where possible. See HCD Drawing G10 or G16. No joints to be used on initial installation.
8. Offset location for joint chamber will be dependant on site conditions.
9. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 4	Drawing No. G14
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		

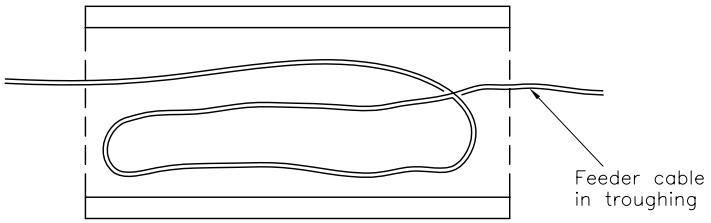


STAGGERED LOOP LAYOUT ARRANGEMENT
FOR SLOTTED LOOP FEEDERS

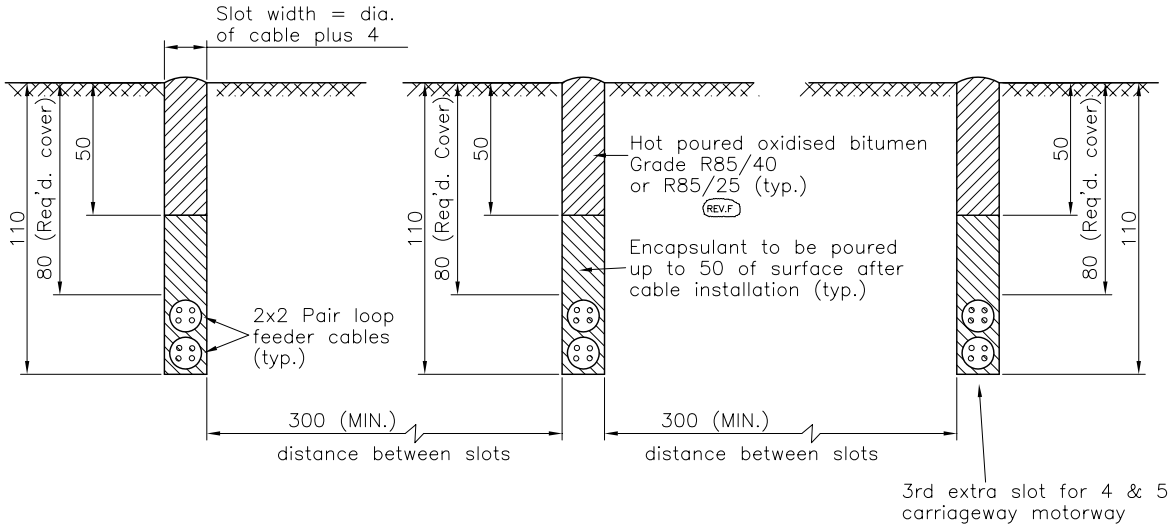
NOTES

1. Cables to be installed in either trough or chamber where possible. See HCD Drawing G10 or G16. No joints to be used on initial installation.
2. Dimensions to be as HCD Drawing G14.
3. Tolerance ±0.02 metres unless otherwise stated.
4. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 5	Drawing No. G15
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		



PLAN ELEVATION OF CENTRAL RESERVATION TROUGH

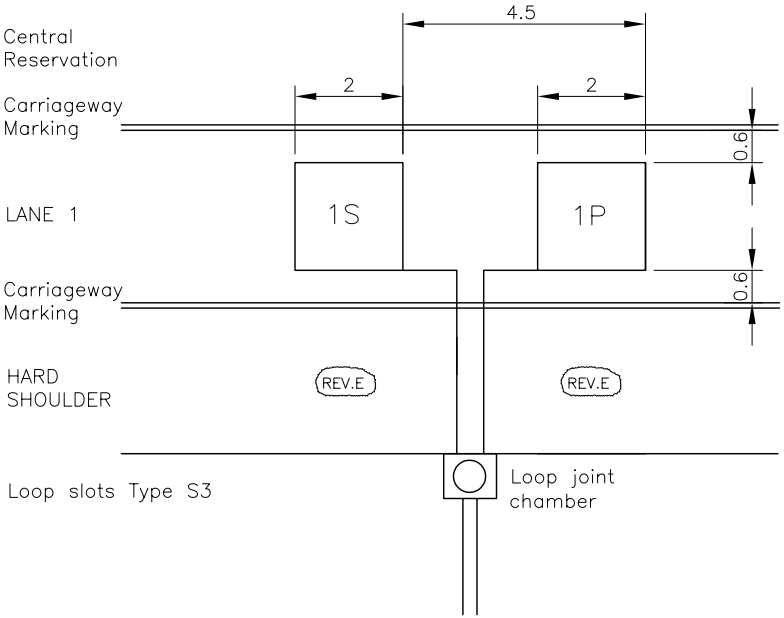


FEEDER CABLE SLOTS FOR UP TO 5 LANES
& HARD SHOULDER (BITUMINOUS ROAD SURFACE)
FOR SLOTTED LOOP FEEDERS

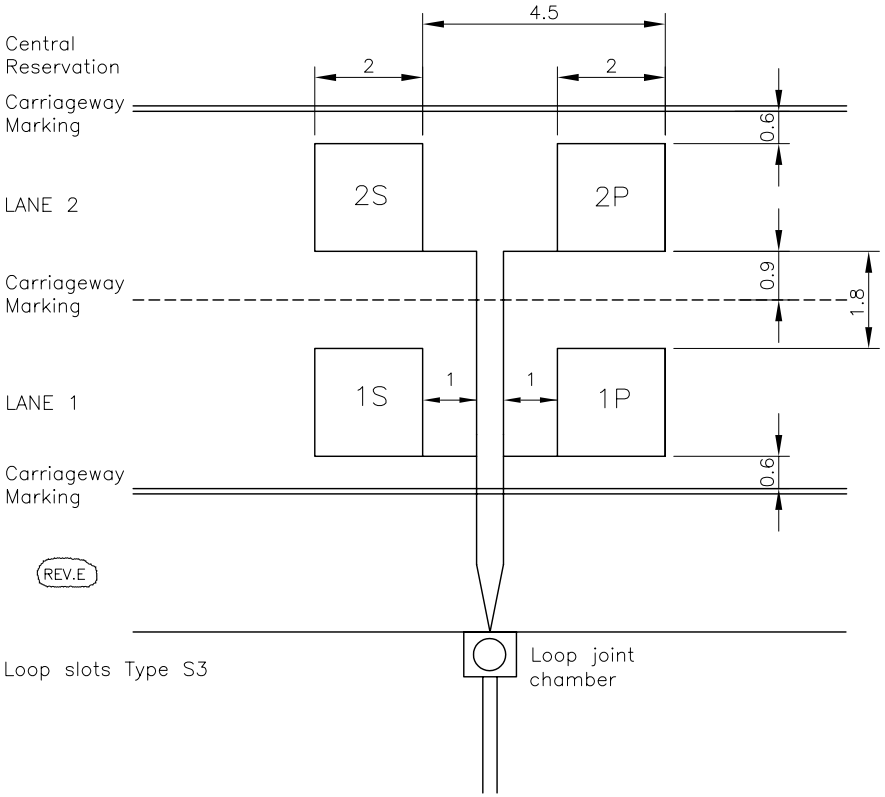
NOTES

1. All dimensions are in millimetres.
2. Feeder cable to be looped to enable jointing if required in future.
3. The above arrangement may not be suitable for all site conditions. The scheme designer shall tailor other arrangements to suit individual locations.
4. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. REV.F

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	F	Nov 05	INSTALLATION DRAWING NMCS AND ALL–PURPOSE ROADS MIDAS AND MS3 LOOP DETAILS – SHEET 6	Drawing No. G16
		E	Nov 03		
		D	Sept 03		
		C	Aug 02		
		A	Dec 91		
		Issue	Date		



1 LANE AND HARD SHOULDER IN FLEXIBLE CONSTRUCTION

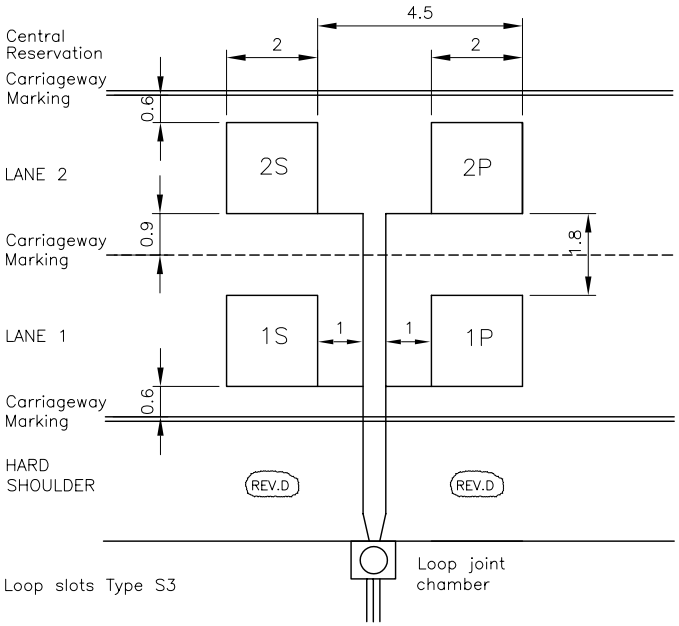


2 LANE FLEXIBLE CONSTRUCTION

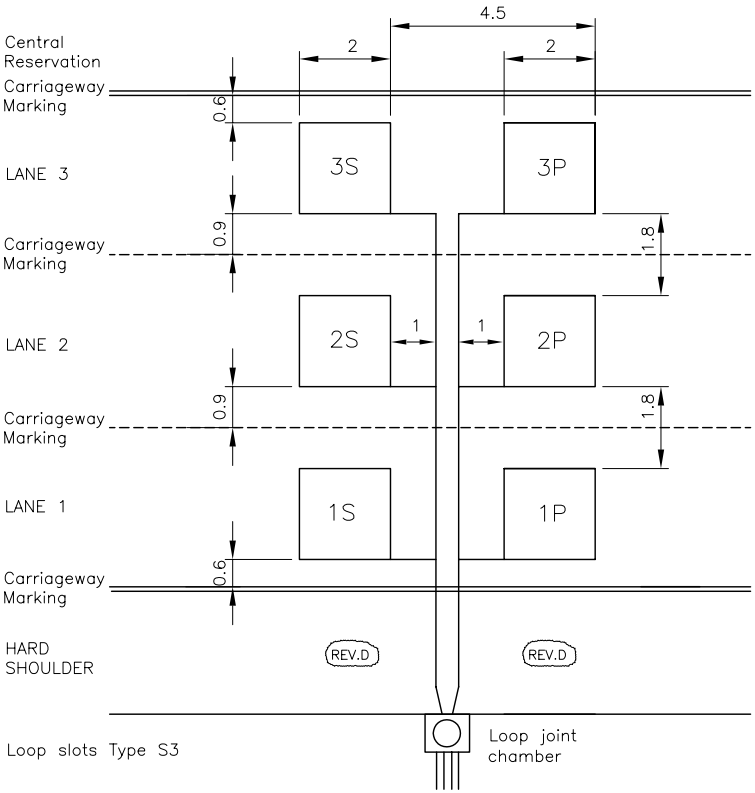
NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.
6. Quad armoured feeder cable is required for speed loops in each lane and hard shoulder.
7. Tolerance ±0.02 metres unless otherwise stated.
8. Loop slot types S1 to S3 are shown on HCD drawing G1.
9. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. (REV.E)

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	E	Nov 05	INSTALLATION DRAWING NMCS MOTORWAY LOOP LAYOUT – SHEET 1	Drawing No. G17
		D	Nov 03		
		C	Aug 02		
		A	Dec 91		
		Issue	Date		



2 LANE AND HARD SHOULDER IN FLEXIBLE CONSTRUCTION

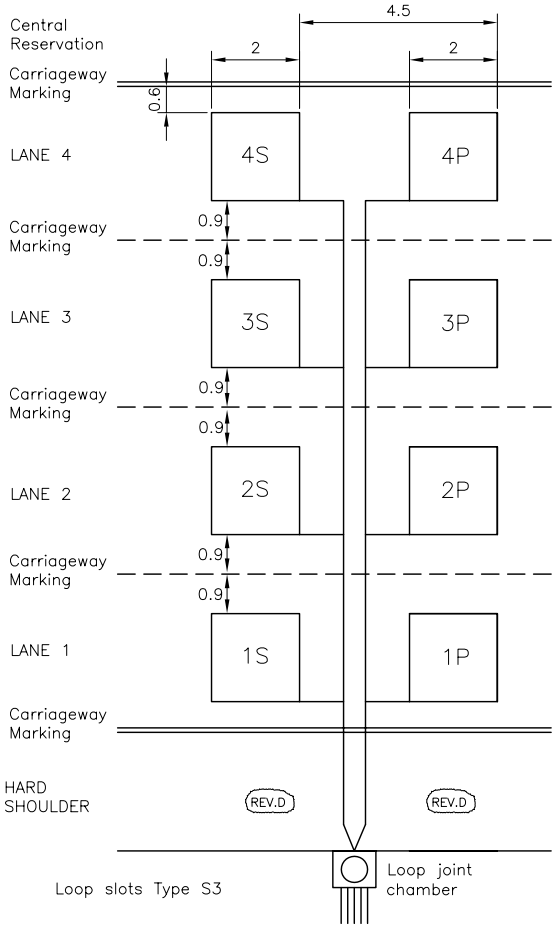


3 LANE AND HARD SHOULDER IN FLEXIBLE CONSTRUCTION

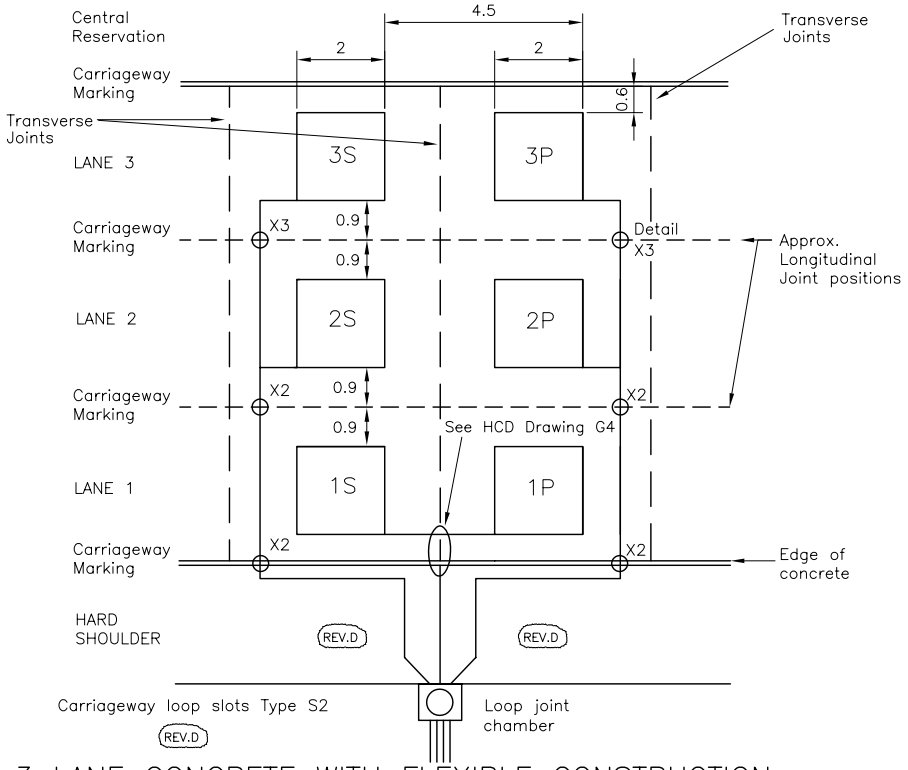
NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.
6. (REV.D) Quad armoured feeder cable is required for speed loops in each lane.
7. Tolerance ±0.02 metres unless otherwise stated.
8. Loop slot types S1 to S3 are shown on HCD drawing G1.
9. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS MOTORWAY LOOP LAYOUT – SHEET 2	Drawing No. G18
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		



4 LANE AND HARD SHOULDER IN FLEXIBLE CONSTRUCTION

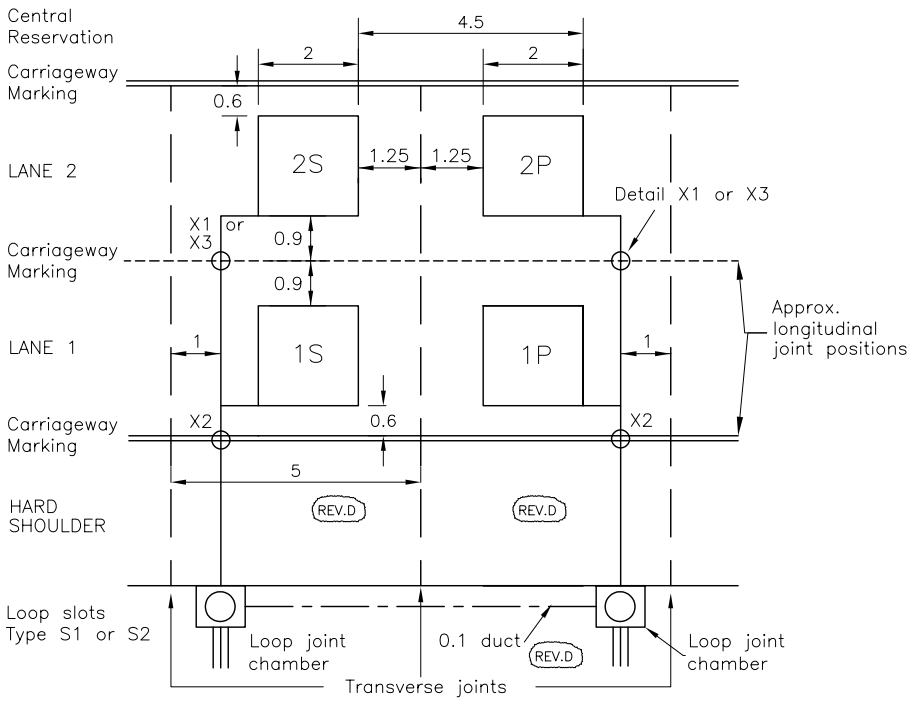


3 LANE CONCRETE WITH FLEXIBLE CONSTRUCTION HARD SHOULDER

NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.
6. (REV.D) Quad armoured feeder cable is required for speed loops in each lane.
7. Tolerance ±0.02 metres unless otherwise stated.
8. Details X2 and X3 are shown on HCD drawing G3.
9. Loop slot types S1 to S3 are shown on HCD drawing G1.
10. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	D	Nov 05	INSTALLATION DRAWING NMCS MOTORWAY LOOP LAYOUT – SHEET 3	Drawing No. G19
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		
		Issue	Date		



2 LANE AND HARD SHOULDER IN CONCRETE OR CONTINUOUS REINFORCED CONCRETE

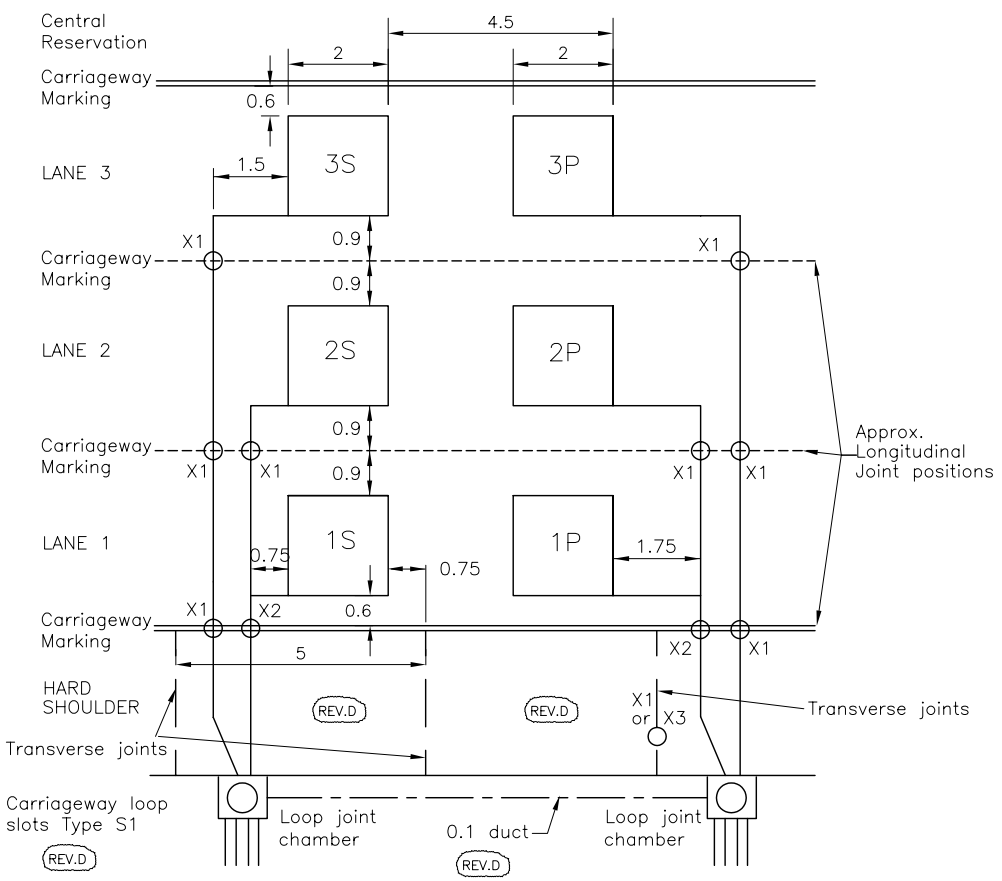
NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.

REV.D 6. Single pair armoured feeder cable is required for speed loops in each lane.

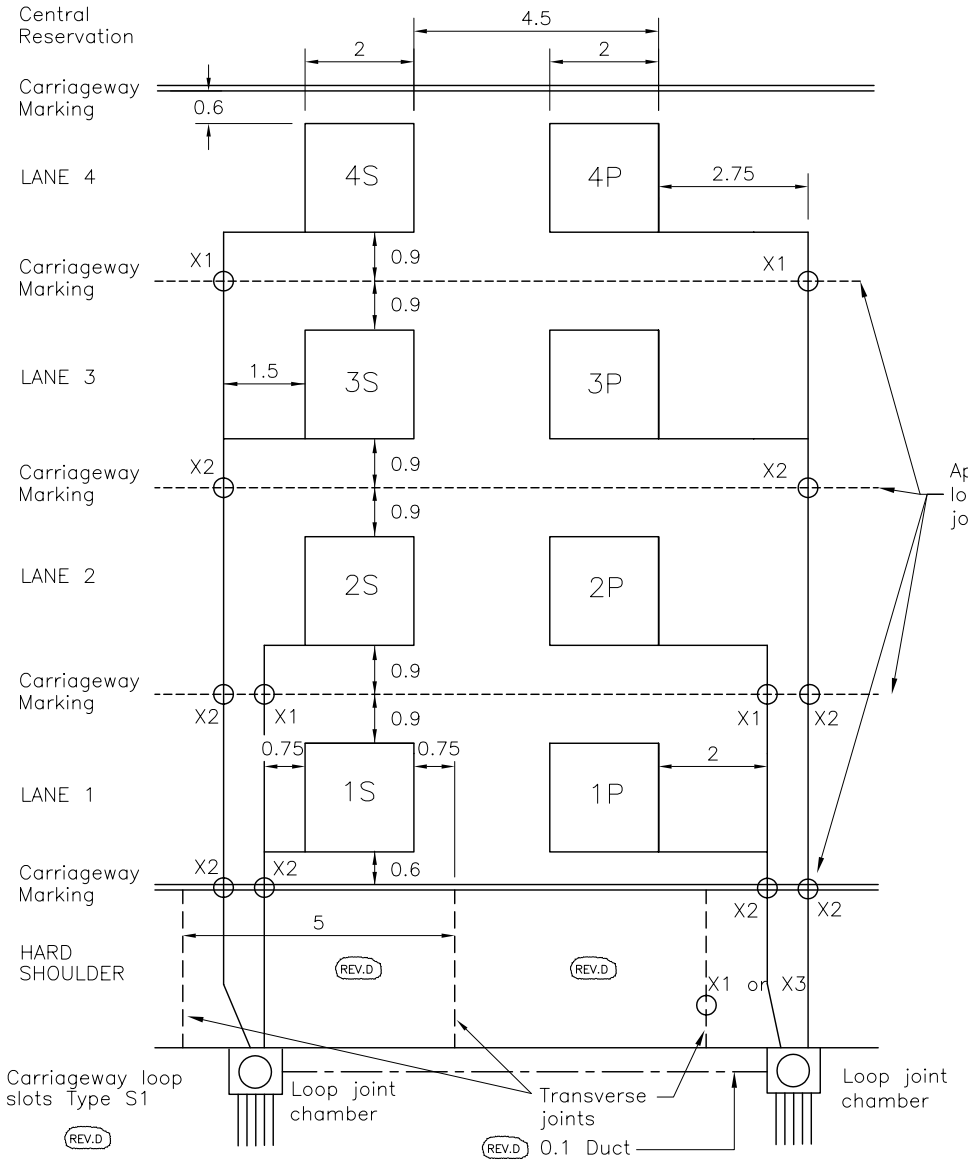
7. Tolerance ±0.02 metres unless otherwise stated.
8. Details X1, X2 and X3 are shown on HCD drawing G3.
9. Loop slot types S1 to S3 are shown on HCD drawing G1.

REV.D 10. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.



3 LANE CONTINUOUS REINFORCED CONCRETE WITH CONTINUOUS REINFORCED OR CONCRETE HARD SHOULDER

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS MOTORWAY LOOP LAYOUT – SHEET 4	Drawing No.
		D	Nov 05		G20
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		

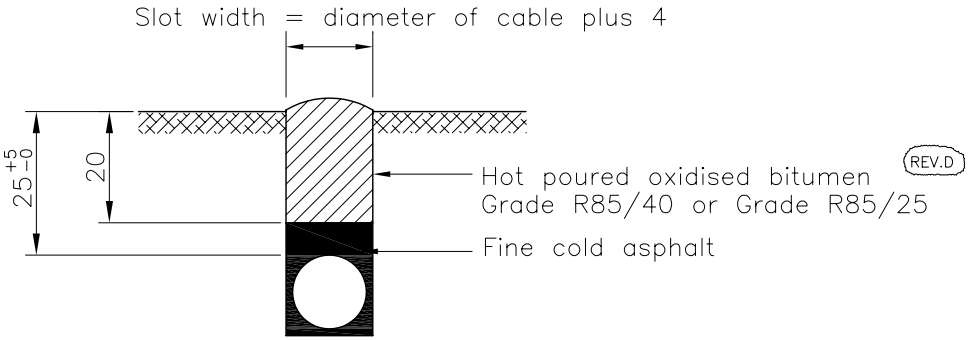


4 LANE CONTINUOUS REINFORCED CONCRETE WITH CONTINUOUS REINFORCED OR CONCRETE HARD SHOULDER

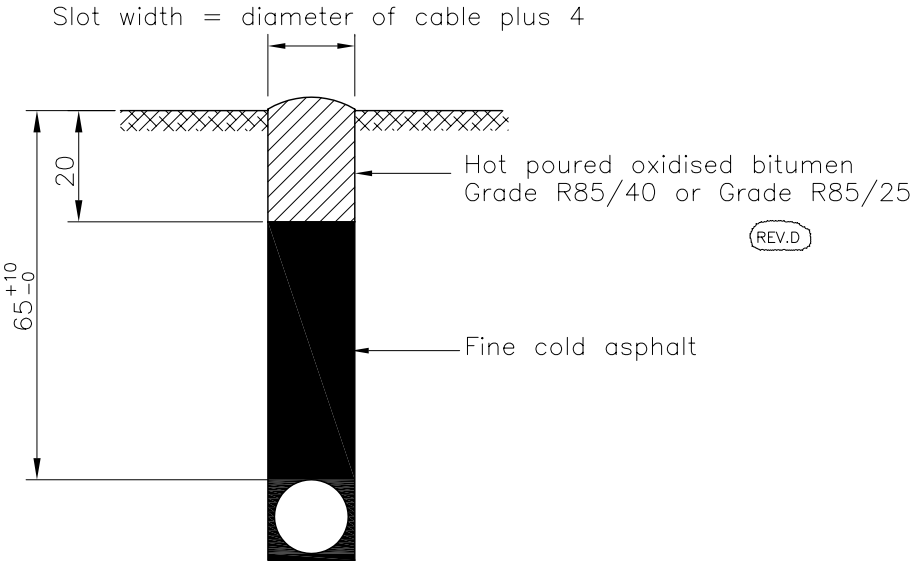
NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. Loop tails to be identified with loop reference shown using preprinted durable plastic sleeve.
4. This is a general drawing. Loop widths will vary according to lane widths.
5. Consult with detector manufacturer on frequency and channel allocation.
6. (REV.D) Single pair armoured feeder cable is required for speed loops in each lane.
7. Details X1 to X4 are shown on HCD drawing G3.
8. Tolerance ±0.02 metres unless otherwise stated.
9. Loop slot types S1 to S3 are shown on HCD drawing G1.
10. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	INSTALLATION DRAWING NMCS MOTORWAY LOOP LAYOUT – SHEET 5	Drawing No.
		D	Nov 05		G21
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		



CONCRETE ROAD SURFACE

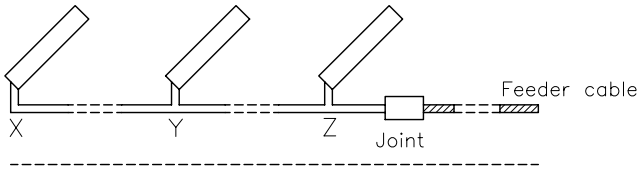


BITUMINOUS ROAD SURFACE

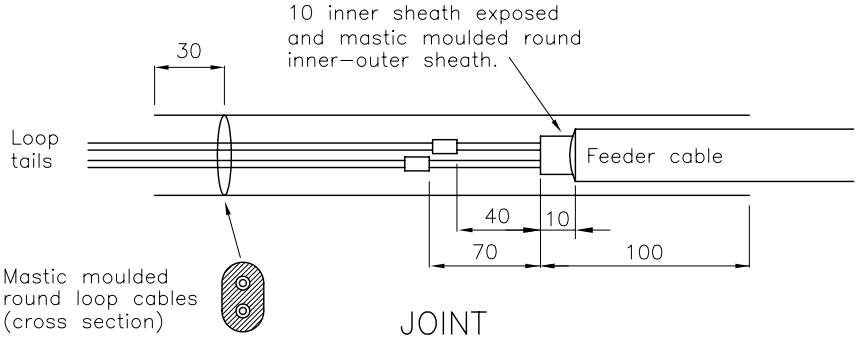
NOTES

1. All dimensions are in millimetres.
2. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. REV.D

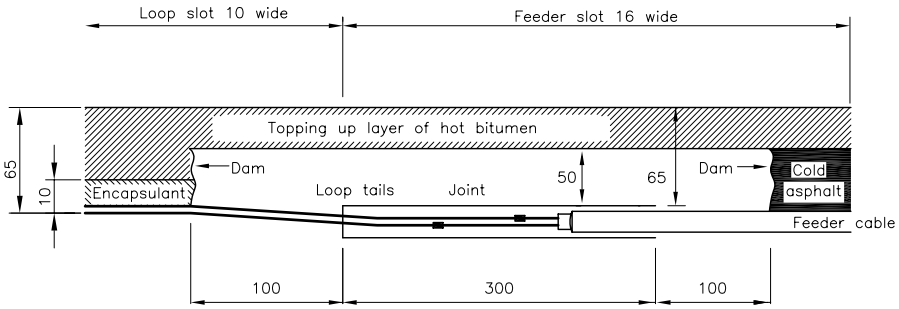
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS DETAILS OF FEEDER CABLE SLOTS	Drawing No.
		D	Nov 05		G22
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		



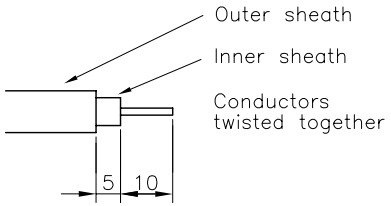
LAYOUT OF LOOPS AND FEEDER CABLE



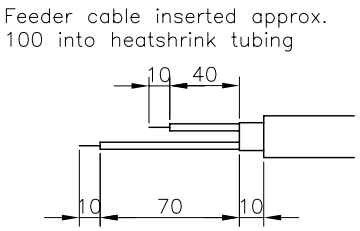
JOINT



DETAILS OF JOINT SLOT



LOOP CABLE DETAIL



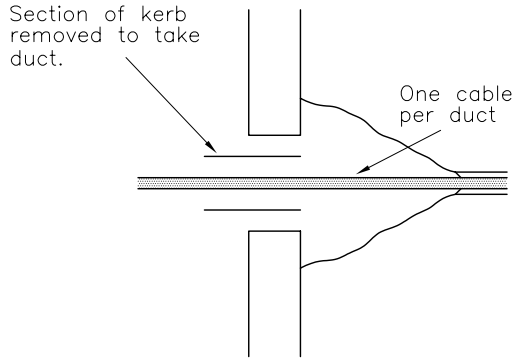
FEEDER CABLE DETAIL

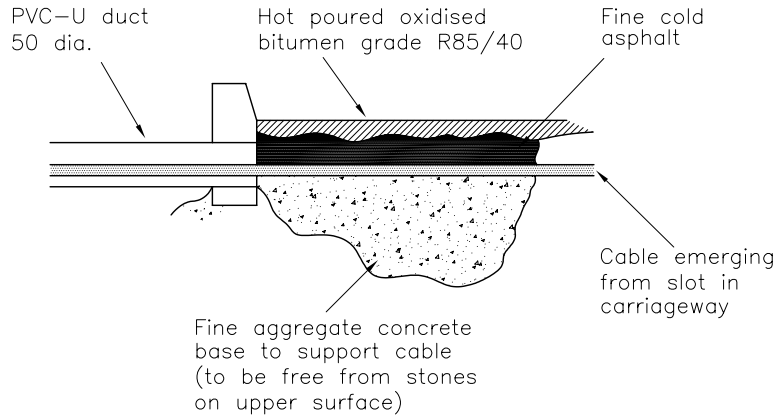
NOTES
1. All dimensions are in millimetres.
2. The width of the joint slot shall be 10 greater than the width for the completed joint.
3. Details of feeder cable slots are shown on HCD Drawing G22.
4. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

(REV.E)

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	E	Nov 05	LOOP (INDUCTIVE) ALL–PURPOSE ROADS DETAIL OF SLOT FOR CABLE JOINT	Drawing No. G23
		D	Nov 03		
		C	Sept 03		
		A	Dec 91		
		Issue	Date		

OPTION 1

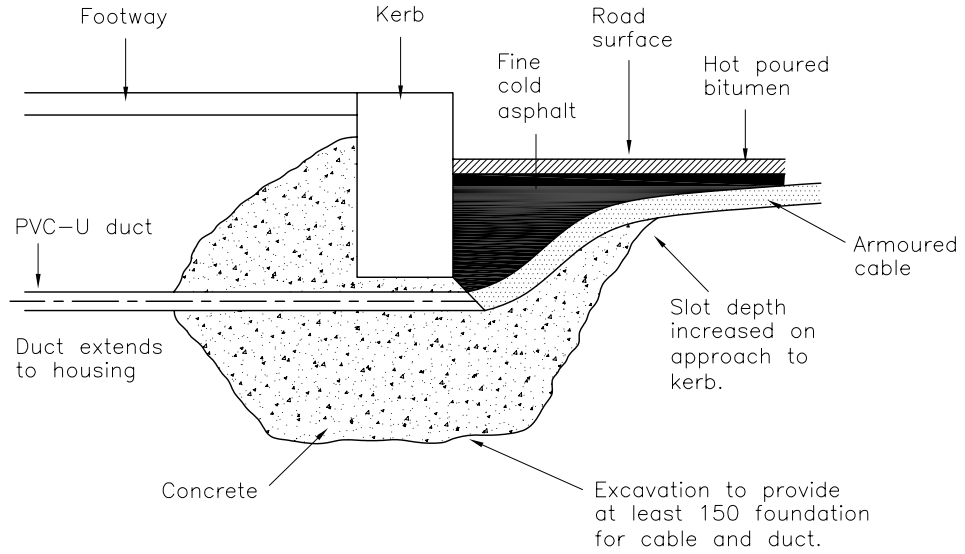




NOTES
1. All dimensions are in millimetres.
2. For option 3 see HCD Drawing G25.
3. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

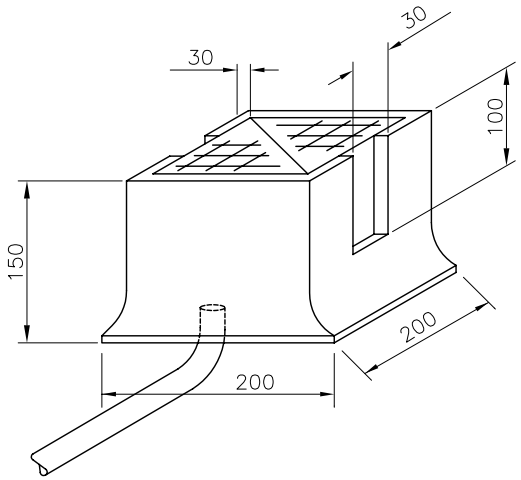
(REV.D)

OPTION 2

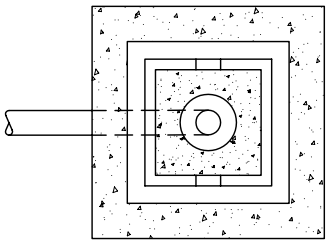


HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS DETAIL OF CABLE ENTRY TO THE FOOTWAY	Drawing No.
		D	Nov 05		G24
		C	Nov 03		
		B	Aug 02		
		A	Dec 91		

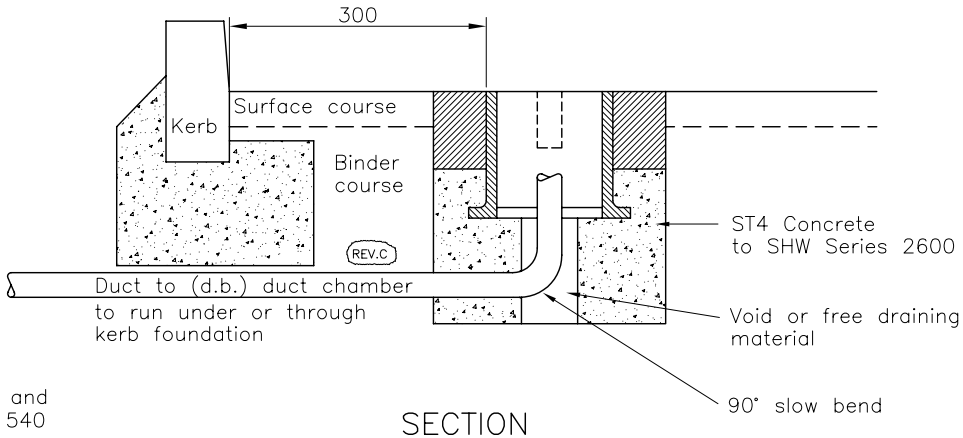
OPTION 3



ISOMETRIC SKETCH



PLAN



SECTION

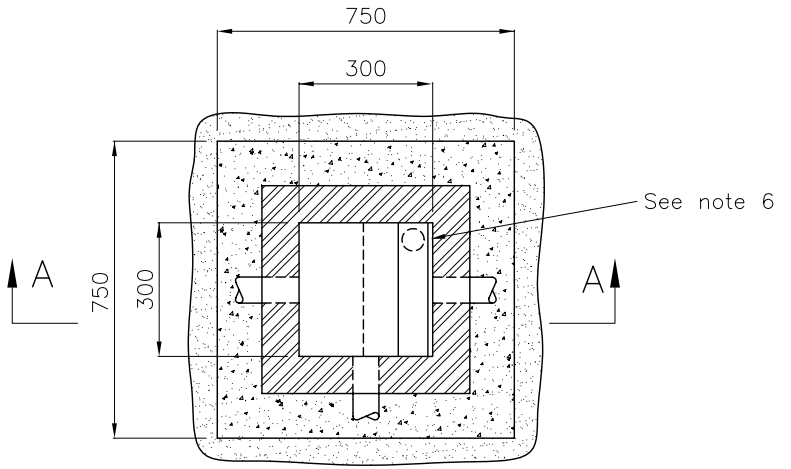
REV.C

CARRIAGEWAY CHAMBER FOR DETECTOR LOOP TAILS (L.B.)

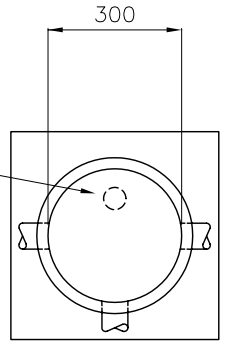
End of duct to be below the slots
Base to be able to drain
Slots to be parallel to kerb line

NOTES
1. All dimensions are in millimetres.
2. For options 1 and 2 see HCD Drawing G24.
3. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. REV.C

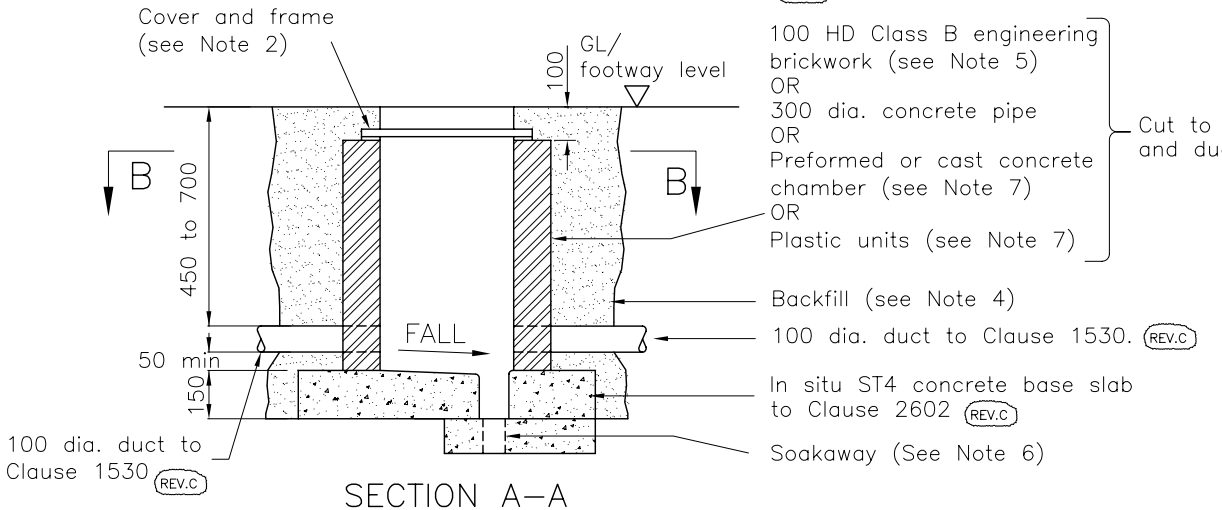
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS DETAIL OF CARRIAGEWAY CHAMBER REV.C	Drawing No. G25
		C	Nov 05		
		B	Nov 03		
		A	Aug 02		



PLAN
SECTION B–B



PLAN
SHOWING CONCRETE PIPE

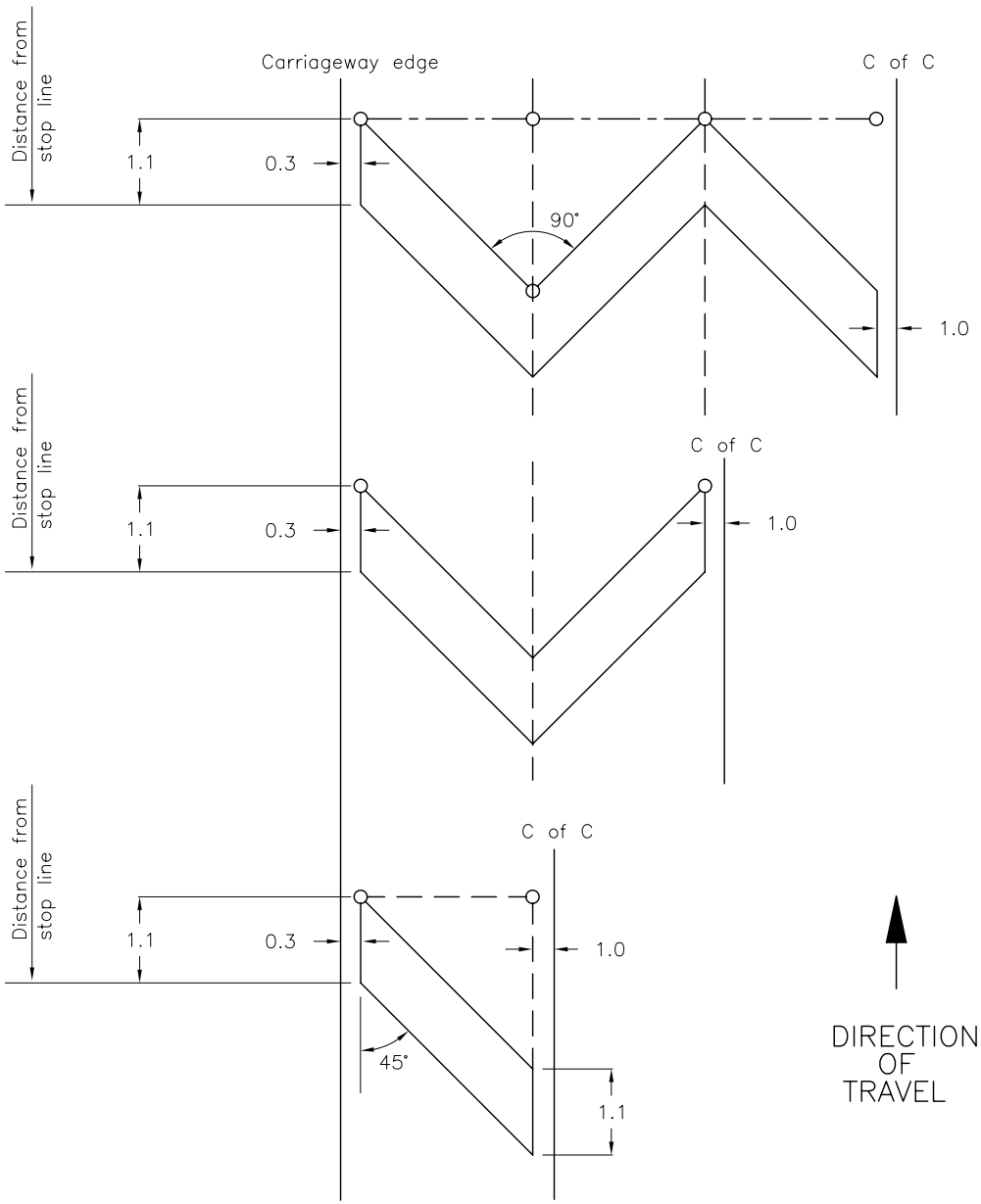


SECTION A–A

NOTES

1. All dimensions are in millimetres.
2. Cover is 300 x 300 x 100 I/D. Inspection cover and frame to BS EN 124 Class B (or as described in Appendix 15/2) bedded on 10 minimum mortar bed designated (i) to Clause 2404. REV.C
3. Recommended depth of duct in footway is 450 minimum 700 maximum.
4. Backfill to SHW Table 6/1 or with ST2 concrete to Clause 2602 where mechanical compaction is impractical.
5. 100 HD Class B engineering brickwork to Clause 2406 on 10 minimum mortar bed designated (i) to Clause 2404. REV.C
6. Insitu base slab to be cast with a minimum fall of 1:20 towards the sump. Positive drainage in the form of a soakaway or connection to the highway drainage network is required.
7. Precast chamber to comply with BS 5911–3 and BS EN 1917 or plastic units or other units in equivalent material. REV.C
8. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. REV.C

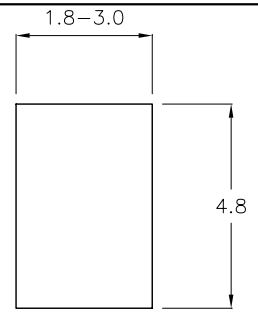
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS DETAIL OF SIGNAL DUCT CHAMBER REV.C	Drawing No. G26
		C	Nov 05		
		B	Nov 03		
		A	Aug 02		



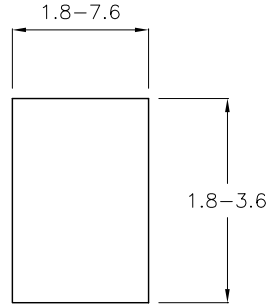
NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. C of C indicates centre of carriageway.
4. See HCD Drawing G5 for details of cross–cut of corners of loop slot.
5. Loop configurations shown on this drawing are for control of traffic signals.
6. Distances from stop lines are contained in MCE 0108 Siting of Inductive Loops for Vehicle Detecting Equipments at Permanent Road Traffic Signal Installations specification.
7. (REV.C) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS CHEVRON LOOPS	Drawing No.
		C	Nov 05		G27
		B	Nov 03		
		A	Aug 02		

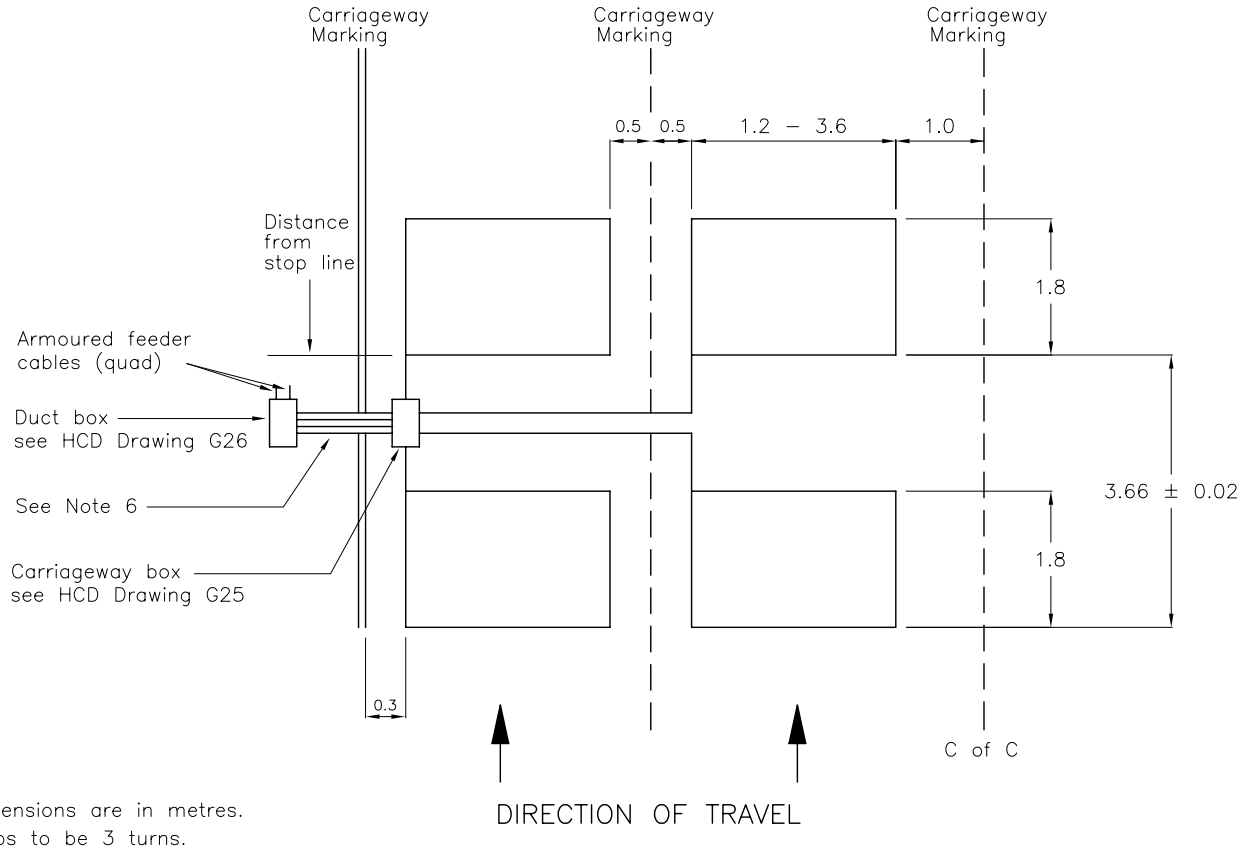


QUEUE LOOP



TURNING LOOP

DIRECTION OF TRAVEL

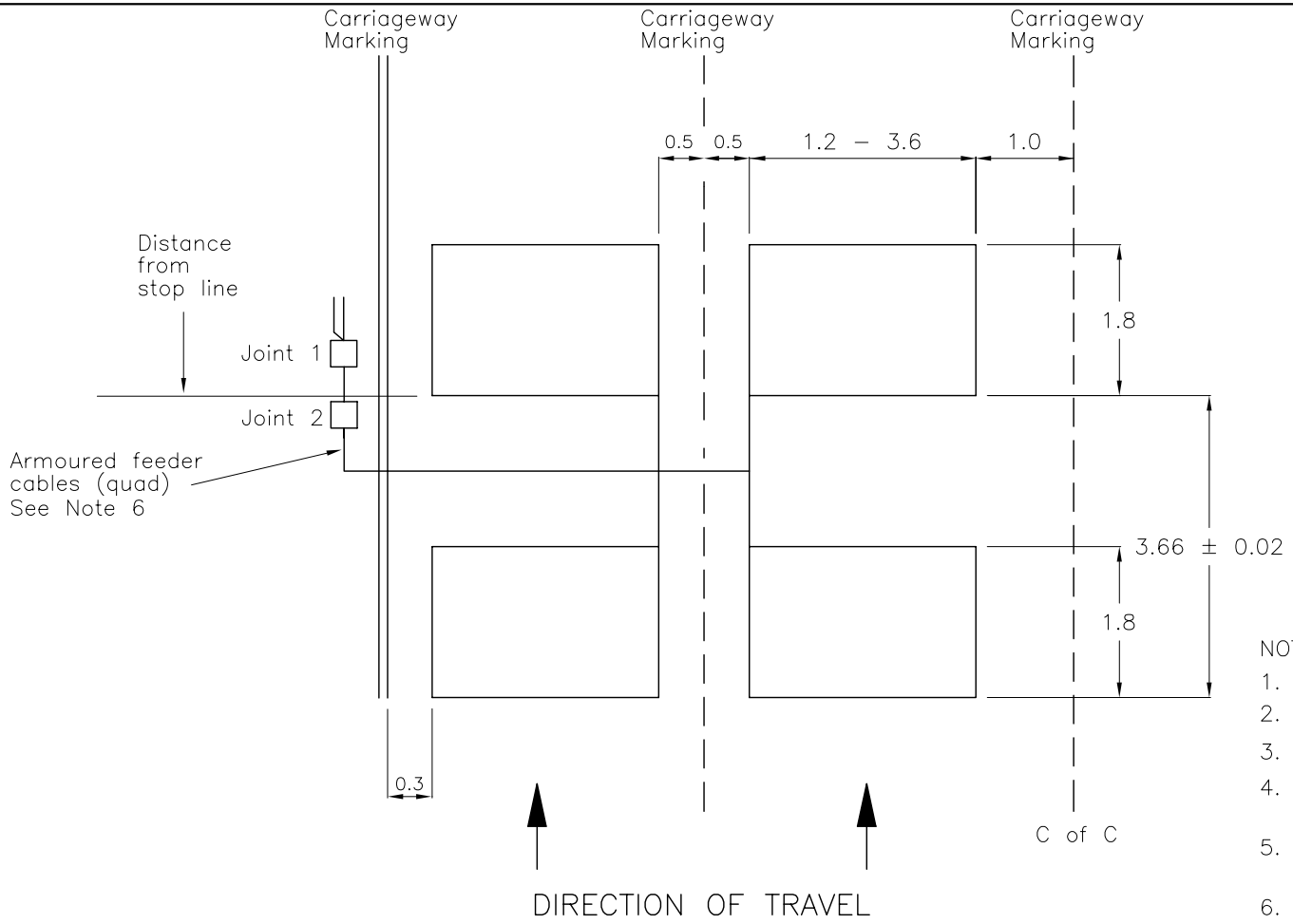


SPEED MEASURING LOOPS

NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. C of C indicates centre of carriageway.
4. Refer to detector manufacturer for maximum feeder length.
5. See HCD Drawing G5 for details of cross–cut of corners of loop slot.
6. Each pair of loops to be twisted.
7. Distances from stop lines are contained in MCE 0108 Siting of Inductive Loops for Vehicle Detecting Equipments at Permanent Road Traffic Signal Installations specification.
8. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org. (REV.C)

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS TURNING, QUEUE AND SPEED MEASURING LOOPS – SHEET 1	Drawing No.
		C	Nov 05		G28
		B	Nov 03		
		A	Aug 02		



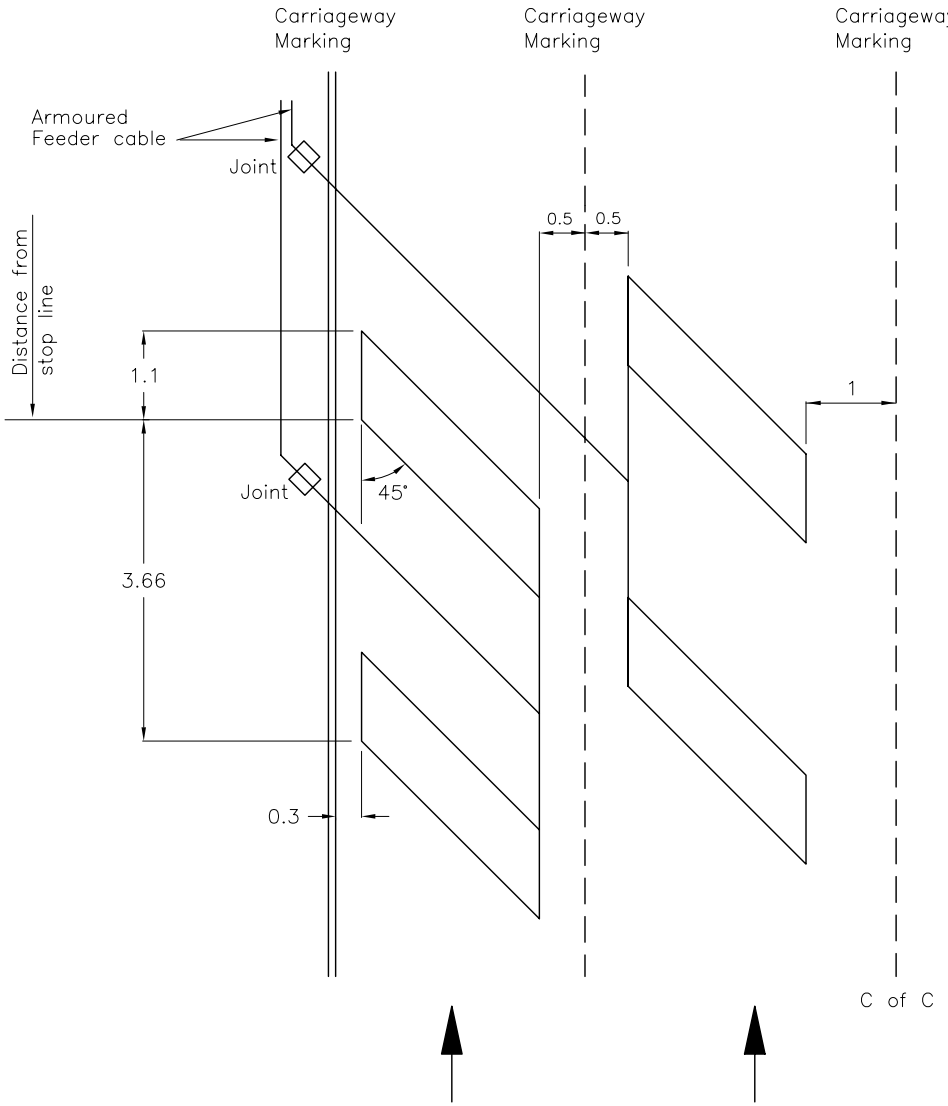
SPEED MEASURING LOOPS

NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. C of C indicates centre of carriageway.
4. Refer to detector manufacturer for maximum feeder length.
5. See HCD Drawing G5 for details of cross–cut of corners of loop slot.
6. Feeder cable 1 connected to loops in left hand lane. Feeder cable 2 connected to loops in right hand lane.
7. Distances from stop lines are contained in MCE 0108 Siting of Inductive Loops for Vehicle Detecting Equipments at Permanent Road Traffic Signal Installations specification.
8. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS SPEED MEASURING LOOPS – SHEET 2	Drawing No.
		D	Nov 05		G29
		C	Nov 03		
		B	Sept 03		
		A	Aug 02		

ROADS WITH REINFORCING MESH

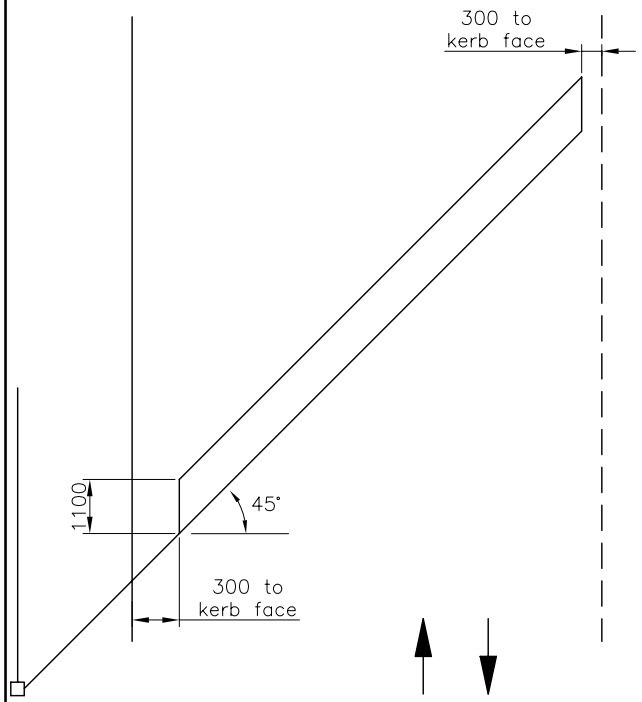


NOTES

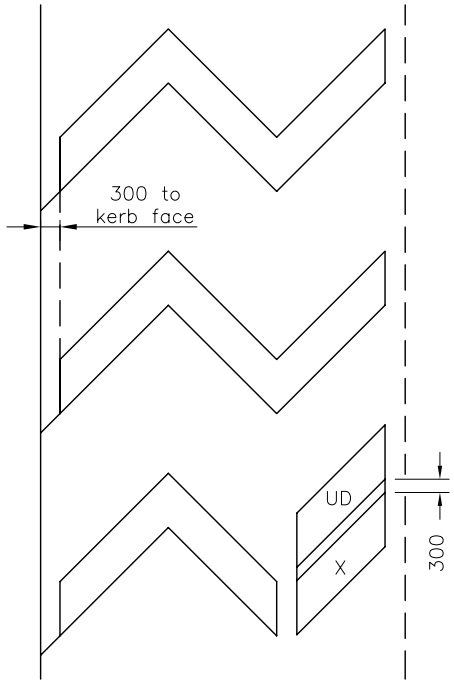
1. All dimensions are in metres.
2. All loops to be 3 turns.
3. C of C indicates centre of carriageway.
4. See HCD Drawing G5 for details of cross–cut of corners of loop slot.
5. Loop configurations shown on this drawing are for control of traffic signals.
6. Distances from stop lines are contained in MCE 0108 Siting of Inductive Loops for Vehicle Detecting Equipments at Permanent Road Traffic Signal Installations specification.
7. (REV.D) For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

DIRECTION OF TRAVEL

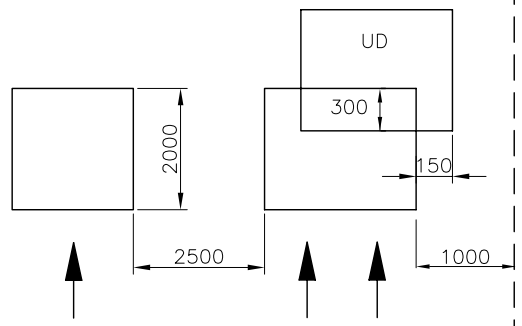
HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS SPEED MEASURING LOOPS – SHEET 3	Drawing No.
		D	Nov 05		G30
		C	Nov 03		
		B	Sept 03		
		A	Aug 02		



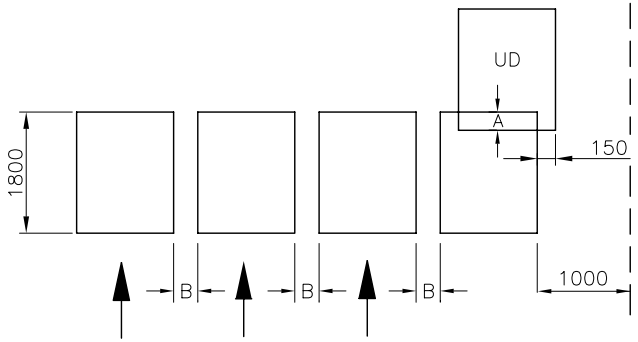
ALL RED LOOP(S)



UD loop overlaps X loop by 300 in direction of travel.



SCOOT LOOP DIMENSIONS



Dimension A = 270

Dimension B = Refer to Highways Agency specification MCE 0115

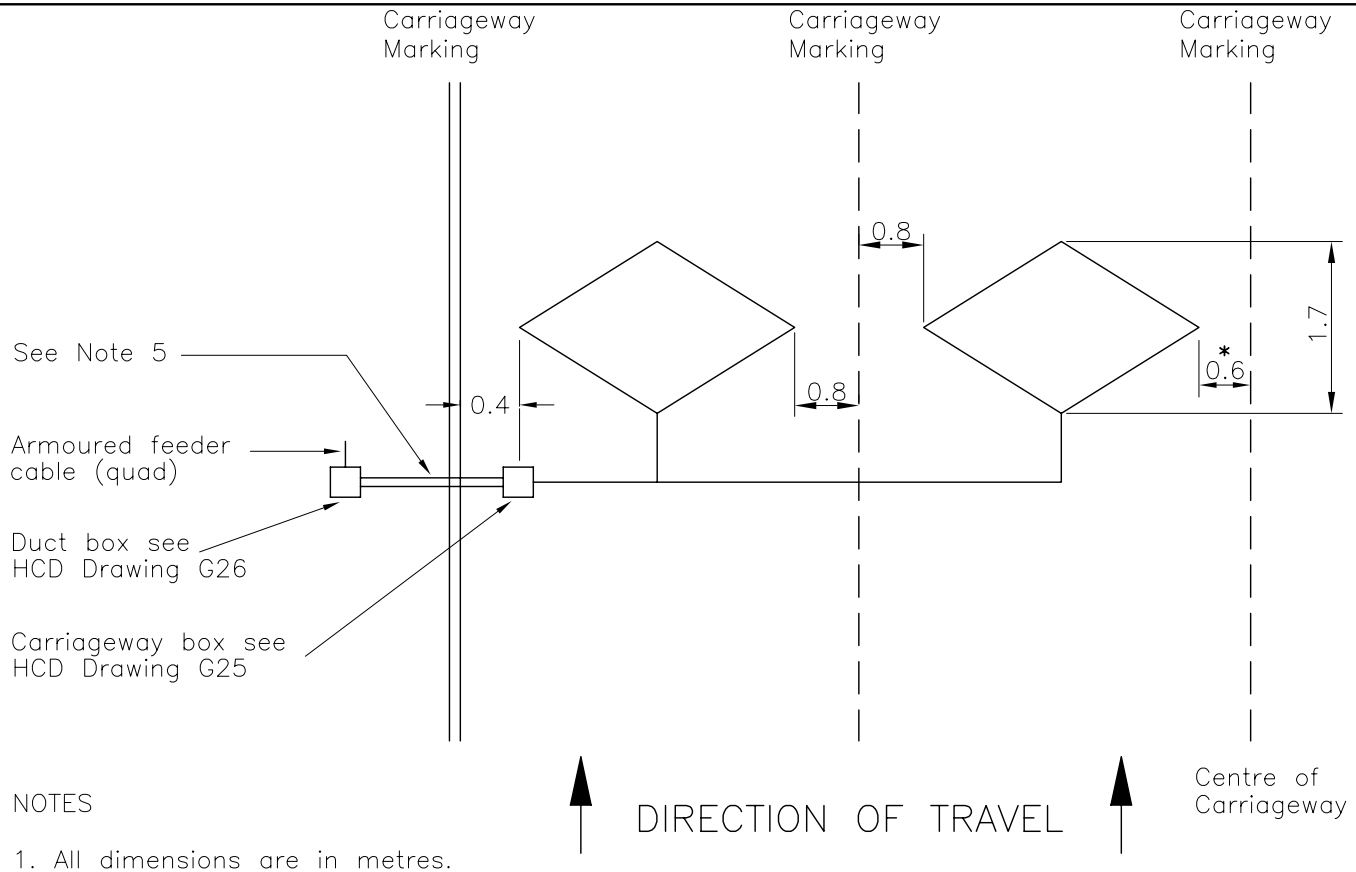
COUNT LOOP DIMENSIONS

NOTES

1. All dimensions are in millimetres.
2. All loops to be 3 turns.
3. Refer to detector manufacturer for maximum feeder length.
4. See HCD Drawing G5 for details of cross–cut of corners of loop slot.
5. Loop configurations shown on this drawing are for control of traffic signals.
6. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

REV.C

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS			LOOP (INDUCTIVE) ALL–PURPOSE ROADS TYPICAL LOOP CONFIGURATION WITH UD DIMENSIONS	Drawing No. G31
		C	Nov 05		
		B	Nov 03		
		A	Aug 02		
		Issue	Date		



NOTES

1. All dimensions are in metres.
2. All loops to be 3 turns.
3. * Denotes where there is a central reserve the dimension may be reduced to 0.4m.
4. See HCD Drawing G5 for details of cross–cut of slot.
5. Each pair of loop tails to be twisted together.
6. For the installation of detector loops on motorways and all purpose trunk roads refer to specification MCH 1540 available at www.tssplansregistry.org.

REV.C

HIGHWAY CONSTRUCTION DETAILS	LOOP DETECTORS	Issue	Date	LOOP (INDUCTIVE) ALL–PURPOSE ROADS MOVA LOOPS	Drawing No.
		C	Nov 05		G32
		B	Nov 03		
		A	Aug 02		