STANDARD PAVEMENT SUBSURFACE
DRAINAGE DETAILS

VOLUME 5 - RIGID PAVEMENT DETAILS

related drawings:
VOLUME 1 - DESIGN AND LOCATION
VOLUME 2 - GRANULAR PAVEMENT WITH BITUMINOUS SURFACING DETAILS
VOLUME 3 - FULL DEPTH ASPHALT PAVEMENT DETAILS
VOLUME 4 - ASPHALT OVER BOUND SUBBASE PAVEMENT DETAILS
VOLUME 6 - SUPPLEMENTARY MODEL DRAWINGS
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* DENOTES PRINCIPAL ROAD PAVEMENT AND GEOTECHNICAL ENGINEER
Concrete base may consist of
Plain (unreinforced) Concrete (PCP)
Continuously reinforced concrete (CRCP)
Jointed reinforced concrete (JRCP)
or steel fibre reinforced concrete (SFCP)

Debonding/7mm sprayed seal
(except under SFCP)

7mm sprayed seal

300mm (min)
Selected Material

Possible
Drainage Layer

Subbase (LCS)
Lean-mix
Concrete

Subgrade

NOT TO SCALE

DETAIL PTR

RIGID PAVEMENT STRUCTURE

NOTES

DESIGN:
1. LAYER THICKNESSES DETERMINED BY PAVEMENT DESIGN.
2. PAVEMENT SUBSURFACE DRAINS TO BE DESIGNED IN ACCORDANCE WITH THESE DRAWINGS
   AND RMS SPECIFICATIONS.
3. SELECTED MATERIAL (R44).

DRAINAGE LAYER:
1. DRAINAGE LAYER TO BE PROVIDED IN ROCK CUTTINGS AND WET SOIL CUTTINGS (R44).
2. WHERE DRAINAGE LAYER PROVIDED IN WET SOIL CUTTINGS THE SUBGRADE MAY REQUIRE
   STABILISATION TO REDUCE ITS MOISTURE SUSCEPTIBILITY.

SELECTED MATERIAL (R44).
**NOTES**

1. "G" DENOTES ALL NFC EDGE DRAINS UNLESS SHOWN OTHERWISE.
2. DETAILS OF WORK OTHER THAN SUBSURFACE DRAINAGE ARE DEPICTED THE SAME LINE AND LEVEL AS ADJACENT LEAN MIX CONCRETE SUBBASE.
3. TRENCH DRAIN DETAILS TO BE DESIGNED IN ACCORDANCE WITH TABLE 1 VOLUME 1.
4. REFER TO STANDARD CONCRETE PAVEMENT DRAWINGS FOR EXTENT OF GEOTEXTILE AS TYPICAL SITUATION ONLY AND ARE NOT APPROPRIATE FOR ALL PROJECTS.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS SHOWN OTHERWISE.

**GENERAL**

NARROW MEDIAN BETWEEN NORMAL CROSSFALL PAVEMENTS WITH DRAINAGE LAYER

DETAIL A02-R

**NOT TO SCALE**

TRENCH DRAIN AND DRAINAGE LAYER UNDER LOW PAVEMENT EDGE

DETAIL A04-R

**NOT TO SCALE**

**DRAWING INFORMATION**

ISSUE: REV 1

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STANDARD PAVEMENT SUBSURFACE DRAINAGE DETAILS

RIGID PAVEMENT DETAILS

STANDARD PTR DETAILS

09

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DRAWN TO SCALE: "B" NOT TO SCALE

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STANDARD PAVEMENT SUBSURFACE DRAINAGE DETAILS

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PLACE GEOTEXTILE AGAINST FACE OF BASE AND SUBBASE LAYERS TO PROVIDE SEPARATION FROM VERGE MATERIAL.

TRENCH DRAIN AND DRAINAGE LAYER, HIGH SO KERB (WHERE INTEGRAL KERB IS USED, USE DETAIL A16-R)

DETAIL A05-R

NOT TO SCALE

PLACE GEOTEXTILE AGAINST FACE OF BASE AND SUBBASE LAYERS TO PROVIDE SEPARATION FROM VERGE MATERIAL.

HIGH PAVEMENT EDGE NO DRAINAGE LAYER (POSSIBLE TRENCH DRAIN)

DETAIL A07-R TRENCH DRAIN

NOT TO SCALE

EDGE AND TRENCH DRAIN, LOW SO KERB * NO DRAINAGE LAYER (WHERE INTEGRAL KERB IS USED, USE DETAIL A17-R)

DETAIL A06-R

NOT TO SCALE

1. * DENOTES ALL NFC EDGE DRAINS UNDER KERBS MUST BE FORMED TO THE SAME LINE AND LEVEL AS ADJACENT LEAN MIX CONCRETE SUBBASE.
2. DETAILS OF WORK OTHER THAN SUBSURFACE DRAINAGE ARE DEPICTED AS TYPICAL SITUATION ONLY AND ARE NOT APPROPRIATE FOR ALL PROJECTS.
3. REFER TO STANDARD CONCRETE PAVEMENT DRAWINGS FOR EXTENT OF GEOTEXTILE PLACED AGAINST FACE OF BASE CONCRETE. GEOTEXTILE IS NOT TO BE DAYLIGHTED.
4. TRENCH DRAIN DETAILS TO BE DESIGNED IN ACCORDANCE WITH TABLE 1 VOLUME 1.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS SHOWN OTHERWISE.

NOTES
5. TRENCH DRAIN DETAILS TO BE DESIGNED IN ACCORDANCE WITH TABLE 1 VOLUME 1.

4. PLACED AGAINST FACE OF BASE CONCRETE, GEOTEXTILE IS NOT TO BE DAYLIGHTED.

REFER TO STANDARD CONCRETE PAVEMENT DRAWINGS FOR EXTENT OF GEOTEXTILE

3. AS TYPICAL SITUATION ONLY AND ARE NOT APPROPRIATE FOR ALL PROJECTS.

DETAILS OF WORK OTHER THAN SUBSURFACE DRAINAGE ARE DEPICTED

2. THE SAME LINE AND LEVEL AS ADJACENT LEAN MIX CONCRETE SUBBASE.

1. EDGES AND TRENCH DRAIN, LOW PAVEMENT EDGE NO DRAINAGE LAYER

DETAILED A08-R

NOT TO SCALE

EDGE DRAIN UNDER LOW SO KERB*, WITH SAFETY BARRIER NO DRAINAGE LAYER

WHERE INTEGRAL KERB IS USED, USE DETAIL A20-R

DETAILED A09-R

NOT TO SCALE

NARROW MEDIAN BETWEEN NORMAL CROSSFALL PAVEMENTS NO DRAINAGE LAYER

DETAILED A10-R

NOT TO SCALE

EDGE AND TRENCH DRAIN UNDER LOW SA KERB*, NO DRAINAGE LAYER

WHERE INTEGRAL KERB IS USED, USE DETAIL A18-R

DETAILED A11-R

NOT TO SCALE

NOTES

1. * DENOTES ALL NFC EDGE DRAINS UNDER KERBS MUST BE FORMED TO
THE SAME LINE AND LEVEL AS ADJACENT LEAN MIX CONCRETE SUBBASE.

2. DETAILS OF WORK OTHER THAN SUBSURFACE DRAINAGE ARE DEPICTED
AS TYPICAL SITUATION ONLY AND ARE NOT APPROPRIATE FOR ALL PROJECTS.

3. REFER TO STANDARD CONCRETE PAVEMENT DRAWINGS FOR EXIST OF GEOTEXTILE
PLACED AGAINST FACE OF BASE CONCRETE. GEOTEXTILE IS NOT TO BE DAYLIGHTED.

4. TRENCH DRAIN DETAILS TO BE DESIGNED IN ACCORDANCE WITH TABLE 1 VOLUME 1.

5. ALL DIMENSIONS IN MILLIMETRES UNLESS SHOWN OTHERWISE.

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5

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5

NO OF SHEETS
09
NOTES

1. * Denotes all NFC edge drains under kerbs must be formed to the same line and level as adjacent lean mix concrete subbase.
2. Details of work other than suburface drainage are depicted as typical situation only and are not appropriate for all projects.
3. Refer to standard concrete pavement drawings for extent of geotextile placed against face of base concrete. Geotextile is not to be daylighted.
4. Trench drain details to be designed in accordance with Table 1 Volume 1.
5. All dimensions in millimetres unless shown otherwise.

1. The base concrete at the edge prior to pouring the base concrete, geotextile must be secured.
2. Details of work other than subsurface drainage are depicted as typical situation only and are not appropriate for all projects.
3. Refer to standard concrete pavement drawings for extent of geotextile placed against face of base concrete. Geotextile is not to be daylighted.
4. Trench drain details to be designed in accordance with Table 1 Volume 1.
5. All dimensions in millimetres unless shown otherwise.

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1. The base concrete at the edge prior to pouring the base concrete, geotextile must be secured.
2. Details of work other than subsurface drainage are depicted as typical situation only and are not appropriate for all projects.
3. Refer to standard concrete pavement drawings for extent of geotextile placed against face of base concrete. Geotextile is not to be daylighted.
4. Trench drain details to be designed in accordance with Table 1 Volume 1.
5. All dimensions in millimetres unless shown otherwise.
4. Trench drain details to be designed in accordance with Table 1 Volume 1.

3. Placed against face of base concrete, geotextile is not to be daylighted.

Refer to standard concrete pavement drawings for extent of geotextile.

2. As typical situation only and are not appropriate for all projects.

Details of work other than subsurface drainage are depicted.

1. Standard pavement subsurface drainage details.
NOTES

1. DETAILS OF WORK OTHER THAN SUBSURFACE DRAINAGE ARE DEPICTED AS TYPICAL SITUATION ONLY AND ARE NOT APPROPRIATE FOR ALL PROJECTS.

2. REFER TO STANDARD CONCRETE PAVEMENT DRAWINGS FOR EXTENT OF GEOTEXTILE PLACED AGAINST FACES OF BASE CONCRETE. GEOTEXTILE IS NOT TO BE DAYLIGHTED.

3. TRENCH DRAIN DETAILS TO BE DESIGNED IN ACCORDANCE WITH TABLE 1 VOLUME 1.

4. ALL DIMENSIONS IN MILLIMETRES UNLESS SHOWN OTHERWISE.

DETAIL A20-R

EDGE DRAIN, LOW INTEGRAL SO KERBS WITH SAFETY BARRIER NO DRAINAGE LAYER

NOT TO SCALE