

Note before filling this form:

A vehicular crossing application form is used to apply for a permit to construct vehicular driveway crossing on the public road or footpath.

Council recommends your application be lodged online by Council's [ePathway Portal](https://mycouncil.liverpool.nsw.gov.au/ePathway/Production/web/) (<https://mycouncil.liverpool.nsw.gov.au/ePathway/Production/web/>). By using online lodgement, Council will receive your application in real time, resulting in faster approvals.

Important: If the driveway does not meet the current driveway specification or if the application is for a secondary driveway, contact Council's driveway inspector and discuss the proposal before lodging an application.

1 Applicant Details

Full Name

Company Name & ACN (if applicable)

Postal Address

Phone

Email

2 Location

Street No. Street Name

Suburb

Postcode

Lot No

Deposited / Strata Plan No:

3 Proposed Work

Type of Vehicular Crossing

- Residential Light Duty
- Medium Density (Units/Townhouses)
- Heavy Duty (Industrial/Commercial)
- Pipe Crossing Culvert
- Dish Drain

The proposed surface finish/material must be Plain Concrete.

Council may not approve other finishes that do not comply with slip resistance standard as per AS/NZS 4663:2002, AS/NZS 4586:1999, AS 3661.2:1994

4 Required Documents

You are required to provide following information with this application:

- Public Liability Certificate of Currency (value at a minimum of \$10 million)

5 Applicant's Declaration

Please complete the declaration below—

I/We acknowledge that:

- I/We are aware Council will not be responsible for any Public Risk Claims for accidents or otherwise, arising from an incorrectly installed vehicular crossing or conditions that are not strictly adhered to
- I/We undertake, that in the event that the completed vehicular crossing is found to be unsatisfactory as a result of the contractor's failure to carry out the work in accordance with the information supplied by Council, or the use of faulty materials or workmanship, the crossing shall be removed and replaced at my expense
- For any additional driveways to a property or extension of driveways, prior approval is required and a letter issued by Council. This letter will be required when submitting the application.

I/We, the undersigned, formally apply for approval to construct a vehicular crossing in accordance with the attached plans and specifications. I/We have read and understood the information attached and I/We am aware of my obligations in carrying out work within the nature strip.

This application form and documentation is open access information for the purposes of the Government Information (Public Access) Act 2009 and Council is obliged to publish it on its website. These details contain your personal information. Please indicate whether or not you consent to the form and documentation being published as submitted to Council.

- I consent to Council publishing this form and documentation as submitted and I acknowledge that any personal information contained within, may be seen by third parties. If ticked, personal information will not be redacted from the form and documentation, prior to it being published.

Signature:

Date:

General information

- Under the Roads Act 1993, property owners are liable for all costs associated with the construction, maintenance and repair of vehicular crossings between the road pavement and property boundary line
- Works shall comply in all respects with the plan and specification provided by Liverpool City Council and with the issued information
- It is the owner's responsibility to ensure that their contractor is licensed and has a current \$10,000,000 public liability cover. Council will NOT accept any liability for injury or damage to any person or property during the course of work
- The contractor shall take every precaution to locate and protect all public utility services. Any damages or alterations to these utility services shall be repaired by the appropriate authority at the owner's/contractor's cost
- Council accepts no responsibility for the identification or position of property boundaries. The property owner/contractor is to identify block boundaries
- No concrete is to be poured until Council has given approval. If there is no approval notice left on site, Council's Contact Centre is to be contacted to obtain the inspection result. If a contractor pour a vehicular crossing without an approval by Council, further approval to work on Council property by the offending contractor may be withdrawn
- Crossings not conforming to Council specifications are not approved Therefore Council: Will not accept any liability for the injury or death to any person or damage caused to anything due to the existence of the non-approved crossing; May require modification, removal or replacement of the crossing at full cost to the owner at any time
- No tree is to be cut down without the written consent of the Council in accordance with Council's Tree Preservation Order
- Redundant laybacks are to be replaced by kerb and gutter (must be formed up prior to approval being given to pour vehicular crossings).

Applicant's responsibility and compliance

- IMPORTANT: This application cannot be accepted without all applicant and registered owner's signatures, which are to be completed at the end of the form.**
- The owner is, by way of signature to the application, responsible for compliance with all of the agreements, declarations and permit/ consent conditions and likewise responsible for compliance in respect of all agents, subcontractors and anyone else carrying out part or all of the activity authorised under the permit/ consent
- Any personal information that you provide on this form will be used by members of Council staff to process this application. The provision of this information is deemed to be voluntary. However, if you do not provide the information requested on this form, Council may be unable to process your application in a timely manner. Please note that information collected by Council in relation to development applications and associated documents is open access information that may be obtained by members of the public under the Government Information Public Access Act 2009.

Processing and approval

- The immediate processing of requests is not guaranteed and Council will not be responsible for the consequences caused by late applications or insufficient information.
- An appropriate fee must be paid when lodging this application and if a further fee is payable, the applicant will be advised by Council. This fee shall be paid prior to issue of the permit/consent for the work. **Cheque clearance is required prior to issue of the permit.**
- At the time of lodgment, a copy of the owner's and/or principal contractor's public liability insurance cover to the order of at least \$10m, including number/expiry date, needs to be submitted and if there are any unknown details such as start and end dates of the work, etc.

Notes on Scheduled Fees

- Detailed schedule of fees and charges can be checked via [Council's website \(www.liverpool.nsw.gov.au/fees\)](http://www.liverpool.nsw.gov.au/fees).
- All fees are payable in advance.
- The fee payable will be assessed by the City Maintenance according to the schedule of fees.

How to lodge an application

All applications are accepted in following ways:

- Submit online at Council's [ePathway Portal \(https://mycouncil.liverpool.nsw.gov.au/ePathway/Production/web/\)](https://mycouncil.liverpool.nsw.gov.au/ePathway/Production/web/) or
- Lodge at Council's Customer Service Centre on Shop R1, 33 Moore Street Liverpool;

Refunds

- Any refunds will be made only to the person/company that paid the fee, and
- Where a refund is required, the applicant must provide contact details for the person/company (if different from applicant) to arrange refund.

Family Name(s)/Surname(s) (or company & ACN)::

Full Given Names or Company Contact Person:

House No

Street

Suburb

Business Phone

Home Phone

Mobile

Email

Fax

Owner's Declaration

I/we own the subject land, consent to this application and consent to Council officers entering the premises during normal office hours for the purpose of conducting inspections relative to this application. I/we accept that all communication regarding this application will be through the nominated applicant.

This application form and documentation is open access information for the purposes of the Government Information (Public Access) Act 2009 and Council is obliged to publish it on its website. These details contain your personal information. Please indicate whether or not you consent to the form and documentation being published as submitted to Council.

I consent to Council publishing this form and documentation as submitted and I acknowledge that any personal information contained within, may be seen by third parties. If ticked, personal information will not be redacted from the form and documentation, prior to it being published.

Signature:

Date:

Owner's consent requirements

- If you are signing on behalf of the owner as the owner's legal representative, you must state the nature of your legal authority and attach documentary evidence eg Registration of Power of Attorney, executor, trustee etc
- Strata Title/Body Corporate – If the property is a unit under strata title or a lot in a community title, then in addition to the owner's signature, the following must be provided if any works are proposed on common property:
- Common seal of the Body Corporate must be stamped on this form over the signature of the owner and signed by the chairman or secretary of the Body Corporate
- If the property has been recently sold, documentary evidence of the sale must be provided such as the Certificate of Title or a letter from your solicitor confirming settlement or the previous owner(s) providing owner's consent.

Family Name(s)/Surname(s) (or company & ACN)::

Full Given Names or Company Contact Person:

House No

Street

Suburb

Email

Contact Number

Licence Number

Expiry Date

Public Liability Insurance Number

Expiry Date

Signature:

Date:

To book an inspection, please contact 1300 36 2170 between 8.30am to 5.00pm Monday to Friday

OFFICE USE ONLY

Additional Information required?

Yes No

Pathway Lodgement to:

DX: Driveway Crossing - Section 138

Application Number:

Comments

Received by:

Date Received:

Fees

Amount (\$)

Receipt Number

Receipt Date

Vehicular Crossing Application

INFORMATION AND SPECIFICATIONS CONSTRUCTION OF VEHICULAR CROSSINGS LIVERPOOL CITY COUNCIL

It is the user's sole responsibility to ensure that the copy of the Specification available to them is the current version as in use by the Council.

1. GENERAL INFORMATION

- (a) Under the Roads Act 1993, Property Owners are liable for all costs associated with the construction, maintenance and repair of vehicular crossings between the road pavement and property boundary line.
- (b) Works shall comply in all respects with the plan and specification provided by Liverpool City Council and with the issued information.
- (c) It is the Owners responsibility to ensure that their contractor is licensed and has a current \$10,000,000 public liability cover. Council will NOT accept any liability for injury or damage to any person or property during the course of work.
- (d) The contractor shall take every precaution to locate and protect all public utility services. Any damages or alterations to these utility services shall be repaired by the appropriate authority at the owners/contractor's cost.
- (e) Council accepts no responsibility for the identification or position of property boundaries. The property owner/ contractor is to identify block boundaries.
- (f) No concrete is to be poured until Council has given approval. If there is no approval notice left on site, Council's Call Centre is to be contacted to obtain the inspection result.

If a contractor pours a vehicular crossing without an approval by Council, further approval to work on Council property by the offending contractor may be forbidden.

- (g) No tree is to be cut down without the written consent of the Council in accordance with Council's Tree Preservation Order.
- (h) Redundant laybacks are to be replaced by kerb and gutter (must be formed up prior to approval being given to pour vehicular crossings)
- (i) Any existing un-used vehicular crossing(s) must be removed, and concrete footpath reinstated at the owner's expense to Council's satisfaction
- (j) On State Roads, Transport for NSW (TfNSW) is responsible for approving works from the road to the back of Kerb and Gutter/layback. Generally, TfNSW approval must be provided to Council prior to any driveway inspections by Council.

2. STANDARD REQUIREMENTS

(a) Safety & Traffic Control

All work on the road reserve shall be carried out with a minimum of obstruction to the pedestrian and vehicular movement. Warning signs, lights and barricading complying with the Australian Standards, shall be in place for the entire time that the work is in progress. Adequate access for pedestrians must be always maintained.

(b) Utility Services

As a guideline the allowable minimum distance and other relevant information are mentioned below:

- Electric poles and Street light poles shall have a minimum of 500mm clear distance from the edge of the vehicular crossings. Electrical turrets shall have 500mm clearance from the edge of the vehicular crossings. (Contact Integral Energy on 131 003).
- A minimum of 300mm clear distance between a Communication (Telstra, Optus..)/NBN pit and the Vehicular Crossing. No pits are allowed half in and half out of the vehicular crossings. If a pit is allowed to be in the vehicular crossing, the owner/contractor should obtain a letter from Telstra or NBN and produce a copy of the letter to Council' s Inspection officer. (Contact Telstra on 132 203 or NBN on 1800 687 626)
- Gas Markers can remain in the Vehicular Crossings. For further information, contact AGL on 131 245
- For any Sydney Water assets located within the new driveway, approval shall be obtained via the [Sydney Water Tap in](#) and provided to Council prior to the initial inspection. If approval has been given by Sydney Water, then their asset access points shall be serviceable and not be covered with any material such as concrete.

Prior to any excavation being carried out "Dial Before You Dig" on 1100 is to be contacted to obtain information of underground services.

(c) Environmental Protection

The contractor shall ensure at all times that the requirements of all relevant acts concerning noise, air, water and other pollution are fully observed. Environmental protection measures regarding erosion and siltation control shall be in place in accordance with Environmental Protection Authority (EPA) requirement.

(d) Constraints of the locations

- Vehicular crossings should not be constructed within 500mm distance from any drainage structure.
- Vehicular crossings should not be located within 6.0m offset from the tangent-point of the kerb return unless Council has given prior approval.
- Vehicular crossing should not be constructed within 1.0m distance from any street trees.

- Where household stormwater pipes within the vehicular crossing/ layback shall be entirely relocated to a minimum of 200mm outside from the vehicular crossing and a satisfactory new connection must be made to the kerb.
- Vehicular crossing should not be located within 300mm distance from any pram ramp.

3. SPECIFICATION

(a) Alignment & Grades

The vehicular crossing shall be constructed in accordance with the Council's Plan No: R25 or as directed by Council's Crossings Inspector and shall be true to the grades as shown on the drawings.

Both sides of the vehicular crossing from the property boundary to the layback are to be in a straight line and perpendicular to the kerb and gutter.

In some instances, due to the unique shape of the property lot, street trees, light poles or the curvature of the road, the above requirement may not be met. Approval for these driveways shall be at the Driveway Inspector's discretion.

(b) Laybacks

If the new vehicular crossing does not align with an existing layback, a new layback must be provided, or the existing layback modified to suit the proposed vehicular crossing.

(c) Base Preparation

All soft and other unsuitable material shall be removed and a minimum of 50mm of DGS 20 bedding material shall be placed and thoroughly compacted to a firm and level surface for the vehicular crossing.

Where the kerb and gutter or laybacks to be constructed, all soft and unsuitable material shall be removed and a minimum of 100mm of DGS 20 bedding material shall be placed and thoroughly compacted to a firm and level surface.

(d) Formwork

The crossing shall be formed in substantial sound timber to the levels and grades as shown on the plans and formwork must be firm and in place to the full depth of the proposed concrete at the time of inspection.

(e) Footpath

Width of the footpath shall be 1.5m with a cross fall (slope) between 1.0% - 3.0%. Council reserves the right to vary its specification(s) on a case-by-case scenario in specific or priority areas. Refer to standard drawing: R23 for further details.

If the existing footpath meets the required thickness and shows no signs of cracks or damage, it may remain in place. However, if any section of the footpath needs to be removed due to inadequate thickness, cracks, or damage, the entire footpath panels

within the driveway must be removed and reconstructed in accordance with the standard drawings.

(f) Reinforcement and dowels

Reinforcement shall be placed as specified in the plans. All reinforcement shall be free from rust, grease, oil and any other coating. Reinforcement shall be secured against displacement during placing and compaction of the concrete. The clear cover to reinforcement shall be as specified in the plans and also shall be cut full length at the property boundary to separate the continuity.

Steel reinforcing mesh and 12mm dia dowels into the existing footpath shall be provided where existing footpath has been removed.

New or modified laybacks shall be dowelled into the existing kerb and gutter. Two (2) x 12mm galvanized dowels installed into the adjoining existing Kerb and gutters.

(g) Expansion Joints

All joints shall have 10mm thick mastic joints in place extending full depth through the slab. It shall be placed at the back of the layback and at the property boundary line as shown on the plan. All expansion joints must be flush with finished surfaces upon completion.

Dummy groove shall be placed either side of the footpath as shown on the plan.

(h) Concrete

Concrete strength shall be a minimum of 25MPa at 28 days for residential driveways and minimum of 32Mpa at 28 days for medium density, commercial and industrial driveways. The delivery docket shall be retained and shown to Council's inspector on request. Thickness of the concrete shall be in accordance with the plan.

(i) Surface Finish

The surface of the finished concrete slab shall be broomed finish, true to grade and free of cracks.

All surface finish must be installed and maintained by the property owner in accordance with Australian Standards AS/NZS 4586: 1999. All kerb and guttering and laybacks shall be finished with a steel float to leave the surface plain, smooth and uniform in colour and appearance.

4. VEHICULAR CROSSINGS, WHERE KERB & GUTTER IS NOT CONSTRUCTED

Due to the variances involved in these areas with differences in width of the road reserves and depth of the table drain an advice inspection with Council's Crossing Inspector is recommended before any works commence to ascertain the design and level.

- **Vehicular Dish Crossing**

It shall be constructed in accordance with the specification and standards of Council's Standard Drawing: R1. Dish crossings shall have same longitudinal slope as the table drain in the direction of the water flow.

- **Vehicular Pipe Crossing**

It shall be constructed in accordance with the specification and standards of Council's Standard Drawing Plan: R26. Pipes shall be a minimum of 300mm diameter supported by headwalls at either end. Larger pipe diameters may be required for table drains, channels with greater expected water volumes. The pipes shall be placed on 100mm thick sand bedding with 14:1 sand and cement surround. The invert of the pipe should be set at the same level as existing table drain at inlet side. The pipe crossings shall have same longitudinal slope as the table drain in the direction of the water flow.

Both vehicular dish crossing and pipe crossing shall be laid parallel to the mainstream flow path and must be aligned so the dish crossing and the headwall of the pipe crossing is perpendicular to the table drain and channel flow path.

The property owners are responsible for laying asphalt or two coat seal between the edge of the road pavement and the edge of the road shoulder and maintain the area.

5. CONSTRUCTION

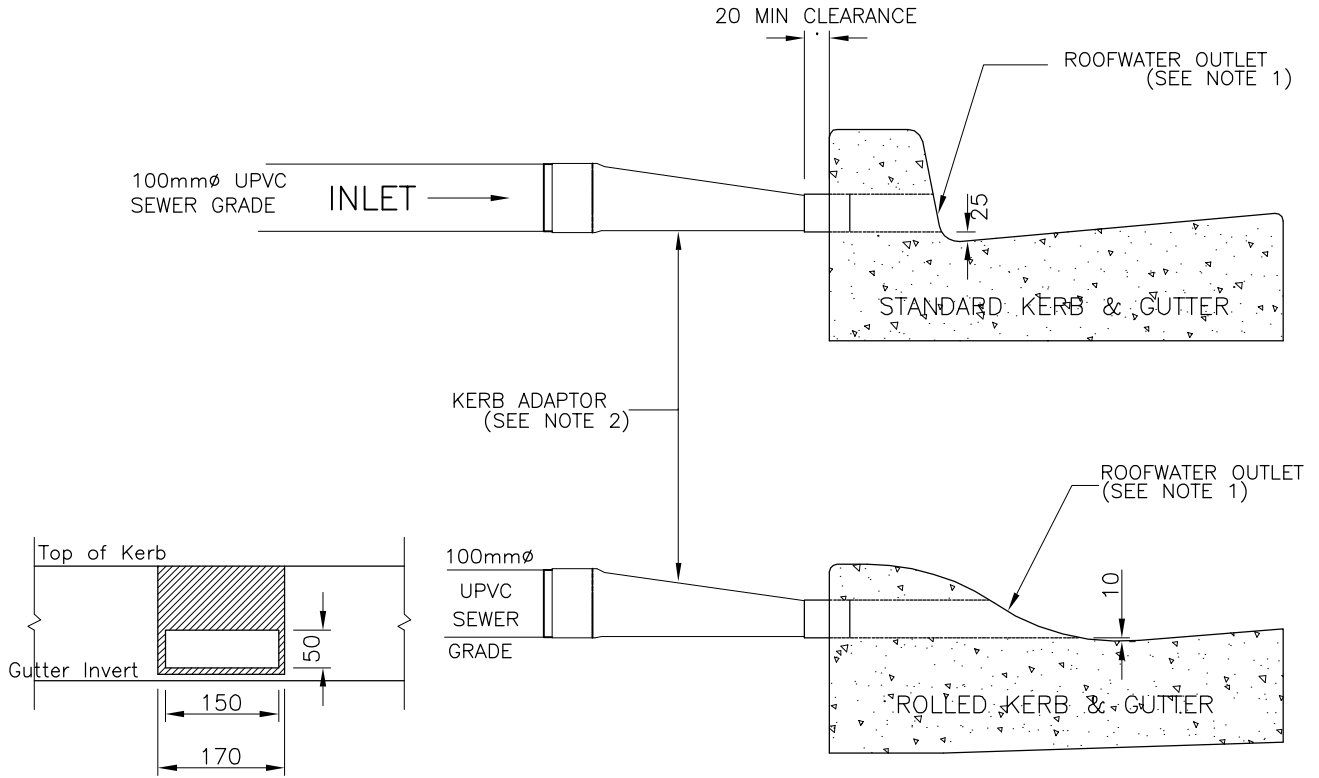
The driveway shall be concreted, formwork removed, and backfilled promptly following Council inspection and approval of the formwork. This work is expected to be completed, weather permitting, within one week from the date of approval. If unforeseen circumstances delay the concreting of the driveway, the formwork shall be removed, the footpath area backfilled, and the area reopened for pedestrian use. In such cases, the formwork must be reinspected by the Council.

6. AFTER CONSTRUCTION

- (a) The disturbed nature strip area shall be backfilled and compacted with suitable soil and turfed.
- (b) Excess spoil shall be removed from the work area and be left in a tidy condition as soon as the work is completed.
- (c) If a new layback or Kerb and Gutter section is formed, the road section in front of it shall be saw cut to a minimum width of 300mm for the full length of construction. If the road damage exceeds 300mm, the saw cut shall be extended to enclose the damaged area. The asphalt and road base in the saw cut area shall then be removed for laying asphalt. The road section will be restored by the Council at the applicant's cost upon completion of the above work.

7. INSPECTION

- (a) Inspections are required prior to pour concrete and will only be carried out if all formwork, reinforcement, jointing material, approved base material, barricades and relevant signage for pedestrians are in its final position.
- (b) The formwork must be completed and ready at least one day prior to the scheduled inspection. If formwork is not fully completed (i.e timbers are nailed to the pegs, no cover chairs for reinforcement), the inspection booking shall be cancelled prior to the inspection by at least 9:00am on the inspection day, otherwise an additional charge may be applied for the next inspection.
- (c) If you require any onsite advice or any further details, you can call and book for an "Advice Only Inspection". No fees will apply to this Inspection.
- (d) To book an inspection, contact Council between 8:30am and 5:00pm, Monday to Friday on 1300 362 170 at least 24 hours prior to the required inspection. Council's crossing application number is required, when booking for an inspection.



ALL DIMENSIONS ARE IN MILLIMETRES

TYPICAL ELEVATION

NOT TO SCALE

TYPICAL CROSS SECTION

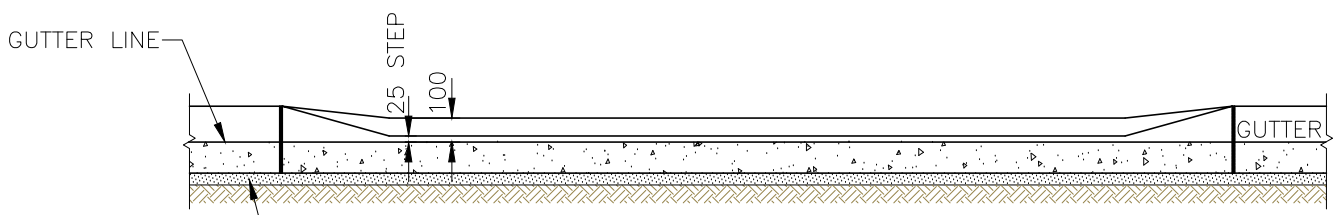
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NOTES

1. ROOFWATER OUTLETS TO BE MANUFACTURED FROM RHS 150 x 50 x 4mm HOT DIPPED GALVANISED MILD STEEL TO AS 1650, TO SUIT KERB TYPE, TO EXTEND MIN. 20mm BEHIND KERB. PROVIDE A UNIFORM COATING OF ZINC AT A RATE OF 500 g / sqm
2. KERB ADAPTOR TO BE UPVC SEWER GRADE 100mm 'CORDINA' TYPE OR SIMILAR, 355 LONG, TO SUIT 100mm PVC STORMWATER CONNECTION AND ROOFWATER OUTLET SECTION.
3. CHECK ROOFWATER OUTLET IS UNOBSTRUCTED PRIOR TO CONNECTING ADAPTOR.
4. ADAPTOR SHALL BE INSERTED INTO ROOFWATER OUTLET MIN. 40mm AND SEALED WITH APPROVED SILICON SEALER.
5. ALL OUTLETS, ADAPTORS AND REDUCERS TO BE FROM AN APPROVED MANUFACTURER AND ALL JOINTS TO BE SEALED AND INTENDED FOR THAT PURPOSED TO LIVERPOOL CITY COUNCIL'S SPECIFICATION.
6. ALL ROOFWATER DRAINAGE SHALL BE PIPED TO THE EXISTING ROOFWATER DRAINAGE OUTLET PROVIDED, IN A MANNER IN ACCORDANCE WITH THE SPECIFICATION & THE DRAWING.
7. IF AN OUTLET IS NOT PROVIDED OR IS NOT IN A LOCATION SUITABLE FOR THE DEVELOPMENT A NEW ROOFWATER OUTLET MAY BE INSTALLED BY THE DEVELOPER IN THE FOLLOWING MANNER: THE KERB SHALL BE SAWCUT ON BOTH SIDES OF THE OUTLET. A KERB ADAPTOR AS PER NOTE 2 SHALL BE INSTALLED TO THE DETAILS SHOWN ABOVE. THE KERB SHALL BE REINSTATED TO ITS ORIGINAL PROFILE USING A CEMENT MORTAR CONTAINING AN EPOXY ADDITIVE FOR ADHERENCE TO THE EXISTING KERB.
8. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

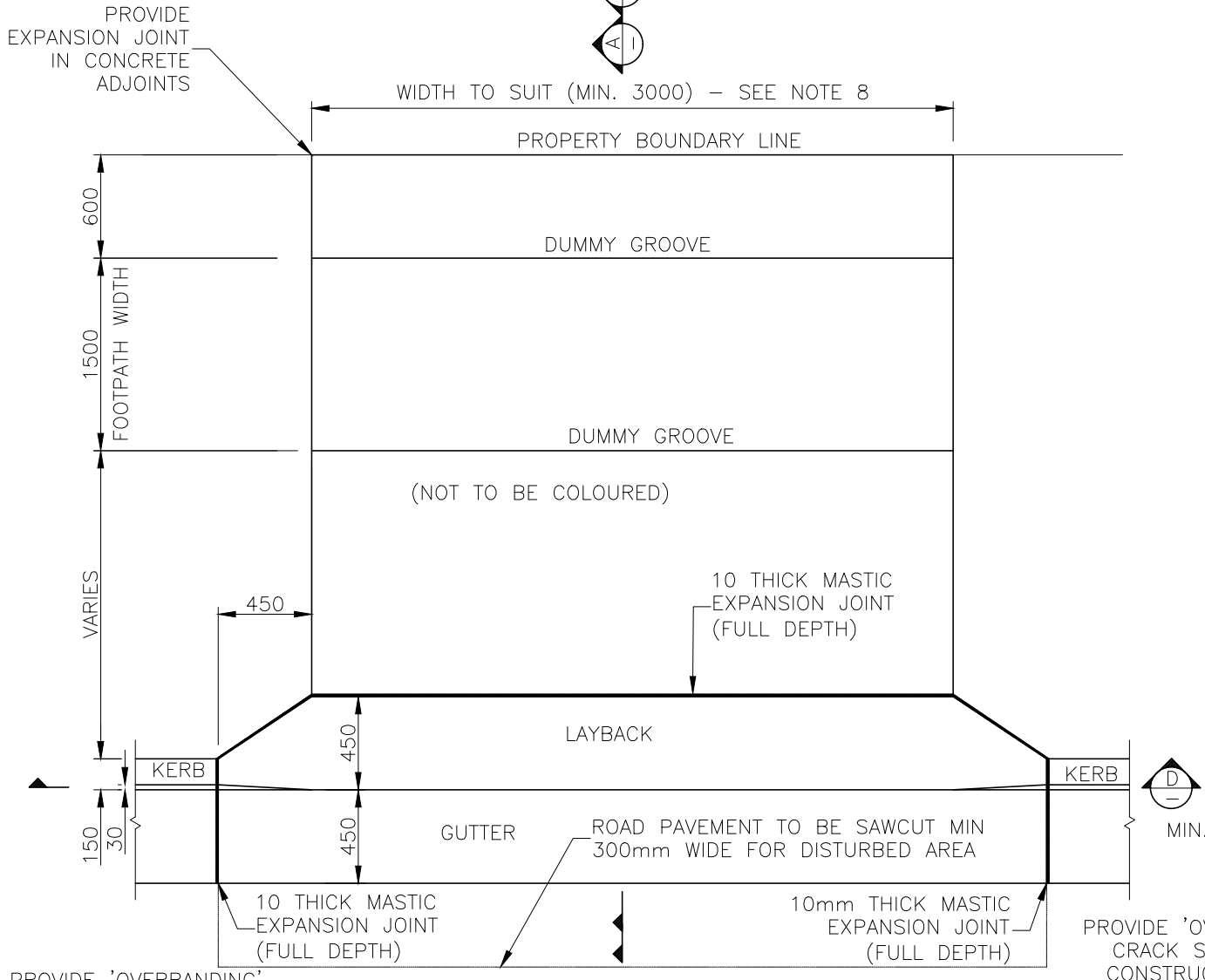
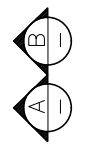
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SCALE	AS SHOWN	ISSUE NO.	B	LIVERPOOL CITY COUNCIL 	Std Dwg No.	
DRAWN	R.N	DATUM	ASSUMED		ROOFWATER OUTLETS & ADAPTORS	D17
CHECKED	P.M.	DATE	MAY 2006			

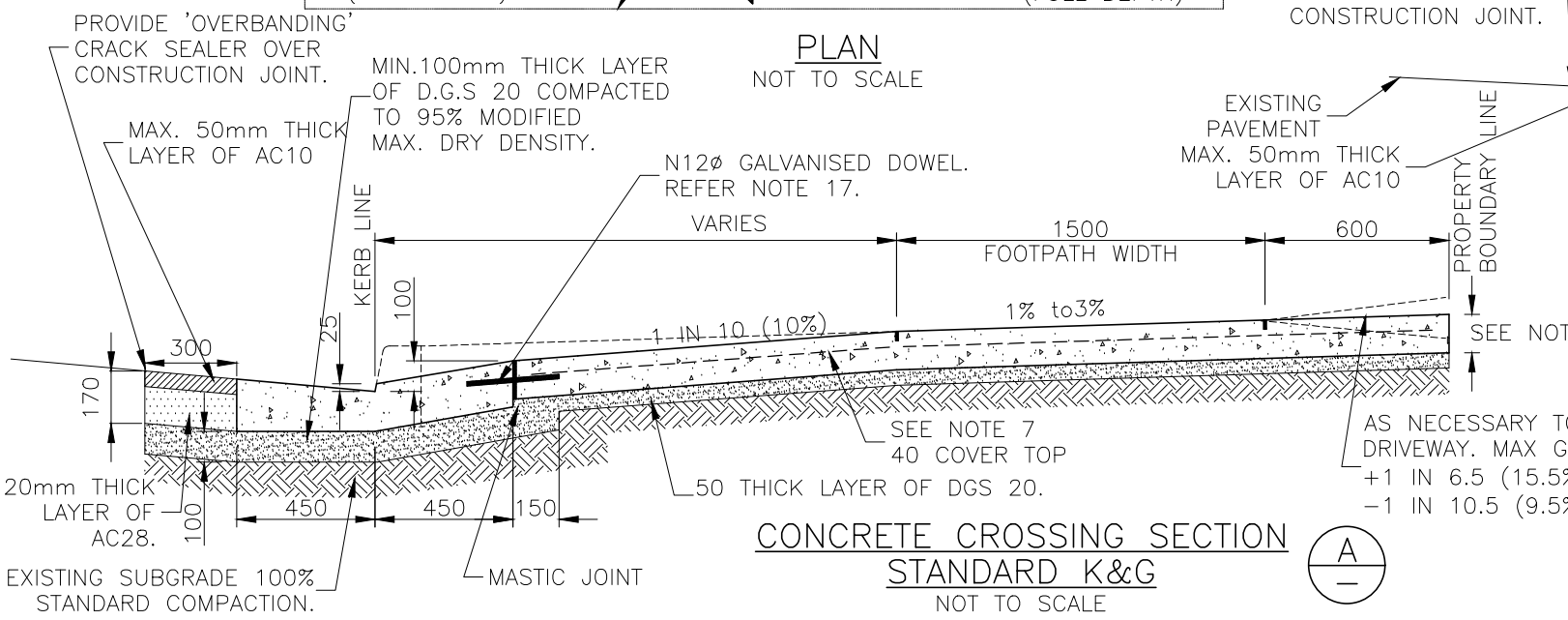


MIN. 100 THICK LAYER OF D.G.B 20 COMPACTED TO 95% MODIFIED MAX. DRY DENSITY.

SECTION D
NOT TO SCALE



PLAN
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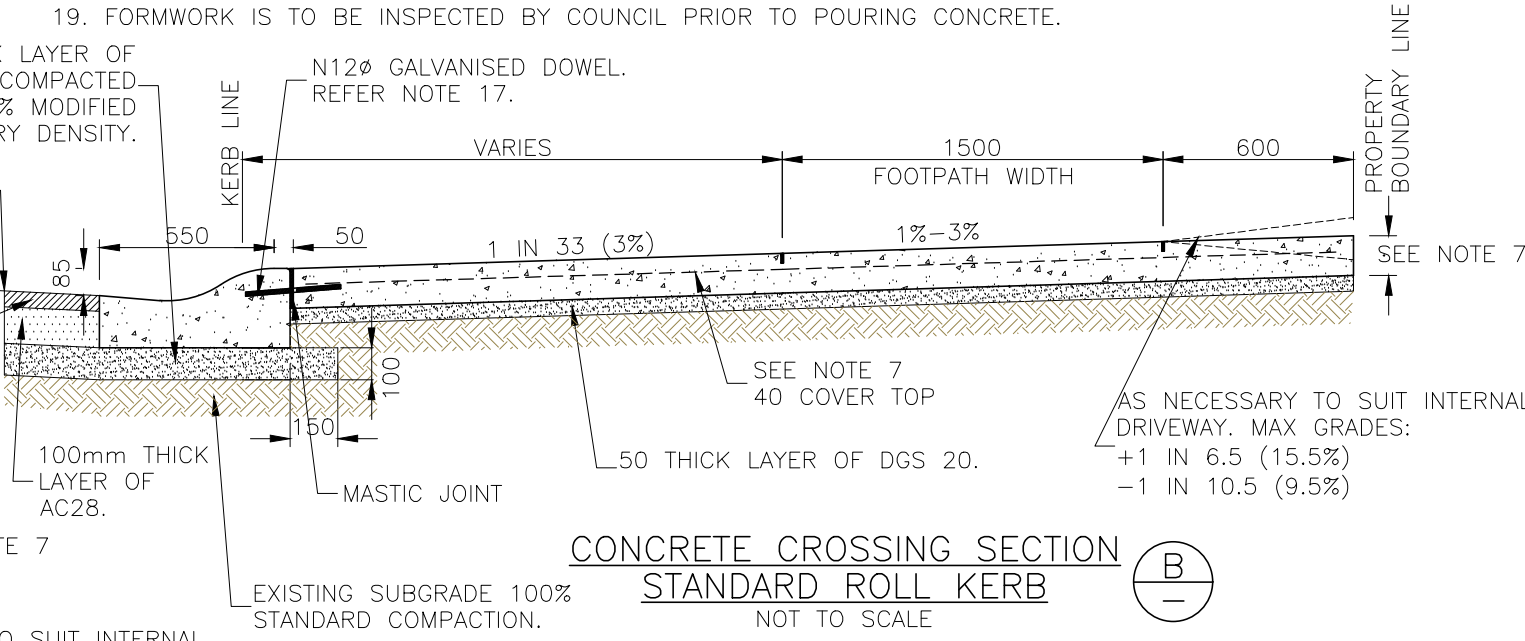


CONCRETE CROSSING SECTION STANDARD K&G
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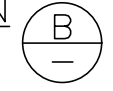


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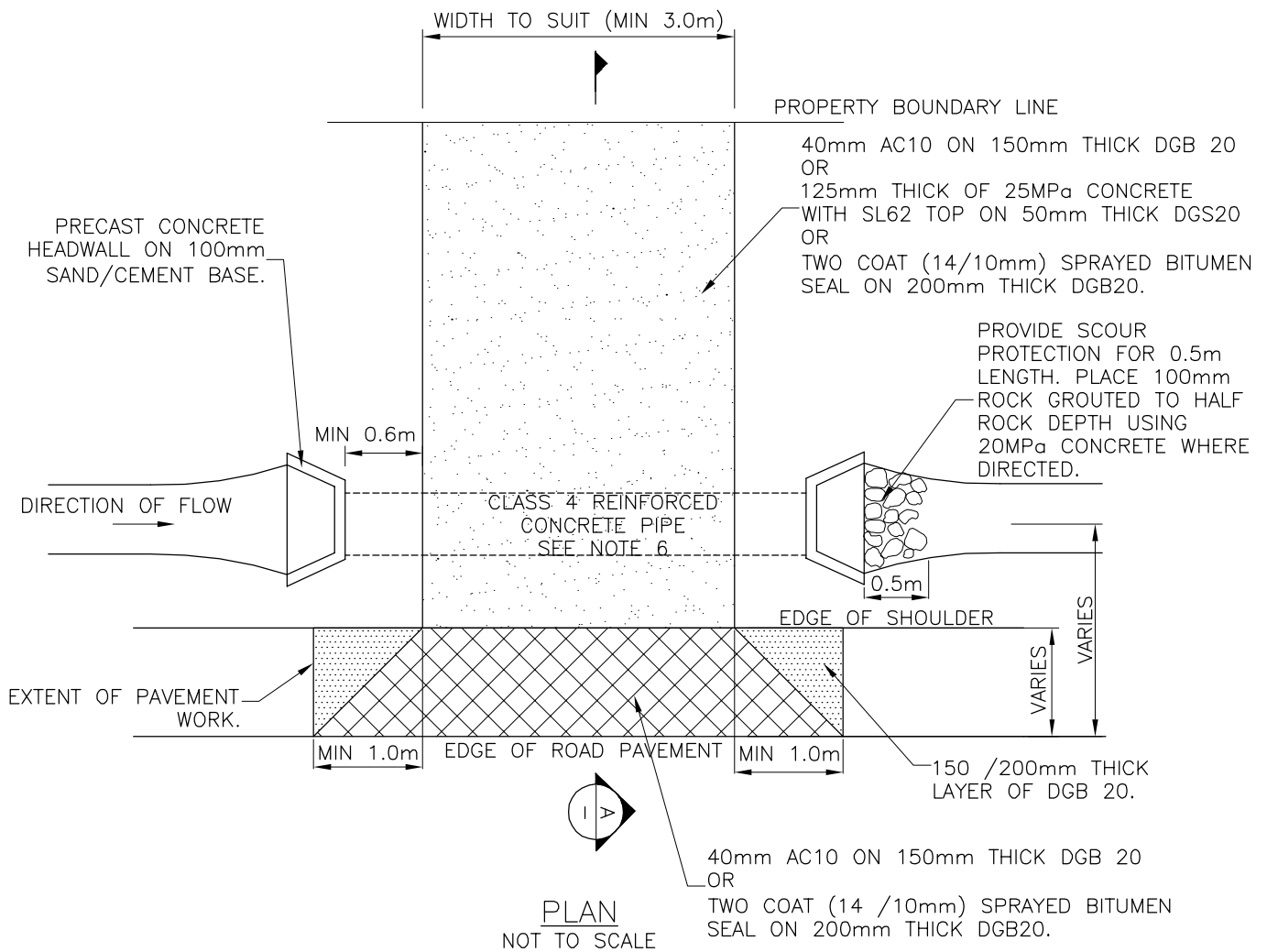
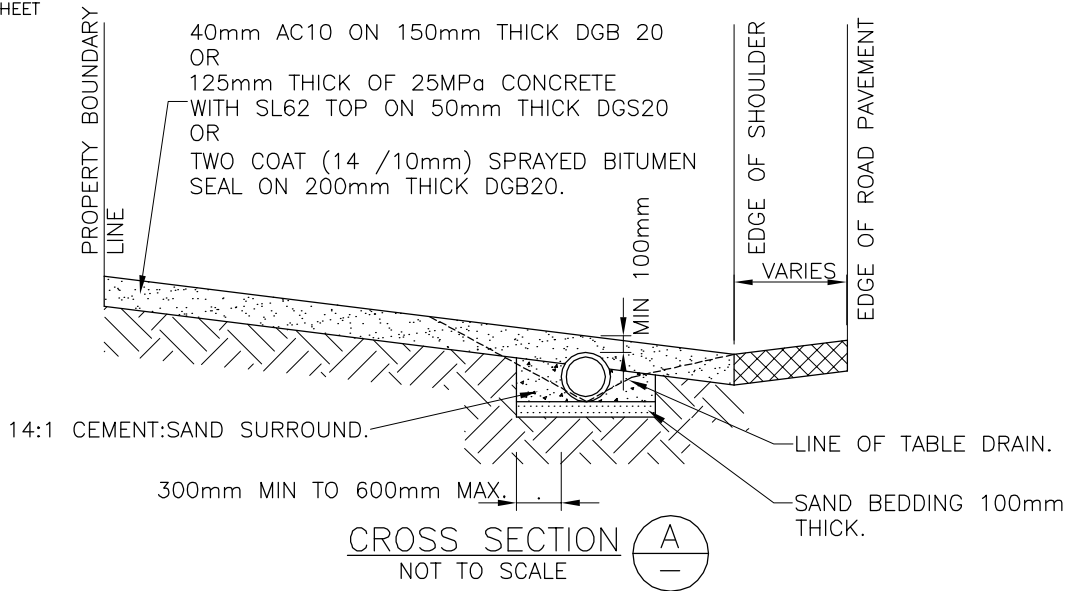
- ALL CONCRETE TO HAVE A MIN COMPRESSIVE STRENGTH (F'c) OF 25MPa AT 28 DAYS.
- DRIVEWAYS ARE TO BE NO CLOSER THAN:
 - 6m FROM TANGENT POINT OF CORNER
 - 0.5m FROM STORMWATER LINTELS
 - 0.5m FROM ELECTRICAL TURRETS
 - 0.3m FROM TELSTRA PITS, NBN PIT etc.
 - 0.5m FROM ELECTRICAL POLES
- FOR SERVICE PITS TO BE CONTAINED WITHIN DRIVEWAY, WRITTEN APPROVAL FROM THE RELEVANT SERVICE AUTHORITY MUST BE OBTAINED AND SUBMITTED TO COUNCIL WITH THE CROSSING APPLICATION.
- GAS MARKERS, WATER HYDRANTS AND STOP VALVES CAN REMAIN IN THE NEW DRIVEWAY BUT MUST BE ACCESSIBLE AT ALL TIMES.
- ALL CROSSFALLS ARE TO BE STRICTLY ADHERED TO.
- ALL REDUNDANT LAYBACKS TO BE REPLACED WITH KERB AND GUTTER AT NO COST TO COUNCIL.
- WHERE A LAYBACK IS TO BE EXTENDED, CONSTRUCTED OR REMOVED, THE ENTIRE LAYBACK/KERB & GUTTERSECTION AND 300mm WIDE OF ADJACENT ROAD PAVEMENT ARE TO BE SAWCUT AND REMOVED FOR THE FULL LENGTH OF PROPOSED VEHICULAR CROSSING. (THE ROAD PAVEMENT IS TO BE RESTORED TO THE SATISFACTION OF COUNCIL'S CROSSING INSPECTOR. THE FINAL RESTORATION FOR THE DAMAGED PAVEMENT WILL BE CARRIED OUT BY COUNCIL AT THE APPLICANT/OWNERS COST)
- | DEVELOPMENT TYPE | SLAB THICKNESS | REINFORCEMENT MESH |
|-----------------------------------|----------------|----------------------------------|
| RESIDENTIAL | 125mm | SL62 NO MESH REQUIRED IN LAYBACK |
| MEDIUM DENSITY(VILLAS/TOWNHOUSES) | 150mm | SL82 INCLUDING LAYBACK |
| COMMERCIAL | 225mm | SL82 INCLUDING LAYBACK |
- THE WIDTH OF RESIDENTIAL DRIVEWAYS SHALL BE
 - MIN 3.0M AT PROPERTY BOUNDARY
 - MAX 4.0m AT PROPERTY BOUNDARY FOR SINGLE GARAGE
 - MAX 5.0m AT PROPERTY BOUNDARY FOR DOUBLE GARAGE
- ALL STORMWATER RELOCATIONS ARE TO BE 100 UPVC SEWER GRADE PIPE WITH A 'CORDINA' TYPE GALVANISED STEEL OUTLET TO KERB & GUTTER. REFER TO LIVERPOOL CITY COUNCIL STANDARD DRAWING NO D17 FOR STANDARD ROOF WATER OUTLET AND ADOPTER DETAILS. NO OUTLET WILL BE PERMITTED WITHIN THE LAYBACK .
- WHEN ALL WORKS ARE COMPLETED, THE EDGES OF THE DRIVEWAY CROSSING ARE TO BE BACKFILLED AND COMPACTED WITH SUITABLE SOIL AND TURFED TO MATCH DRIVEWAY LEVELS.
- ALL EXISTING FOOTPATHS AFFECTED BY THE WORKS ARE TO BE SAWCUT AND REMOVED. THE DRIVEWAY CROSSING IS TO BE CONNECTED TO THE FOOTPATH WITH NO GAPS OR STEP.
- DRIVEWAY CROSSING MUST BE FENCED OFF UNTIL COMPLETED FOR PUBLIC SAFETY.
- DAMAGE TO EXISTING FOOTPATHS REQUIRES FULL PANEL REPLACEMENT TO THE NEAREST TRANSVERSE DUMMY JOINT TO MATCH EXISTING.
- GULLY PITS ARE NOT TO BE LOCATED WITHIN PROPOSED DRIVEWAYS.
- ALL DRIVEWAYS LOCATIONS ARE TO COMPLY WITH CLAUSE 3.2.3 OF AS2890.1-1993 - PARKING FACILITIES.
- ALL SURFACES MUST BE INSTALLED AND MAINTAINED TO COMPLY WITH AUSTRALIAN STANDARD AS/NZS 4586:1999, AS/NZS 4663.2004, AS/NZS 3661.2;1994.
- DOWELING OF LAYBACK TO DRIVEWAY WITH GALVANISED N12Ø DOWELS PLACED 350mm IN FROM EDGES OF CROSSING AND AT 900mm SPACING IS OPTIONAL BUT RECOMMENDED WHERE EXPANSIVE/REACTIVE CLAYS EXIST. COAT ONE HALF OF DOWEL WITH PETROLEUM JELLY IMPREGNATED TAPE TO ENSURE SLIP JOINT. ALL DOWELS TO BE 300mm LONG WITH 150mm PENETRATION INTO EACH SLAB.
- COMMERCIAL/INDUSTRIAL AND MEDIUM DEVELOPMENT AREAS LAYBACK TO CONSTRUCTED INTEGRAL WITH DRIVEWAY CROSSING.
- FORMWORK IS TO BE INSPECTED BY COUNCIL PRIOR TO POURING CONCRETE.



CONCRETE CROSSING SECTION STANDARD ROLL KERB
NOT TO SCALE



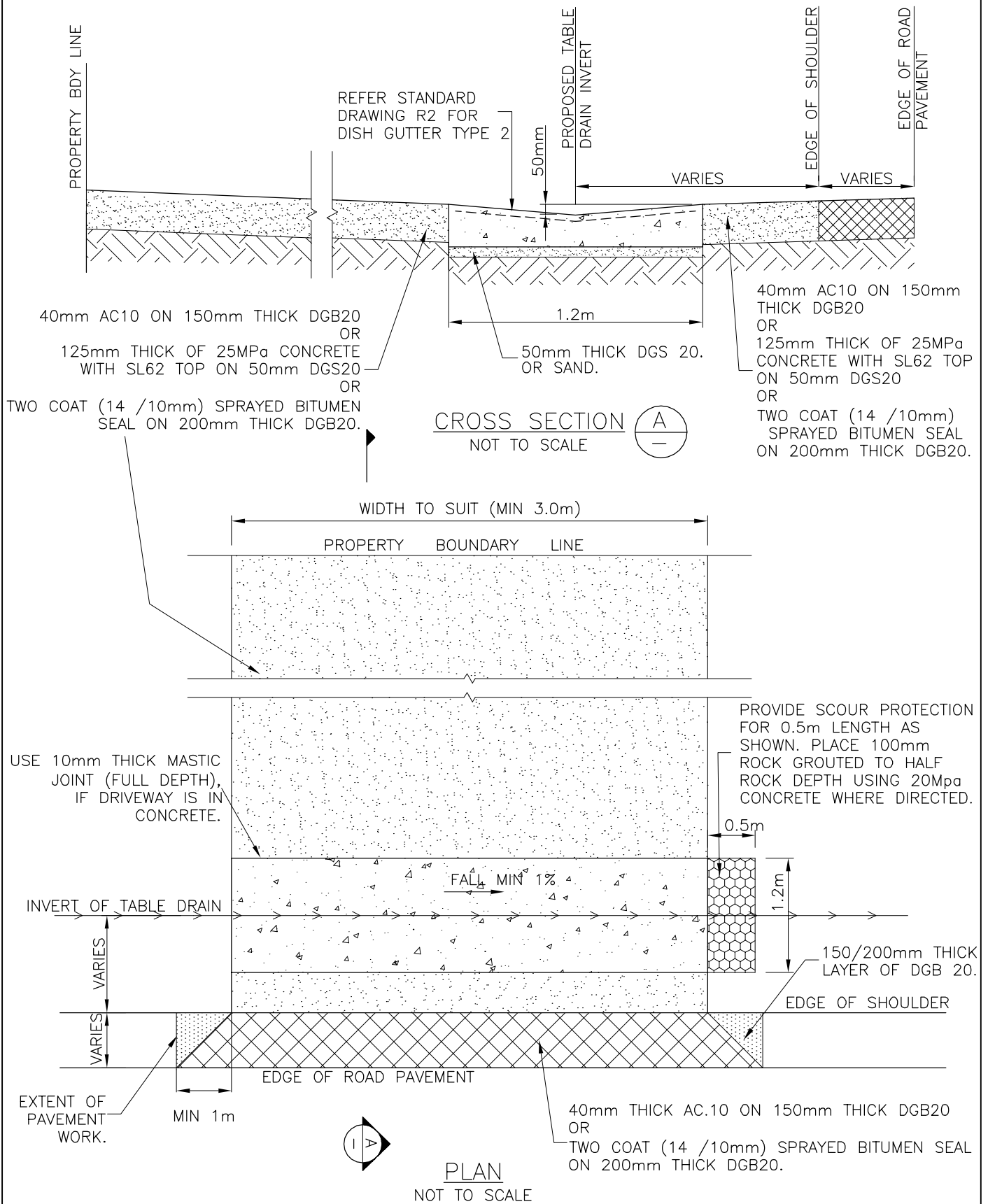
SCALE	AS SHOWN	ISSUE NO.	D	LIVERPOOL CITY COUNCIL	Std Dwg No.	
DRAWN	P.S	DATUM	ASSUMED		CONCRETE VEHICULAR	R25
CHECKED	B.P	DATE	SEP 2023		CROSSINGS FOR URBAN AREAS	



NOTES:

1. PIPE DIAMETER WILL VARY ACCORDING TO CALCULATED STORMWATER FLOW. MIN DIA 300mm.
2. PIPES TO BE BEDDED ON WELL COMPACTED SAND.
3. BASE MATERIAL TO BE COMPACTED TO 95% MODIFIED DRY DENSITY AS DETERMINED BY AS1289.5.4.1.
4. UNLESS OTHERWISE ADVISED BY COUNCIL THE INVERT OF THE PIPE IS TO BE BELOW THE EXISTING SUBGRADE LEVEL.
5. SCOUR PROTECTION TO BE PLACED IN THE TABLE DRAIN ON THE DOWNSTREAM SIDE WHERE DIRECTED.
6. IF THE BEDDING HEIGHT IS LESS THAN 200mm, CLASS 6 PIPE TO BE USED.
7. FORM WORK IS TO BE INSPECTED BY COUNCIL PRIOR TO POURING CONCRETE.

SCALE	AS SHOWN	ISSUE NO.	A	LIVERPOOL CITY COUNCIL 	Std Dwg No.	
DRAWN	R.N.	DATUM	ASSUMED		VEHICULAR PIPE CROSSING	R26
CHECKED	v.c	DATE	AUG 2006		FOR RURAL AREAS	

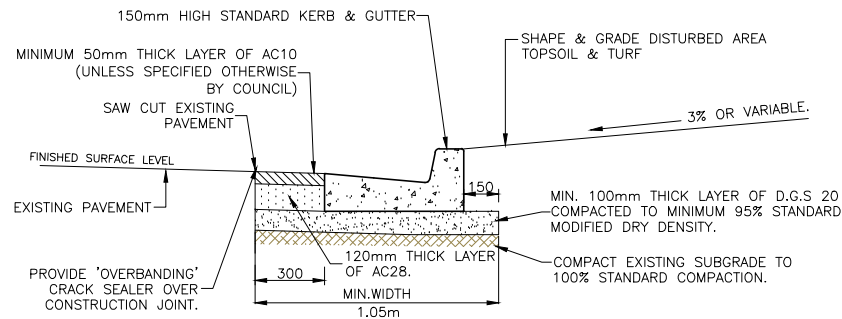
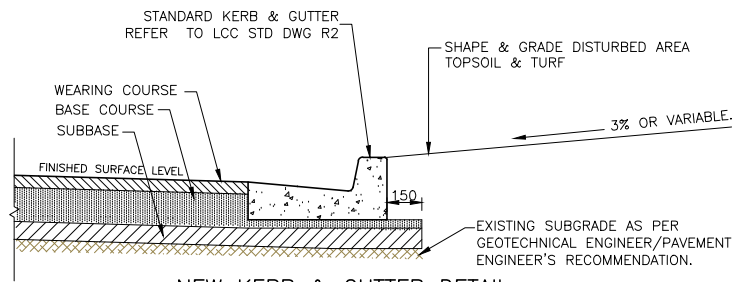


- NOTE:
1. FORMWORK IS TO BE INSPECTED BY COUNCIL PRIOR TO POURING CONCRETE.
 2. FOR HEAVY DUTY DRIVEWAY USE SL82, DOUBLE LAYER SL62 TOP AND SL82 BOTTOM MESHES IN DISH GUTTER.
 3. THE SUB BASE MATERIAL SHALL BE COMPACTED TO PROVIDE A MINIMUM RELATIVE COMPACTION AS DETERMINED BY AS1289.5.4.1 OF 95% MODIFIED DRY DENSITY.

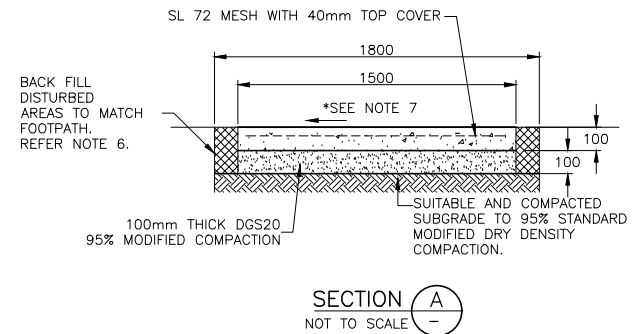
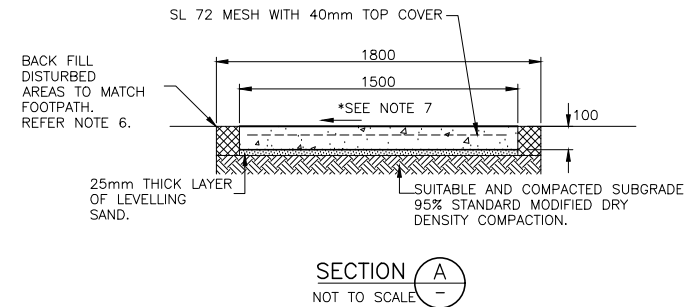
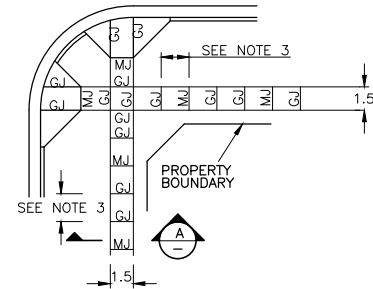
SCALE	AS SHOWN	ISSUE NO.	B	LIVERPOOL CITY COUNCIL 	Std Dwg No.	
DRAWN	R.N.	DATUM	ASSUMED		VEHICULAR DISH CROSSING	R1
CHECKED	v.c	DATE	AUG 2006		FOR RURAL AREAS	

NOTES FOR FOOTPATH CONSTRUCTION

1. FOOTPATH PAVING TO BE 100mm THICK LAID ON A MINIMUM 25mm THICK SAND BASE ON SUITABLE COMPACTED SUBGRADE. AT VEHICLE CROSSINGS THE PAVING TO BE THICKENED IN ACCORDANCE WITH COUNCIL'S DRIVEWAY STANDARD AND SPECIFICATION. REFER TO STANDARD DRAWING NO R25.
2. CONCRETE TO BE MINIMUM COMPRESSIVE STRENGTH $F'c$ 25MPa AT 28 DAYS.
3. PROVIDE MASTIC JOINTS (MJ) 10mm IN WIDTH FOR THE FULL DEPTH OF FOOTPATH AT INTERVALS NOT EXCEEDING 6m AND GROOVED JOINTS (GJ) NARROW VERTICAL 20mm DEEP NOT EXCEEDING 2m INTERVALS.
4. IN HIGHLY REACTIVE SUBGRADE AREAS FOOTPATH AND PAVING TO BE LAID ON A MINIMUM OF 100mm THICK DGS20 ON A SUITABLE COMPACTED SUBGRADE
5. INSTALL TRIP STOP (IF REQUIRED) IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATION.
6. IF THE DISTURBED AREA WIDTH IS GREATER THAN 0.5m PLACE TOP SOIL OF MINIMUM 50mm DEPTH AND TURF AREA.
7. THE CROSSFALL ON A PEDESTRIAN PATH MAY VARY FROM 1% TO 3%. PROVIDING DRAINAGE IS ADEQUATE, A LESSER CROSSFALL IS PREFERRED (I.E 1%).
8. TRANSITION PROPOSED FOOTPATH WIDTH TO EXISTING FOOTPATH WIDTH AT 10' OR 3m (WHICHEVER IS GREATER).

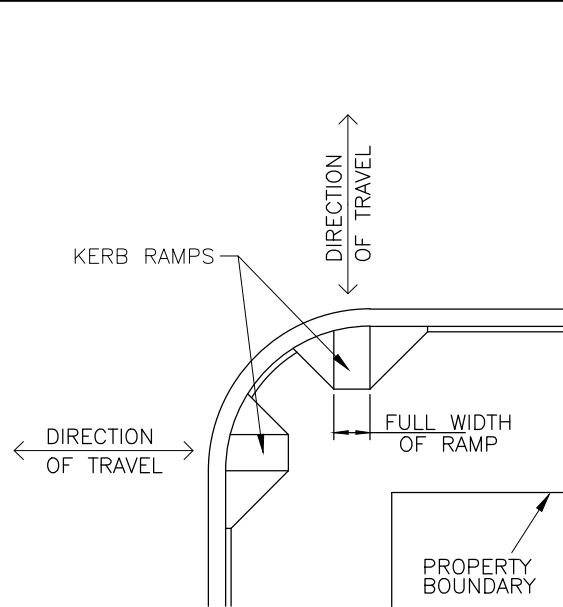


MJ = MASTIC JOINT
GJ = GROOVE JOINT



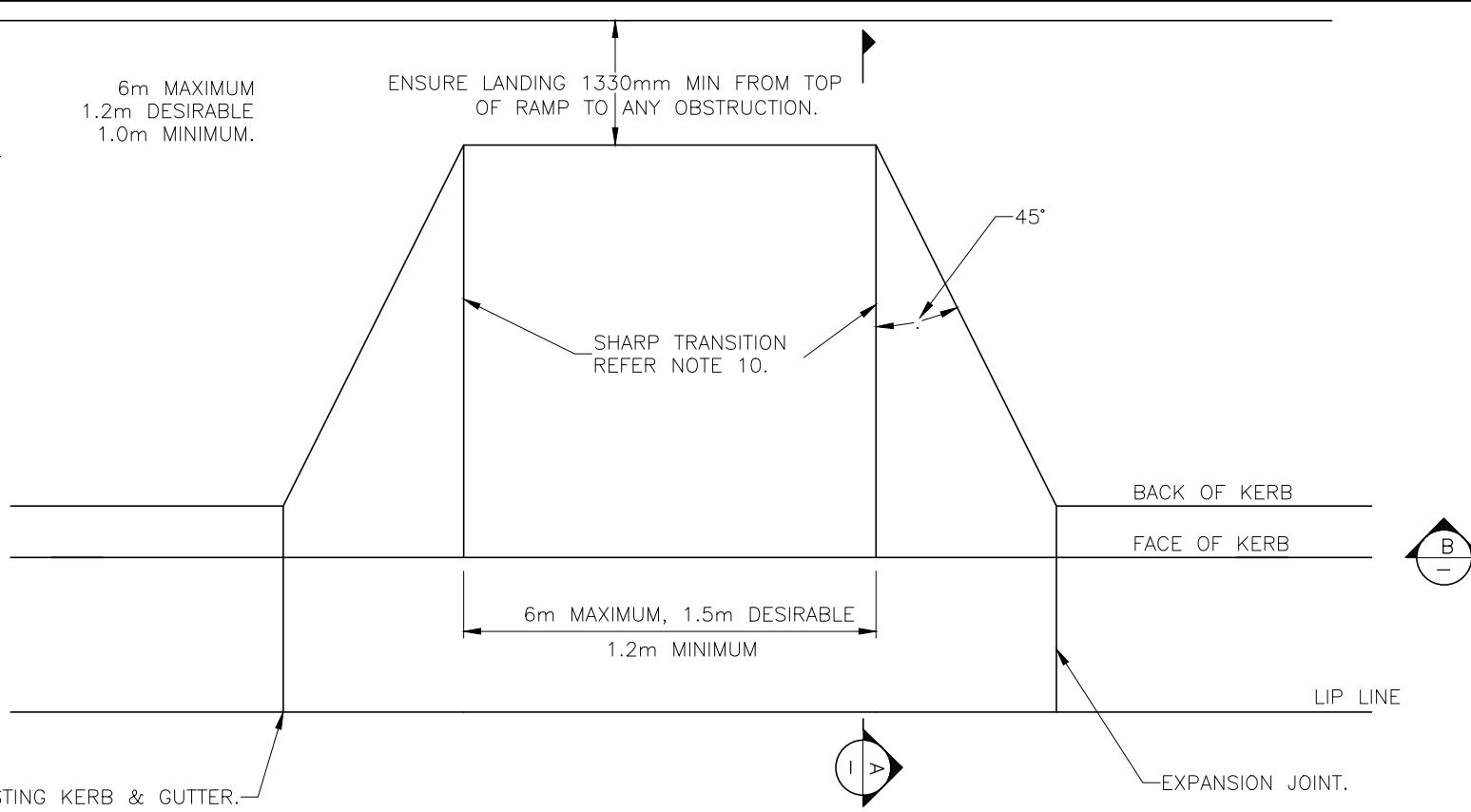
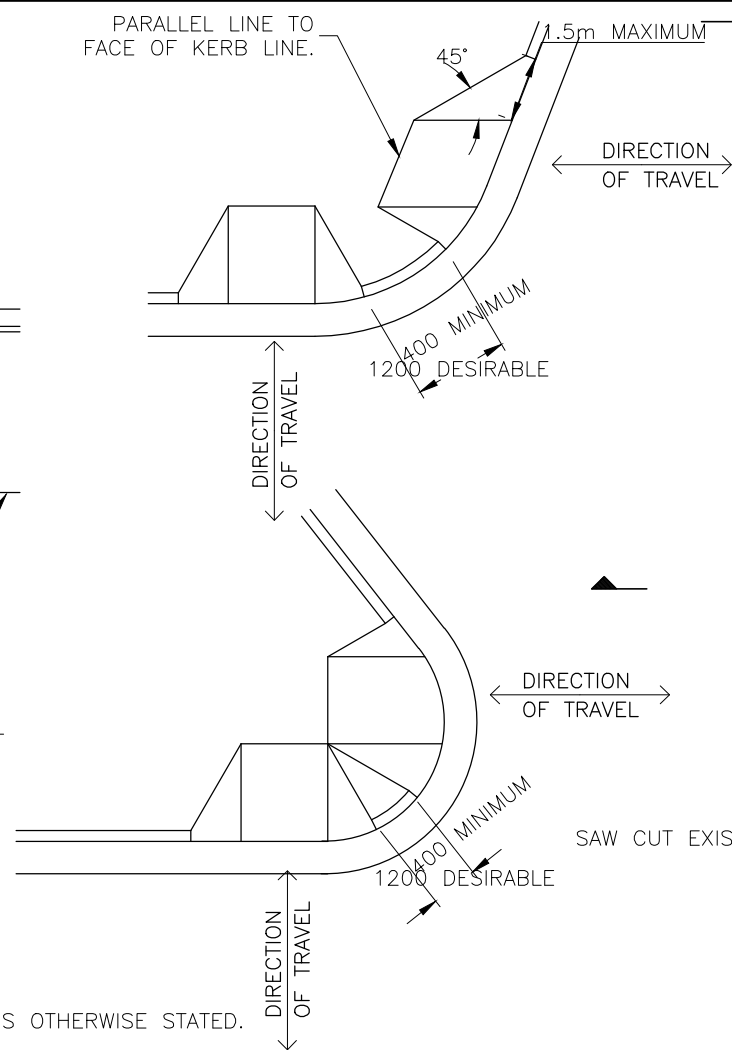
(ALTERNATIVE DETAIL FOR HIGHLY REACTIVE SUBGRADE AREA ONLY)

SCALE	AS SHOWN	ISSUE NO.	G	LIVERPOOL CITY COUNCIL	Std Dwg No.
DRAWN	M.H	DATUM	ASSUMED	FOOTPATH AND KERB & GUTTER	R23
CHECKED	B.P	DATE	SEP 2023	DETAIL	



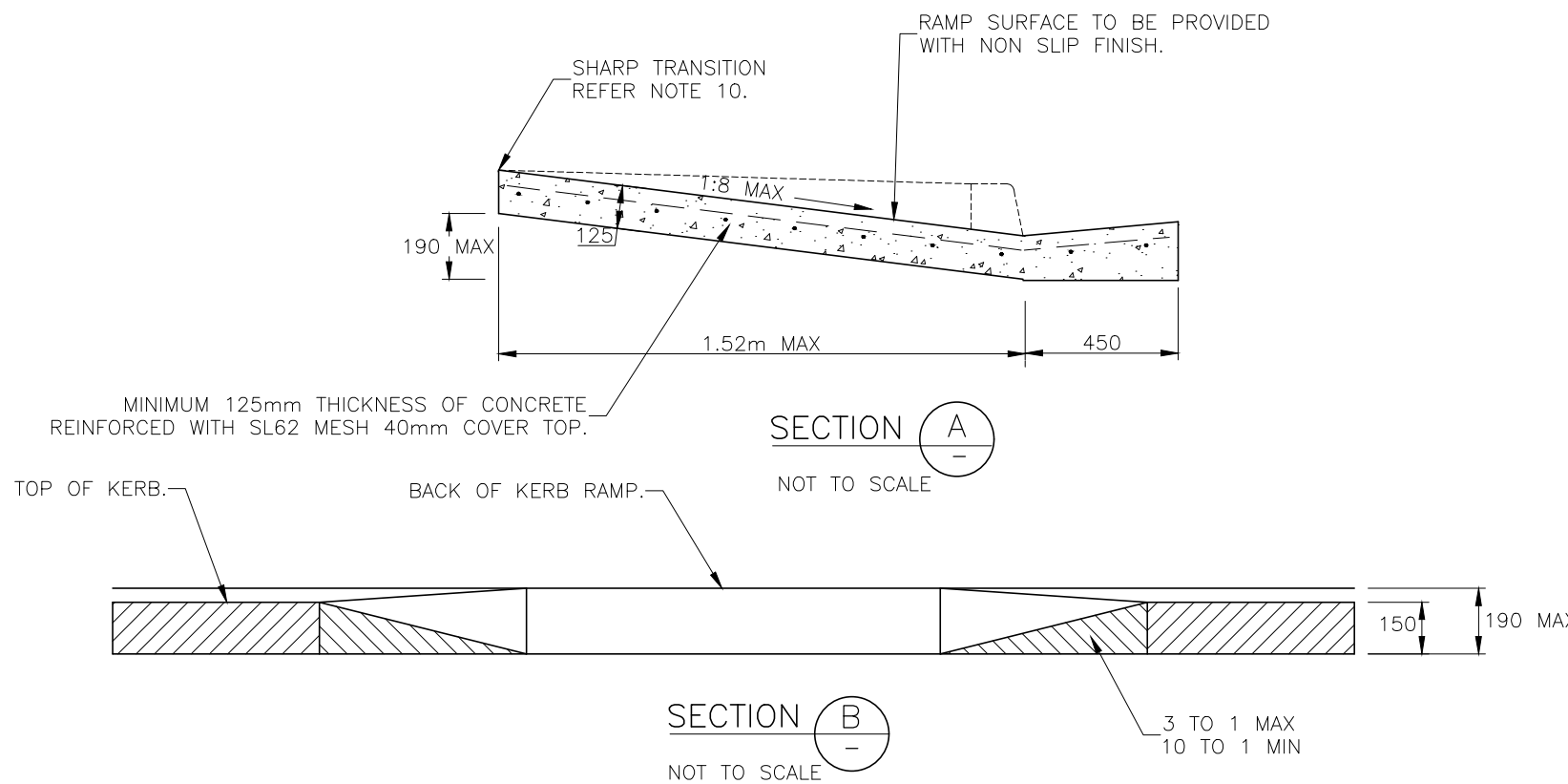
LOCATION OF RAMPS

NOT TO SCALE



RAMP DETAIL PLAN

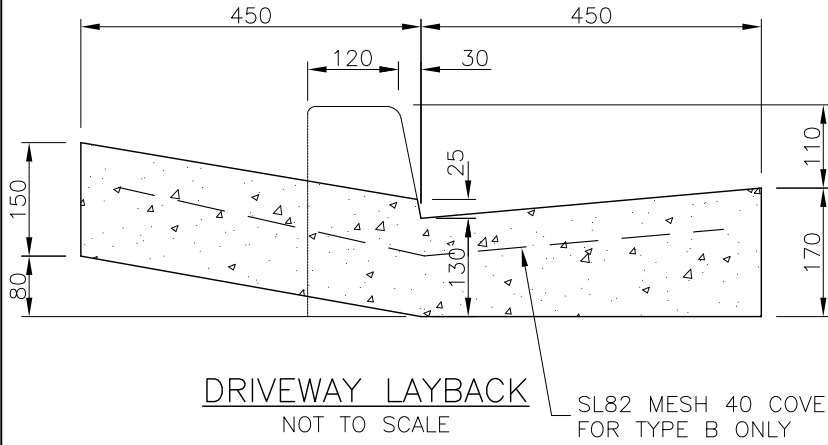
NOT TO SCALE



NOTES

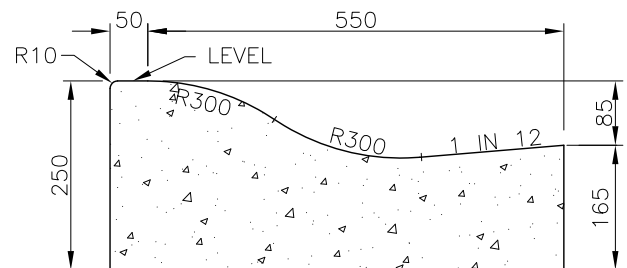
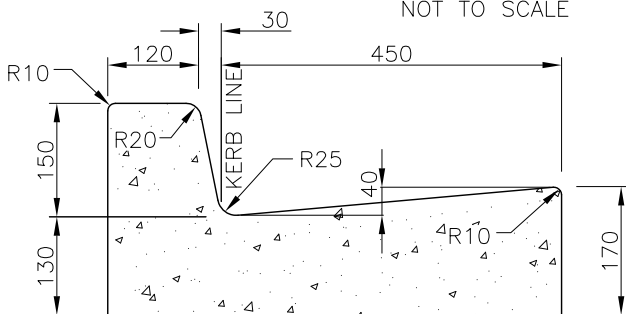
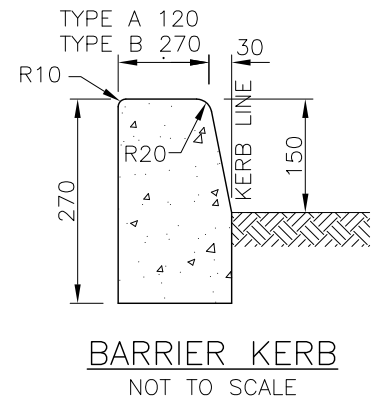
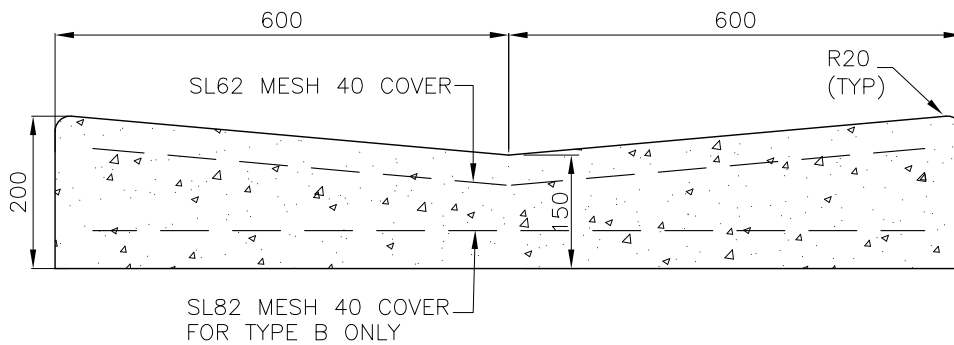
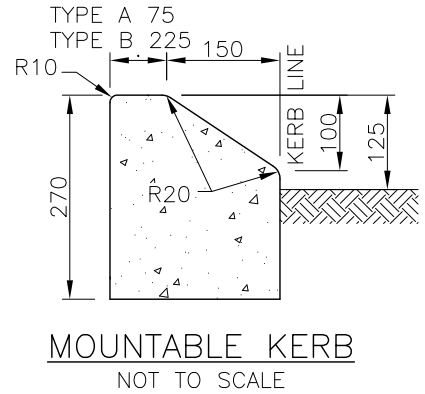
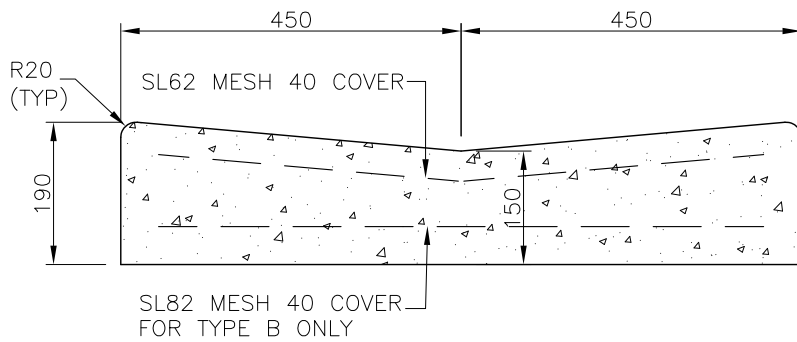
1. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE STATED.
2. ALL KERB RAMPS ARE TO BE ALIGNED WITH THE DESIRED DIRECTION OF PEDESTRIAN TRAVEL, AND BE A MINIMUM WIDTH OF 1200mm.
3. AT PEDESTRIAN CROSSINGS AND MARKED FOOT CROSSINGS RAMP MUST LINE UP WITH CROSSING AND CORRESPONDING CROSSING ON OTHER SIDE OF THE ROAD.
4. FOR A MARKED FOOT CROSSING (SHARED PEDESTRIAN / BICYCLE CROSSING) THE SLOPING FACE OF RAMP SHOULD BE AS WIDE AS THE INSIDE OF THE PAINT LINES WITH A PUSH BUTTON ON IT, AT A PRACTICAL WIDTH NO LESS THAN 1200mm.
5. AT PEDESTRIAN CROSSINGS (ZEBRA) THE SLOPING FACE OF THE RAMP SHOULD BE AS WIDE AS THE OUTSIDE EDGE OF THE ZEBRA STRIPES. WHERE THIS IS NOT POSSIBLE, THE RAMP SHOULD BE A MINIMUM WIDTH NO LESS THAN 1200mm WIDE.
6. AT MARKED FOOT CROSSINGS (PEDESTRIAN ONLY CROSSING) THE SLOPING FACE OF THE RAMP SHOULD BE AS WIDE AS THE INSIDE OF THE PAINT LINES. WHERE THIS IS NOT POSSIBLE, LOCATE RAMP CLOSE TO POST WITH A PUSH BUTTON ON IT, AT A MINIMUM WIDTH OF NOT LESS THAN 1200mm.
7. EXPANSION JOINTS TO BE PROVIDED WHERE ENDS OF KERB RAMP ABUTS KERB AND GUTTER.
8. SEPARATE KERB RAMPS MUST BE USED FOR ADJACENT CROSSINGS AT INTERSECTIONS.
9. ALL CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH (F'c) OF 25MPa AT 28 DAYS.
10. PROVIDE METAL KEY JOINTS OR EQUIVALENT AT SHARP TRANSITIONS.
11. THE NEED FOR SHARP TRANSITION IS CRITICAL IN GUIDING PEDESTRIANS WITH IMPAIRMENT.
12. THERE MUST BE A SHARP TRANSITION AND NO LIP BETWEEN EDGE OF RAMP AND THE GUTTER.

SCALE	AS SHOWN	ISSUE NO.	c	LIVERPOOL CITY COUNCIL	Std Dwg No.	
DRAWN	J.R.	DATUM	ASSUMED		KERB RAMPS	R17
CHECKED	V.C.	DATE	SEP 2020			



NOTES:

1. TYPE A REFERS TO RESIDENTIAL USE.
2. TYPE B REFERS TO MEDIUM DENSITY COMMERCIAL AND INDUSTRIAL USES.
3. ROAD BASE TO EXTEND BENEATH KERBS, GUTTERS, DISH DRAINS & DRIVEWAY LAYBACKS. REFER TO R23 FOR FURTHER DETAILS.
4. CONCRETE COMPRESSIVE STRENGTH (F'c) AT 28 DAYS, TO BE 20MPa FOR KERBS & GUTTERS AND 25MPa FOR DISH CROSSINGS AND LAYBACKS.



SCALE	AS SHOWN	ISSUE NO.	B	LIVERPOOL CITY COUNCIL 	Std Dwg No.
DRAWN	R.N.	DATUM	ASSUMED		KERB PROFILES
CHECKED	P.B.	DATE	JULY 06		