Vehicle Crossing Infrastructure Index

SED_NO	Title
VX0000	Vehicle Crossing Index
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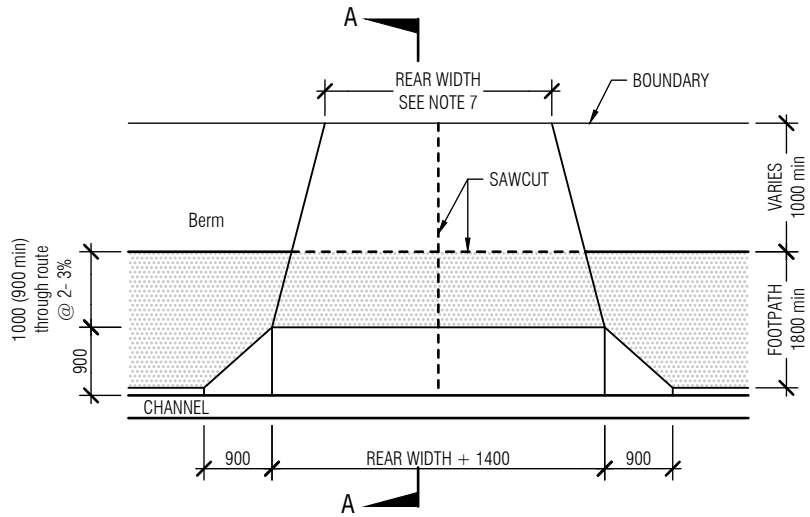
VX0102	Residential Vehicle Crossing (Sheet 2 of 4)
VX0103	Residential Vehicle Crossing (Sheet 3 of 4)
VX0104	Residential Vehicle Crossing (Sheet 4 of 4)
VX0105	Typical driveway crossing through a swale
VX0201	Commercial Vehicle Crossing (Sheet 1 of 4)
VX0202	Commercial Vehicle Crossing (Sheet 2 of 4)
VX0203	Commercial Vehicle Crossing (Sheet 3 of 4)
VX0204	Commercial Vehicle Crossing (Sheet 4 of 4)
VX0205	Typical commercial driveway crossing through a swale
VX0301	Rural Vehicle Crossing
VX0302	Rural Vehicle Crossing (Zone Speed=50km/hr)
VX0303	Rural Vehicle Crossing (Zone Speed > 60km/hr)

VEHICLE CROSSING FOOTPATH NEXT TO KERB

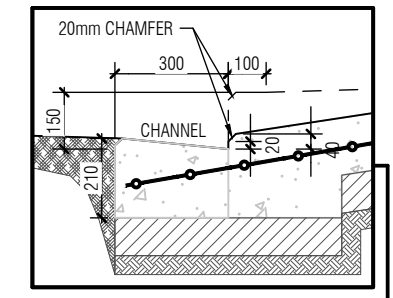
VEHICLE CROSSING FOOTPATH SEPARATED FROM KERB

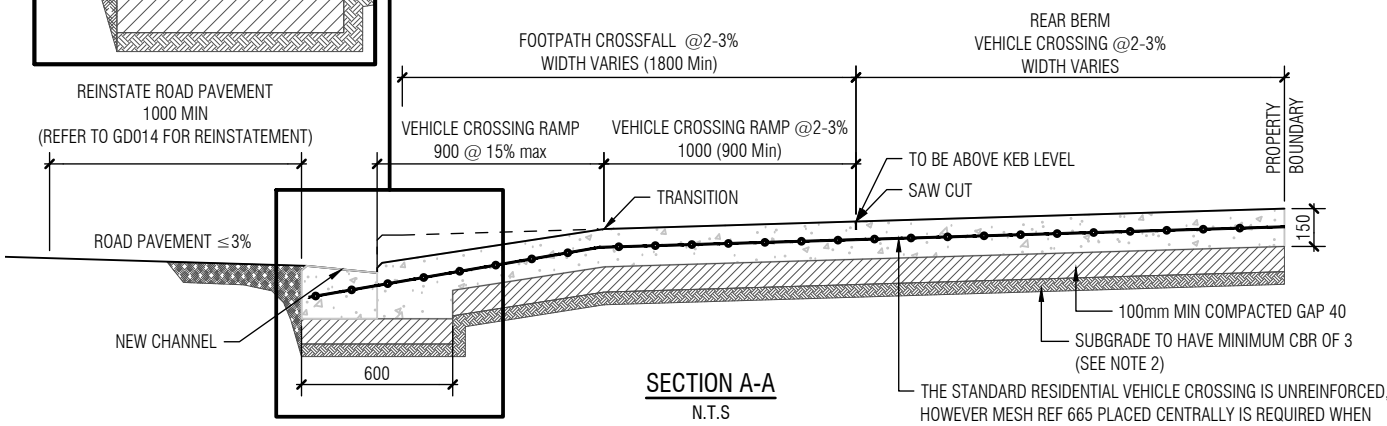
VEHICLE CROSSING WITH FOOTPATH <1.8m

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING
FOOTPATH NEXT TO KERB
N.T.S





SECTION A-A
N.T.S

THE STANDARD RESIDENTIAL VEHICLE CROSSING IS UNREINFORCED, HOWEVER MESH REF 665 PLACED CENTRALLY IS REQUIRED WHEN JOINING TO MORE THAN 4 DWELLINGS

Notes:

1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation.
6. Construct in same material and finish as surrounding footpath.
7. Rear Width to be as permitted under Auckland unitary Plan;
   2750-3000 - Single vehicle crossing
   5500-6000 - Two-Way Shared Access
   3000-3500 - One-Way Shared Access

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TDM TECHNICAL STANDARDS

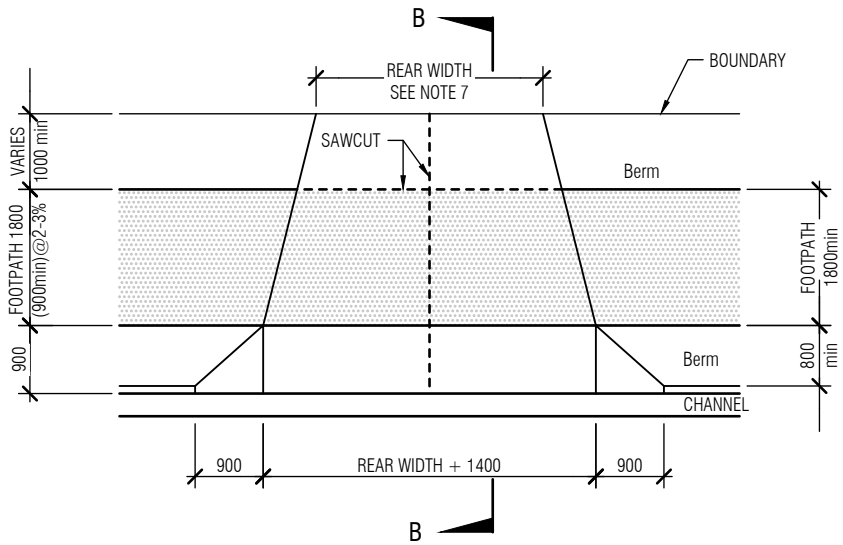
Residential Vehicle Crossing (Sheet 2 of 4)

Date: 20/05/2021

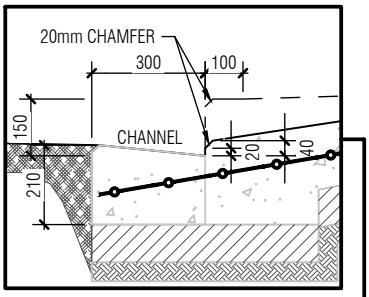
SED No. VX0102

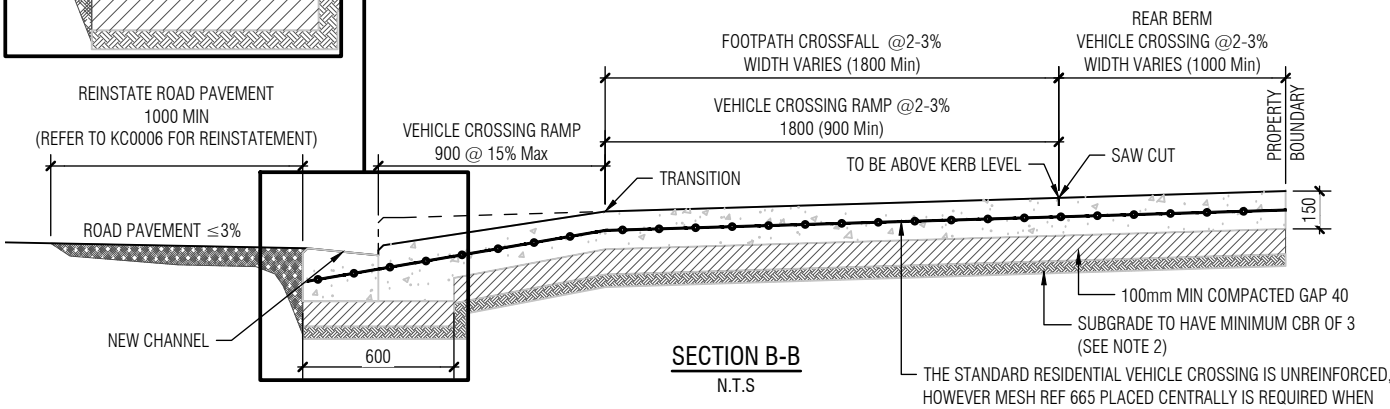
Version B

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING
FOOTPATH SEPARATED FROM KERB
N.T.S





SECTION B-B
N.T.S

Notes:

1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation.
6. Construct in same material and finish as surrounding footpath.
7. Rear Width to be as permitted under Auckland unitary Plan;
   2750-3000 - Single vehicle crossing
   5500-6000 - Two-Way Shared Access
   3000-3500 - One-Way Shared Access

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TDM TECHNICAL STANDARDS

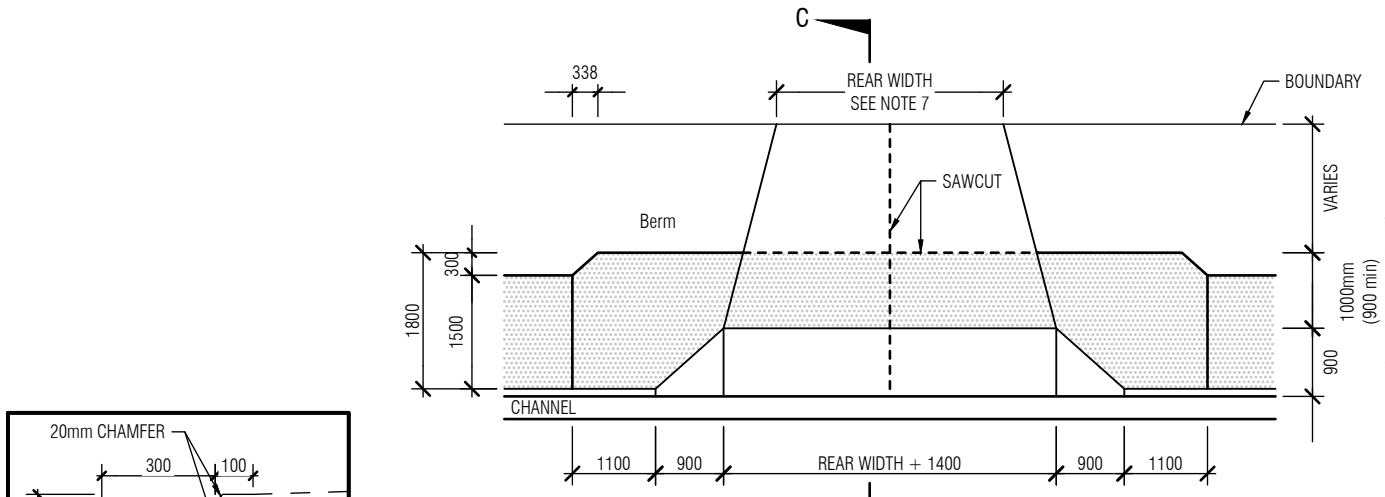
Residential Vehicle Crossing (Sheet 3 of 4)

Date: 20/05/2021

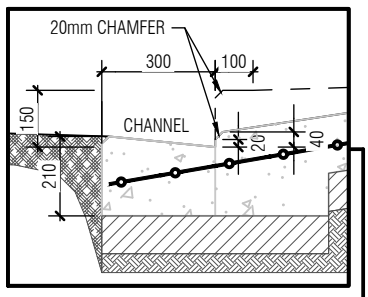
SED No. VX0103

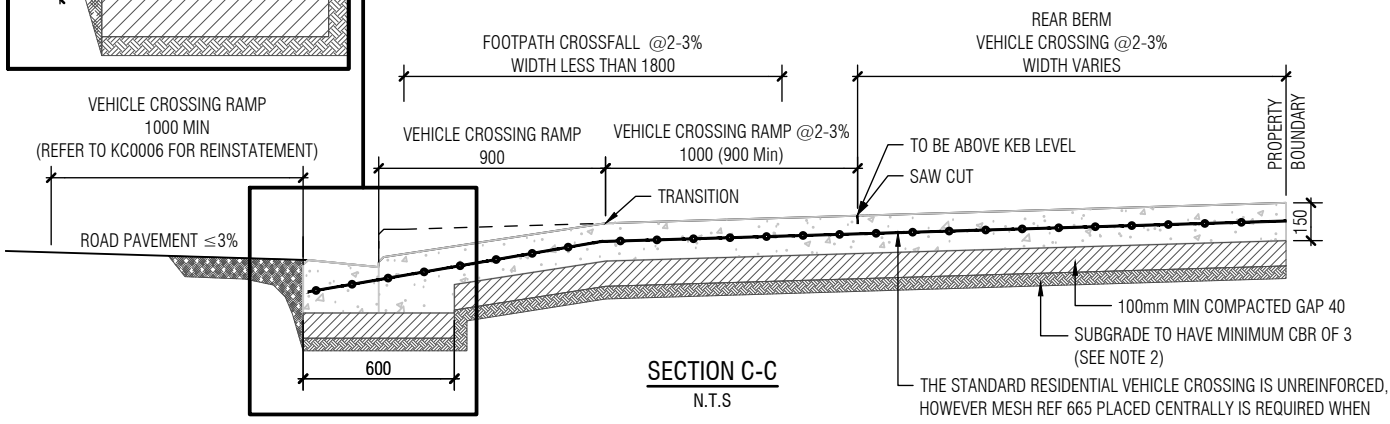
Version B

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING
WITH FOOTPATH <1.8m
N.T.S





SECTION C-C
N.T.S

Notes:

1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation..
6. Construct in same material and finish as surrounding footpath.
7. Rear Width to be as permitted under Auckland unitary Plan;
   2750-3000 - Single vehicle crossing
   5500-6000 - Two-Way Shared Access
   3000-3500 - One-Way Shared Access

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TDM TECHNICAL STANDARDS

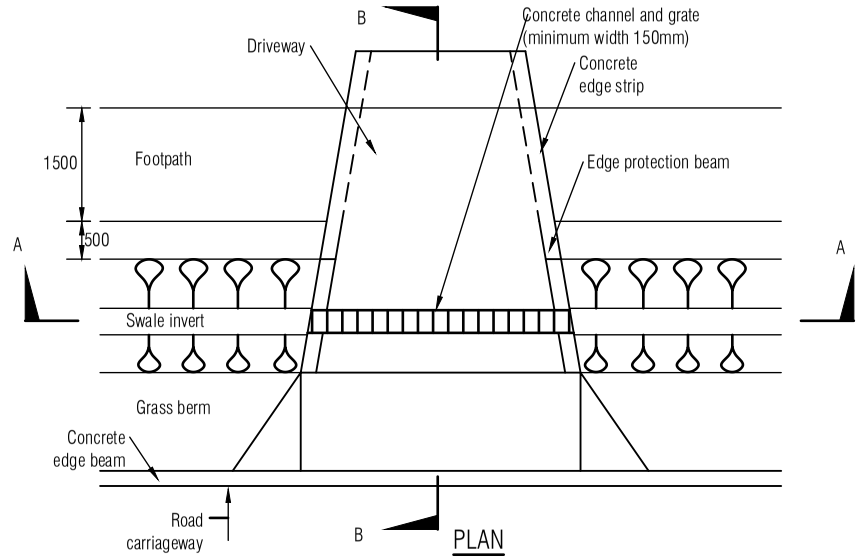
Residential Vehicle Crossing (Sheet 4 of 4)

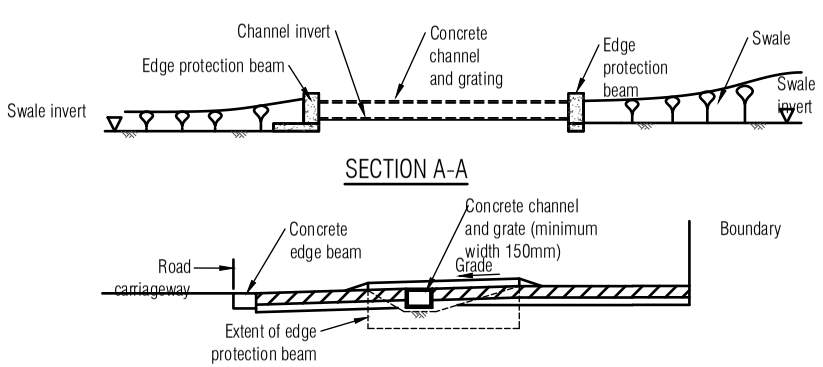
Date: 20/05/2021

SED No. VX0104

Version B

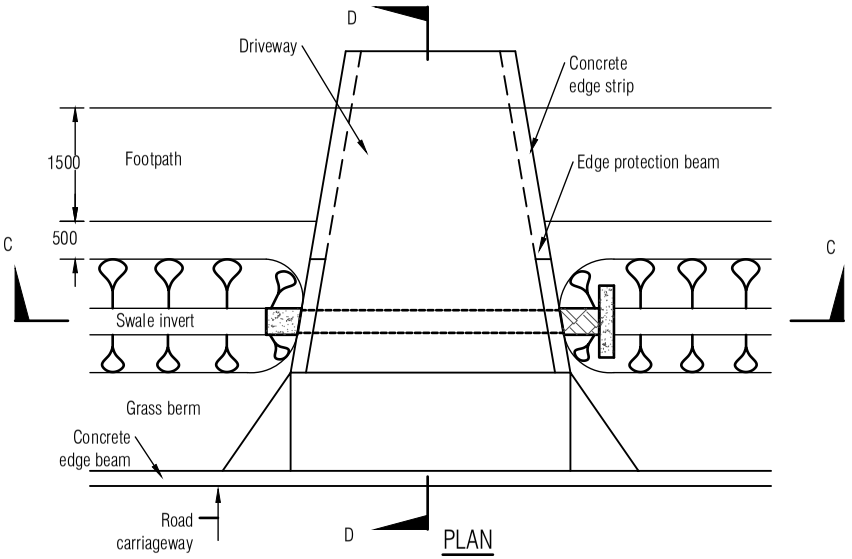
Note: this drawing is for indicative purpose only and use only as a guide. Site specific designs will be required.

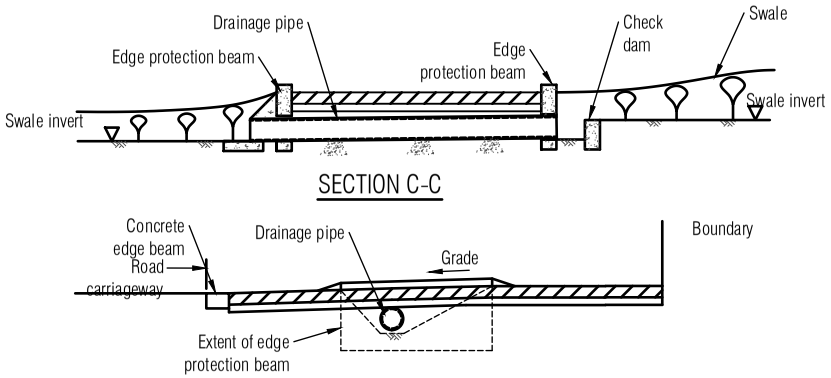




SECTION B-B

DRIVEWAY CROSSING USING GRATED CHANNEL





SECTION D-D

DRIVEWAY CROSSING USING DRAINAGE PIPE

VX0105

Transport Design Manual | Standard Engineering Details

APPROVED ENGINEER

TDM TECHNICAL STANDARDS

Typical driveway crossing through a swale

SED No. **VX0105**

Version **A**

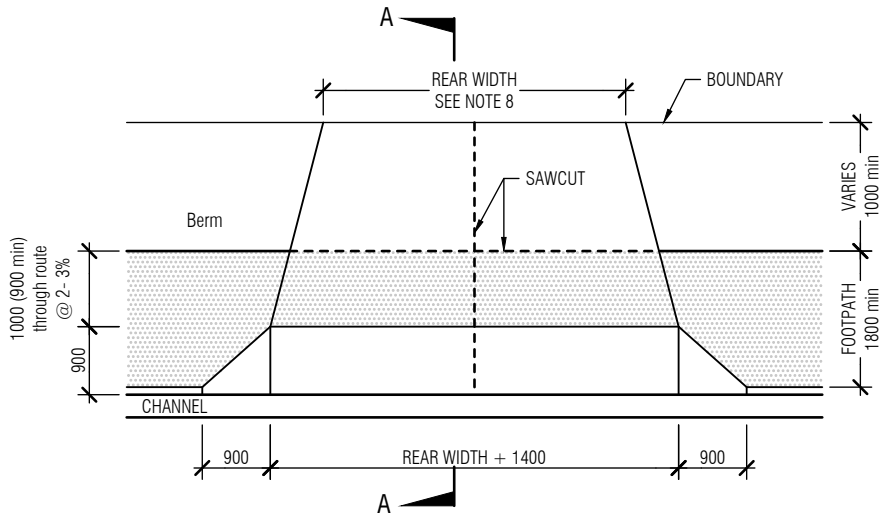
Date: 20/05/2021

VEHICLE CROSSING FOOTPATH NEXT TO KERB

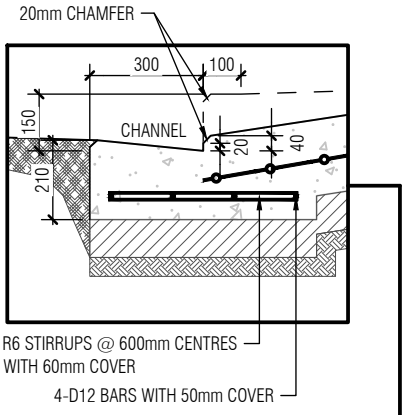
VEHICLE CROSSING FOOTPATH SEPARATED FROM KERB

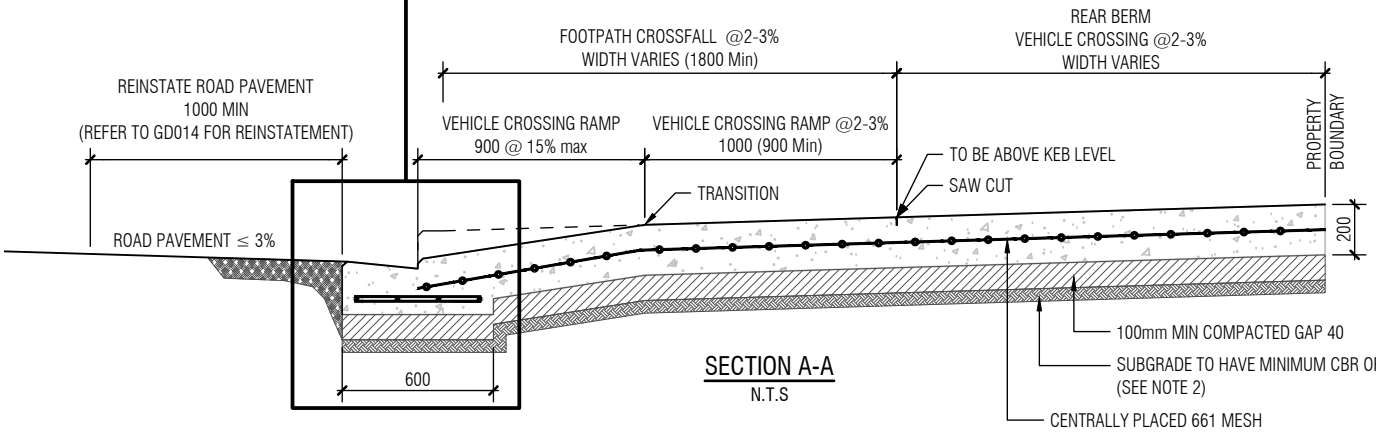
VEHICLE CROSSING WITH FOOTPATH <1.8m

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING
FOOTPATH NEXT TO KERB
N.T.S





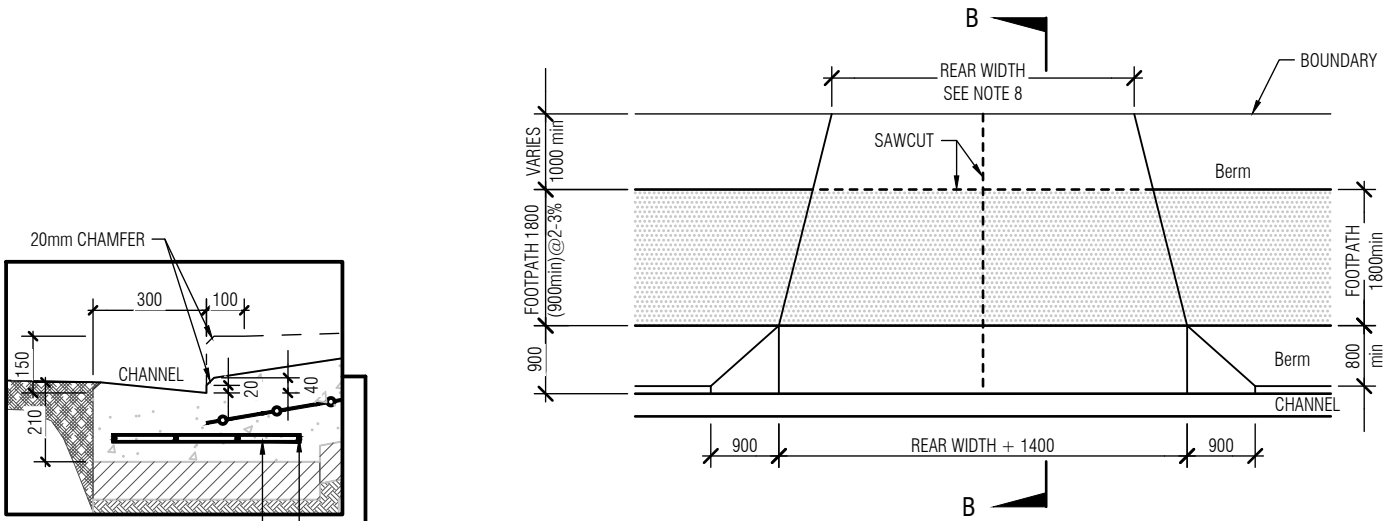
SECTION A-A
N.T.S

Notes:

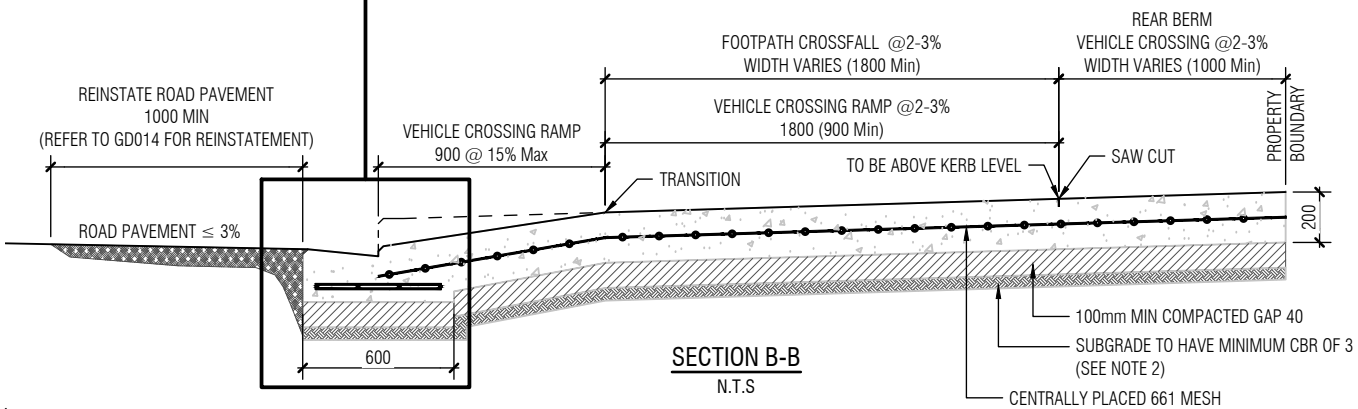
1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation.
6. Construct in same material and finish as surrounding footpath.
7. Width of vehicle crossing to be designed by using tracking curves for intended large heavy vehicles.
8. Rear Width as permitted under Auckland Unitary Plan;
   COMMERCIAL USE;
   - 3700-4000 - Single vehicle crossing
   - 6000-7000 - Double vehicle crossing

   RESIDENTIAL USE;
   - 2750-3000 - Single vehicle crossing
   - 5500-6000 - Two-Way Shared Access
   - 3000-3500 - One-Way Shared Access

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING-FOOTPATH
SEPARATED FROM KERB
N.T.S



SECTION B-B
N.T.S

Notes:

1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation.
6. Construct in same material and finish as surrounding footpath.
7. Width of vehicle crossing to be designed by using tracking curves for intended large heavy vehicles.
8. Rear Width as permitted under Auckland Unitary Plan;
   COMMERCIAL USE;
   3700-4000 - Single vehicle crossing
   6000-7000 - Double vehicle crossing
   RESIDENTIAL USE;
   2750-3000 - Single vehicle crossing
   5500-6000 - Two-Way Shared Access
   3000-3500 - One-Way Shared Access

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TDM TECHNICAL STANDARDS

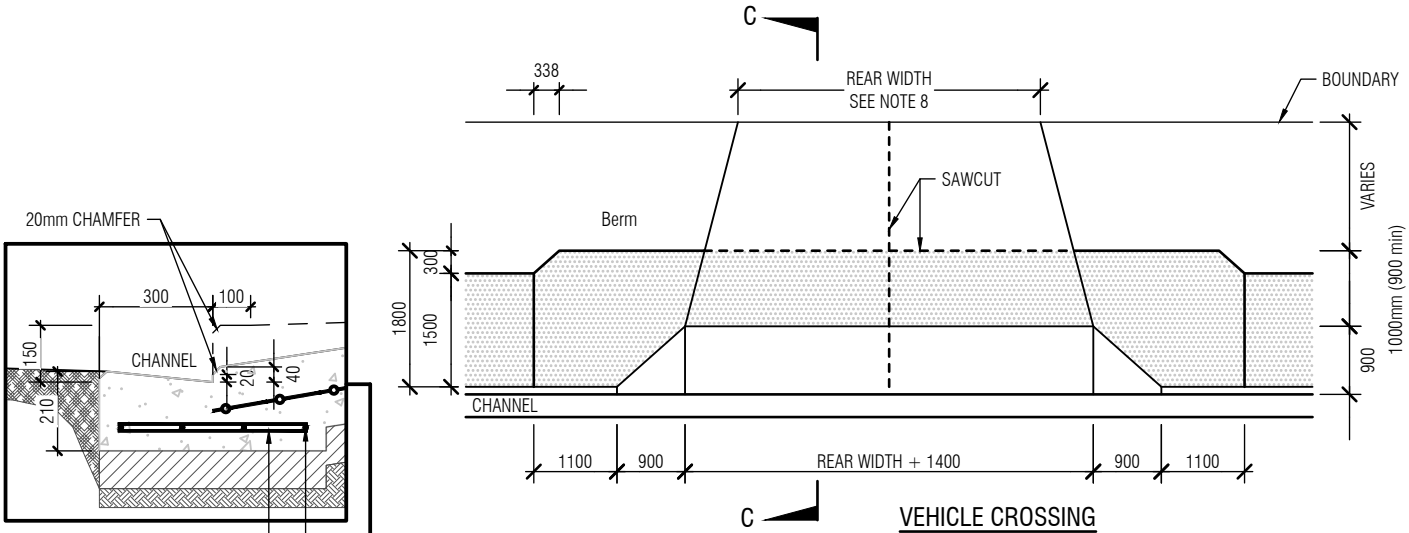
Commercial Vehicle Crossing (Sheet 3 of 4)

Date: 20/05/2021

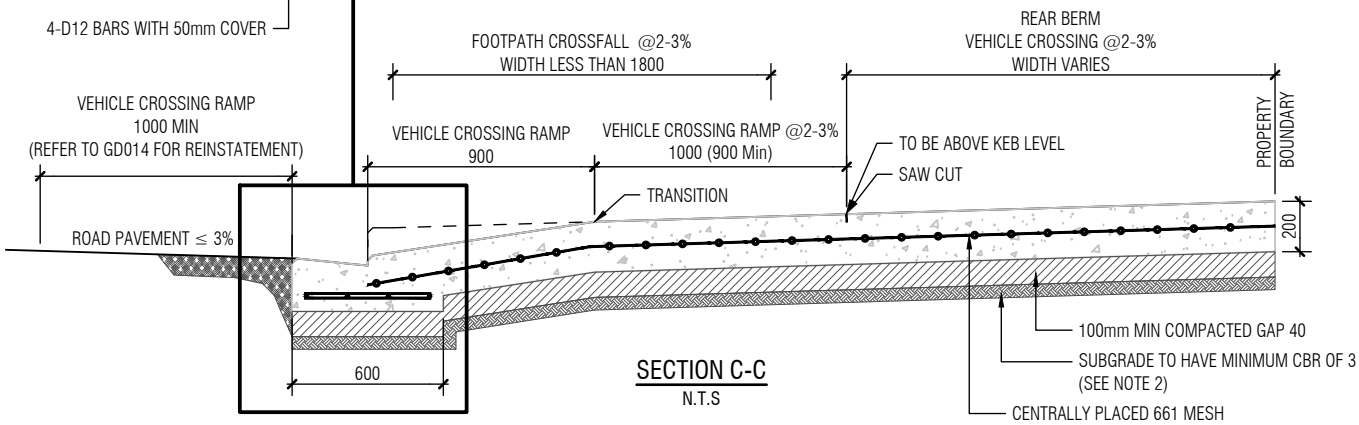
SED No. VX0203

Version A

PERSPECTIVE VIEW
N.T.S



VEHICLE CROSSING
WITH FOOTPATH <1.8m
N.T.S



SECTION C-C
N.T.S

Notes:

1. All dimensions are in millimetres unless noted otherwise.
2. If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
3. All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide.
4. Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
5. Any existing infrastructure within the crossing may require specific design approval for relocation.
6. Construct in same material and finish as surrounding footpath.
7. Width of vehicle crossing to be designed by using tracking curves for intended large heavy vehicles.
8. Rear Width as permitted under Auckland Unitary Plan;
   COMMERCIAL USE;
   - 3700-4000 - Single vehicle crossing
   - 6000-7000 - Double vehicle crossing

   RESIDENTIAL USE;
   - 2750-3000 - Single vehicle crossing
   - 5500-6000 - Two-Way Shared Access
   - 3000-3500 - One-Way Shared Access

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TDM TECHNICAL STANDARDS

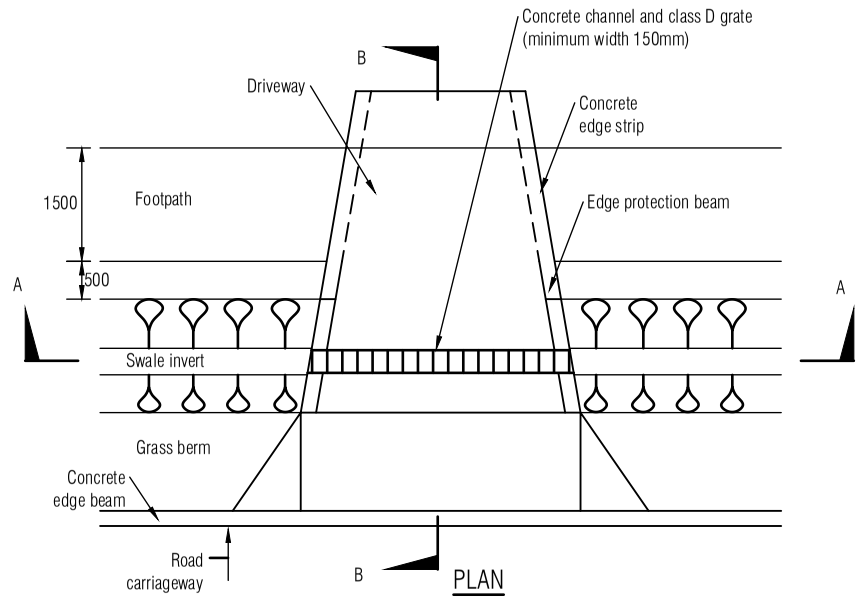
Commercial Vehicle Crossing (Sheet 4 of 4)

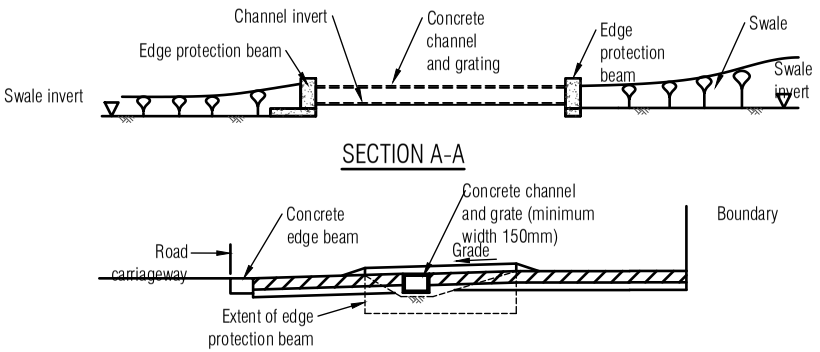
Date: 20/05/2021

SED No. VX0204

Version A

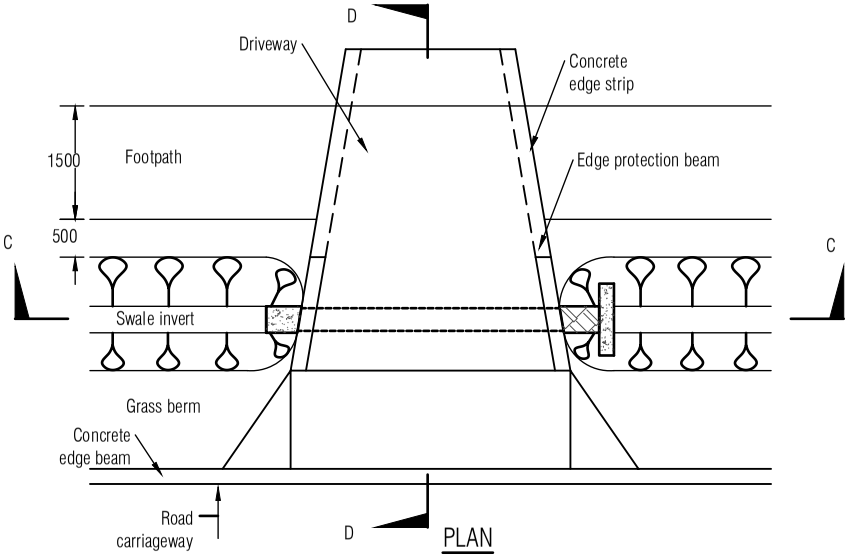
Note: this drawing is for indicative purpose only and use only as a guide. Site specific designs will be required.

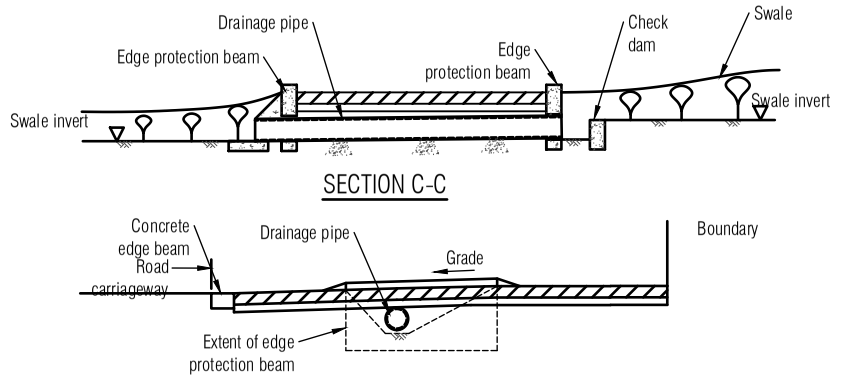




SECTION B-B

DRIVEWAY CROSSING USING GRATED CHANNEL





SECTION D-D

DRIVEWAY CROSSING USING DRAINAGE PIPE

TDM TECHNICAL STANDARDS

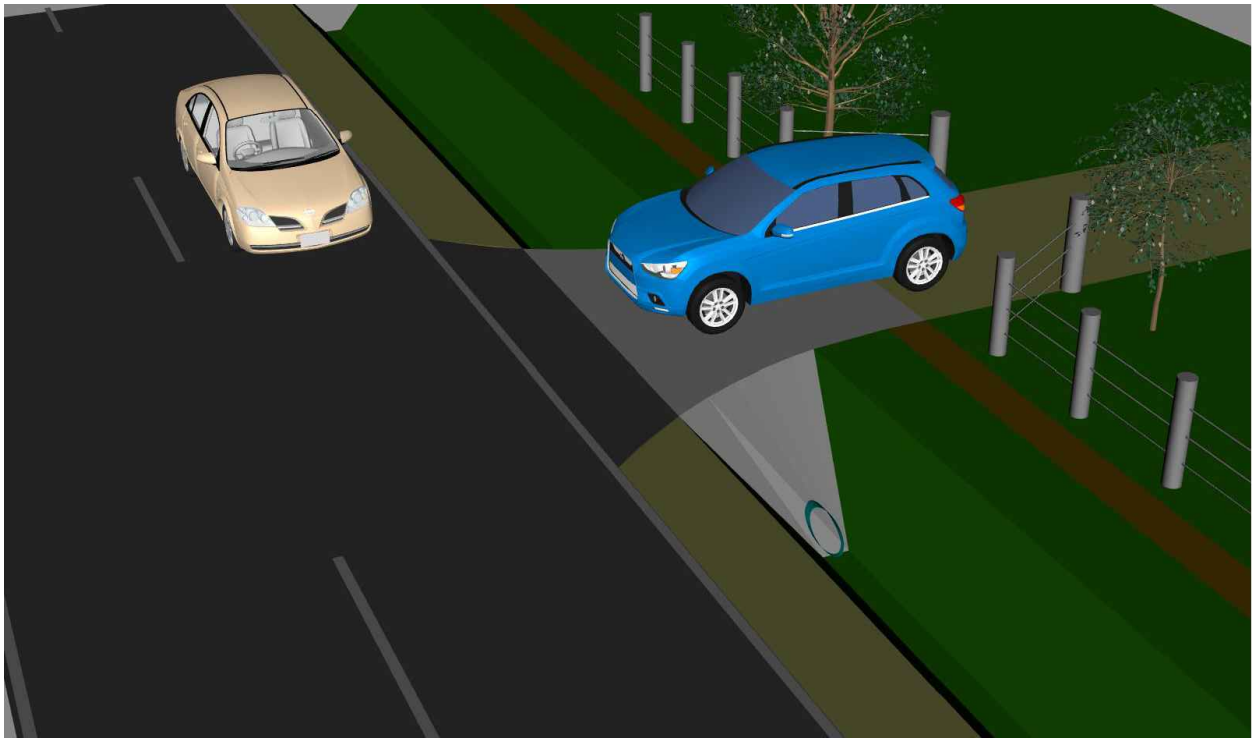
Typical commercial driveway crossing through a swale

SED No. VX0205

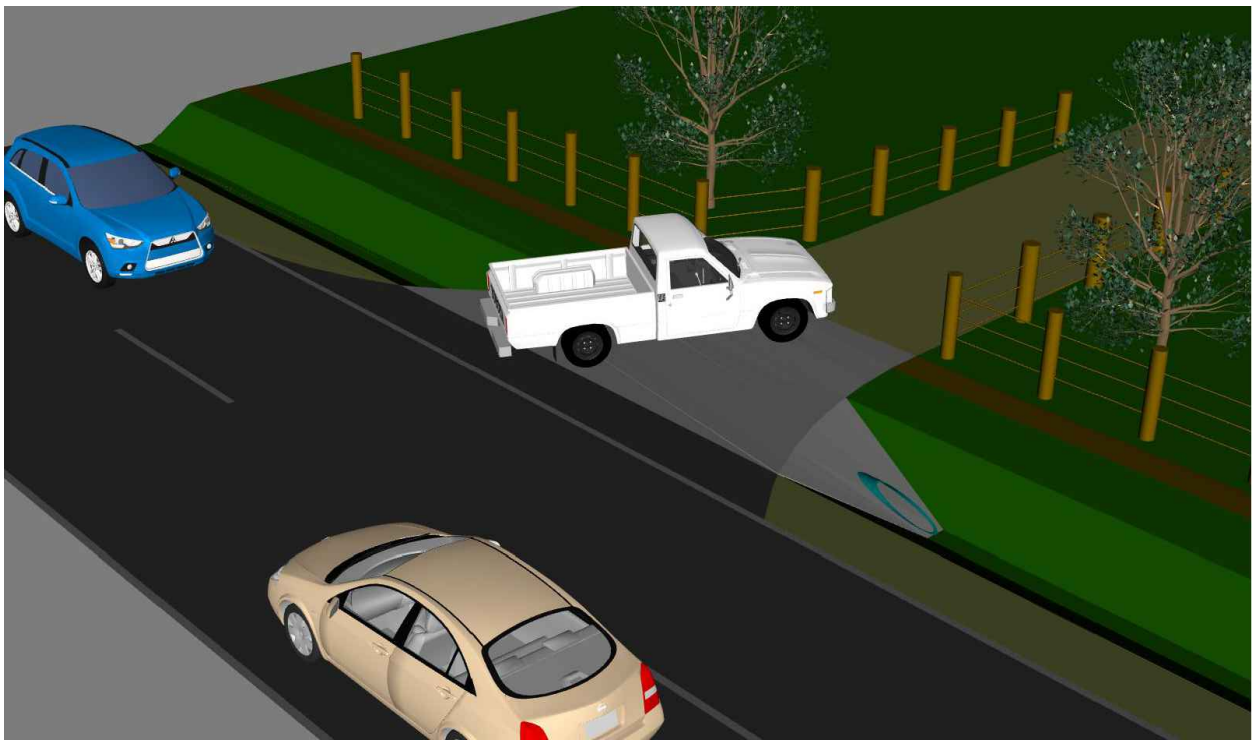
Version A

Date: 20/05/2021

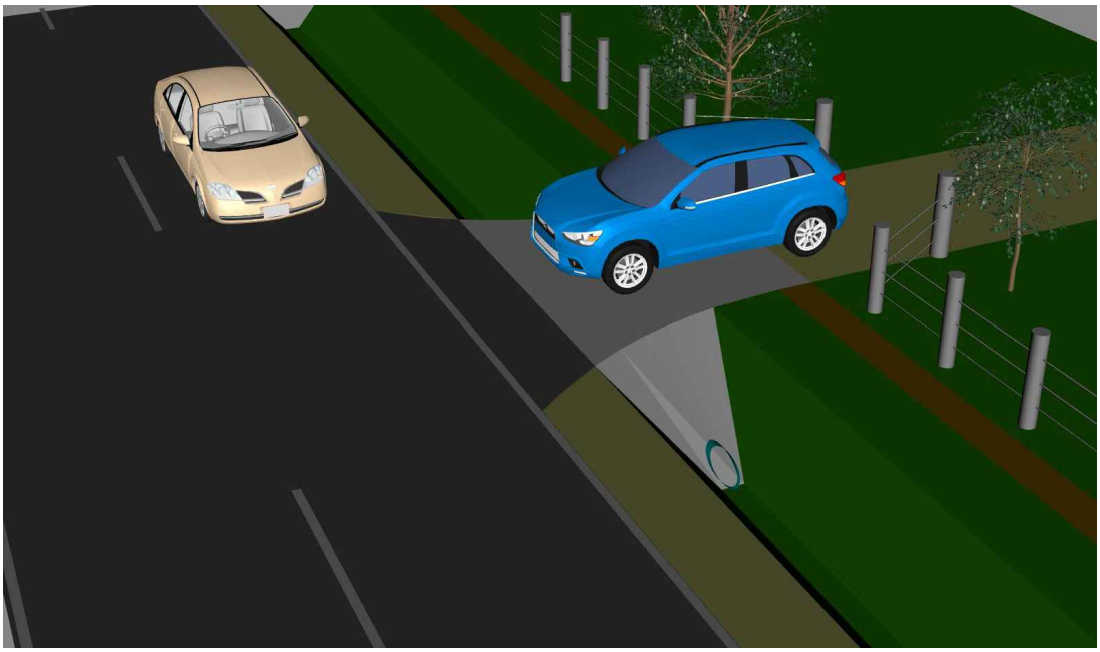
VX0205



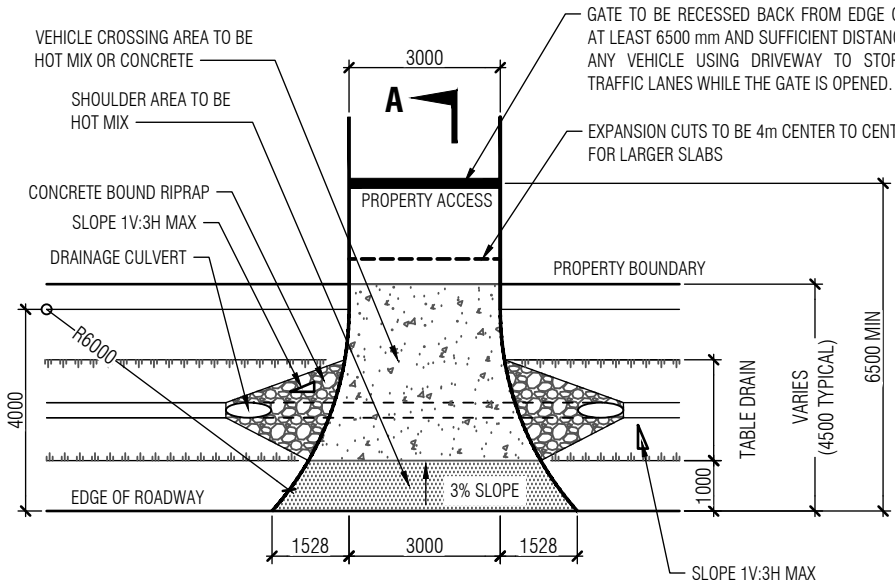
RURAL VEHICLE CROSSING (ZONE SPEED=50km/hr)

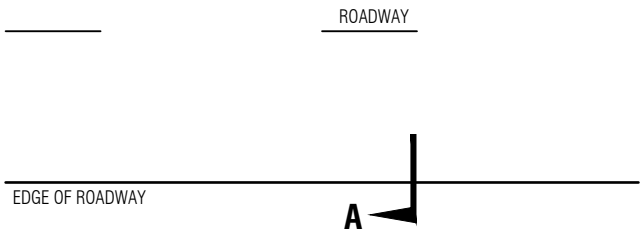


RURAL VEHICLE CROSSING (ZONE SPEED > 60km/hr)

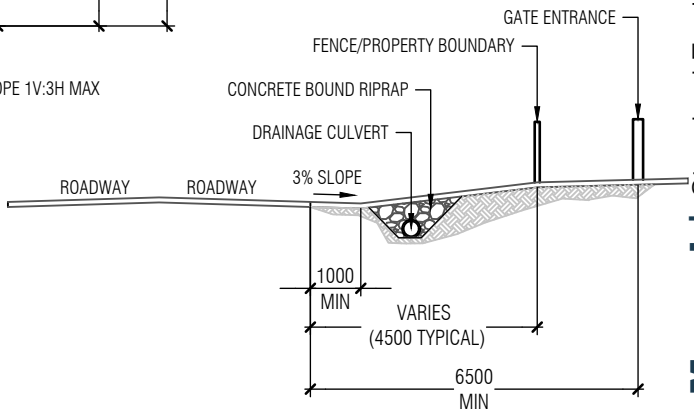


3D VIEW
N.T.S





VEHICLE CROSSING PLAN
N.T.S



SECTION A-A
N.T.S

NOTES:

1. All dimensions are in millimeters unless noted otherwise
2. The radius of 6.0m may increase to a maximum width of 9.0m if needed to accommodate the tracking path of a large heavy vehicle.
3. The 6.5m minimum gate distance may increase as needed for length of large vehicles frequently using access.
4. Drainage culvert ≥ 300mm diameter is required in most cases.
5. Pavement design to be approved by AT for use other than single residential life style lot.
6. Table drain may need to be deepened and diverted away from road to install culvert
7. Whole driveway in the private property to be soild, either concrete or hotmix, to avoid tracking of materials, detritus, metal etc on to the public road.
8. Larger Slabs to have expansion cuts 4m center to center

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TDM TECHNICAL STANDARDS

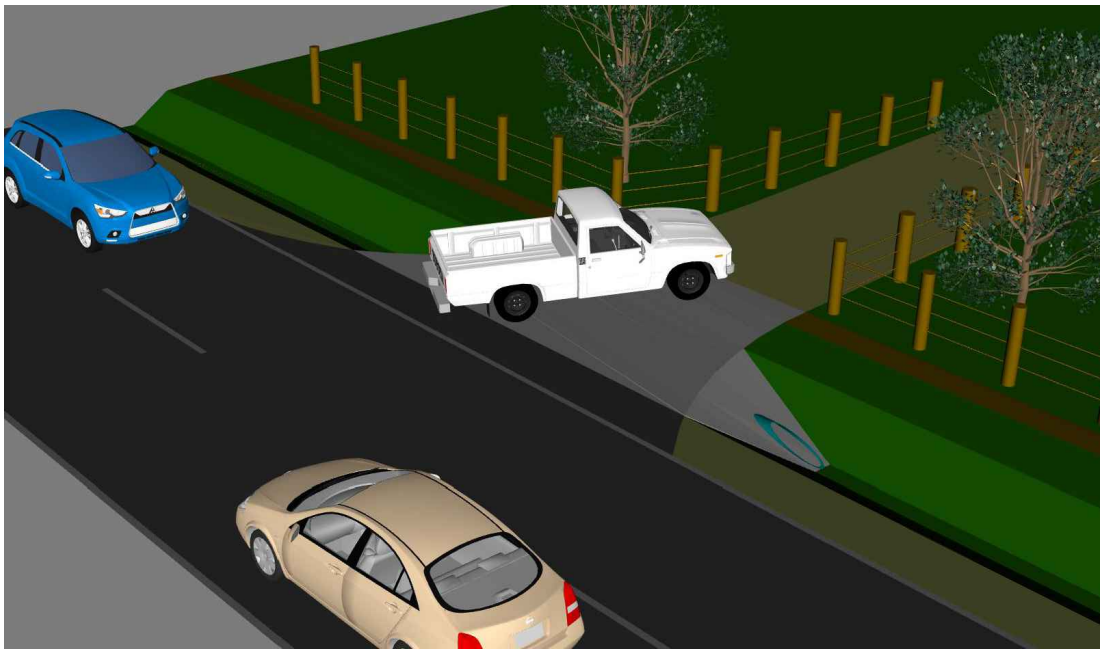
Rural Vehicle Crossing (Zone Speed=50km/hr)

Date: 20/05/2021

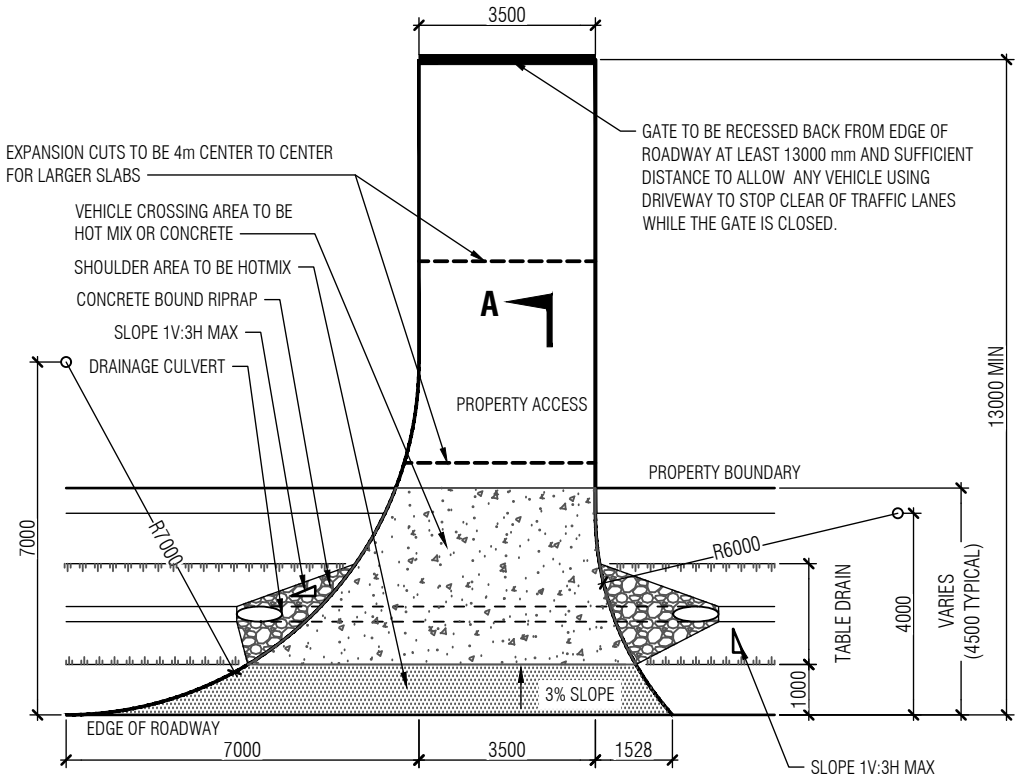
SED No. VX0302

Version A

VX0303

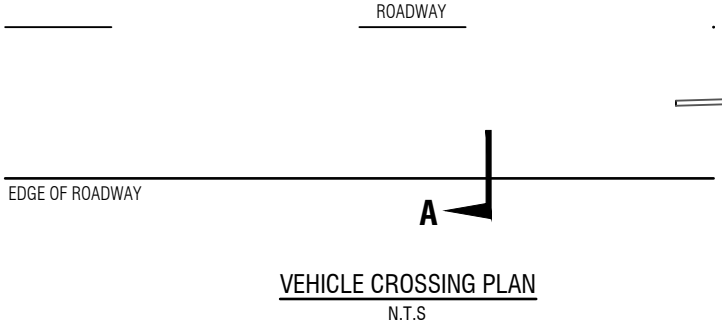


3D VIEW
N.T.S

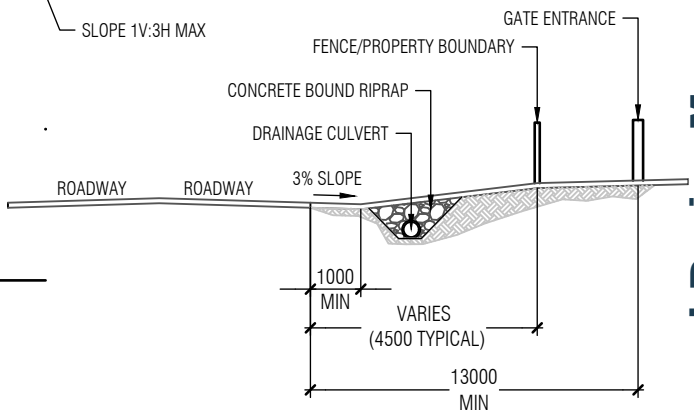


NOTES:

1. All dimensions are in millimeters unless noted otherwise
2. The radius of 7.0m minimum is needed for a van with 20km/hr speed on entering the access.
3. For larger vehicles, the proposed turning speed and tracking need to be supplied. And sealed surface extended to match path.
4. The 13.0m minimum distance to the gate allows for a van turning at 20km/hr to stop. The distance may need to be increased for use by larger vehicles.
5. Drainage culvert ≥ 300mm diameter is required in most cases.
6. Pavement design to be approved by AT for use other than single residential life style lot.
7. Table drain may need to be deepened and diverted away from the road to install culvert
8. Whole driveway in the private property to be soild, either concrete or hotmix, to avoid tracking of materials, detritus, metal etc on to the public road.
9. Larger Slabs to have expansion cuts 4m center to center



VEHICLE CROSSING PLAN
N.T.S



SECTION A-A
N.T.S

Transport Design Manual | Standard Engineering Details

CHIEF APPROVED ENGINEER

TDM TECHNICAL STANDARDS

Rural Vehicle Crossing (Zone Speed > 60km/hr)

Date:	20/05/2021	
SED No.	VX0303	Version A