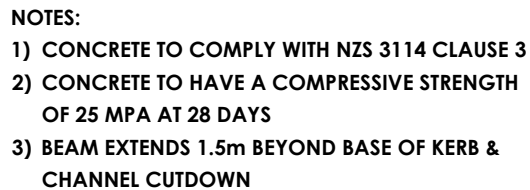
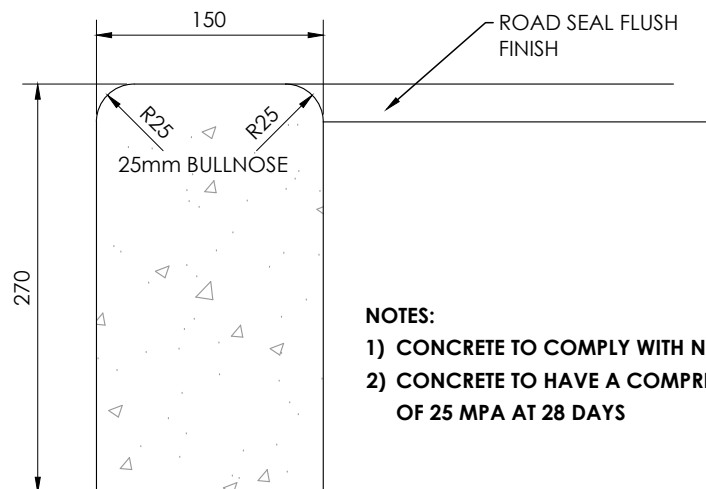


**NOTES:**

- 1) CONCRETE TO COMPLY WITH NZS 3114 CLAUSE 3
- 2) CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 25 MPA AT 28 DAYS

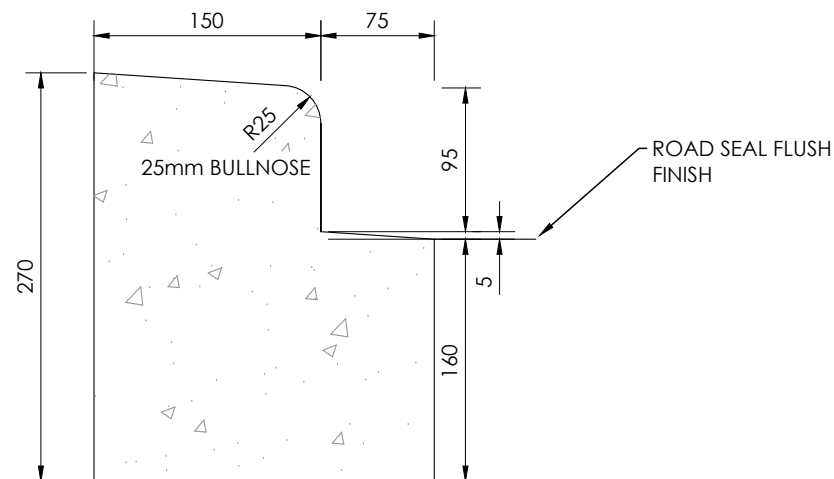




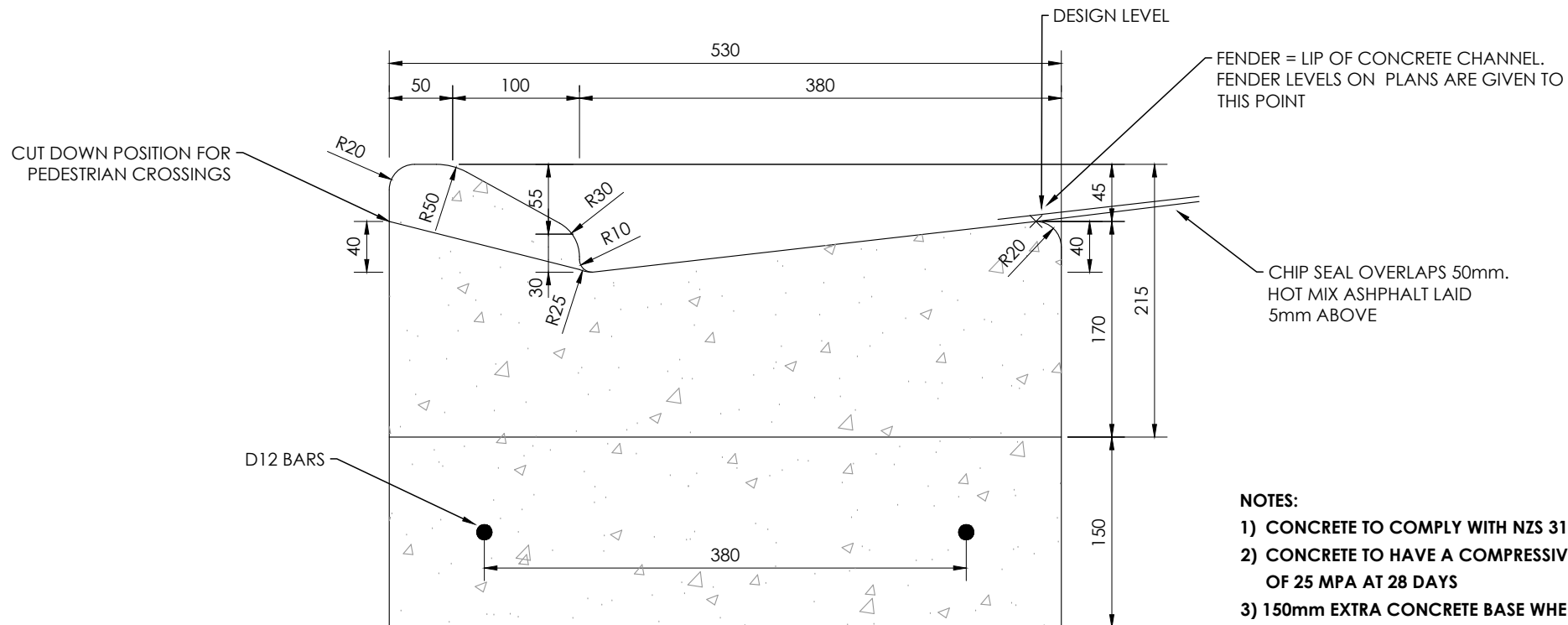
FLUSH KERB ONLY

**NOTES:**

- 1) CONCRETE TO COMPLY WITH NZS 3114 CLAUSE 3
- 2) CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 25 MPA AT 28 DAYS

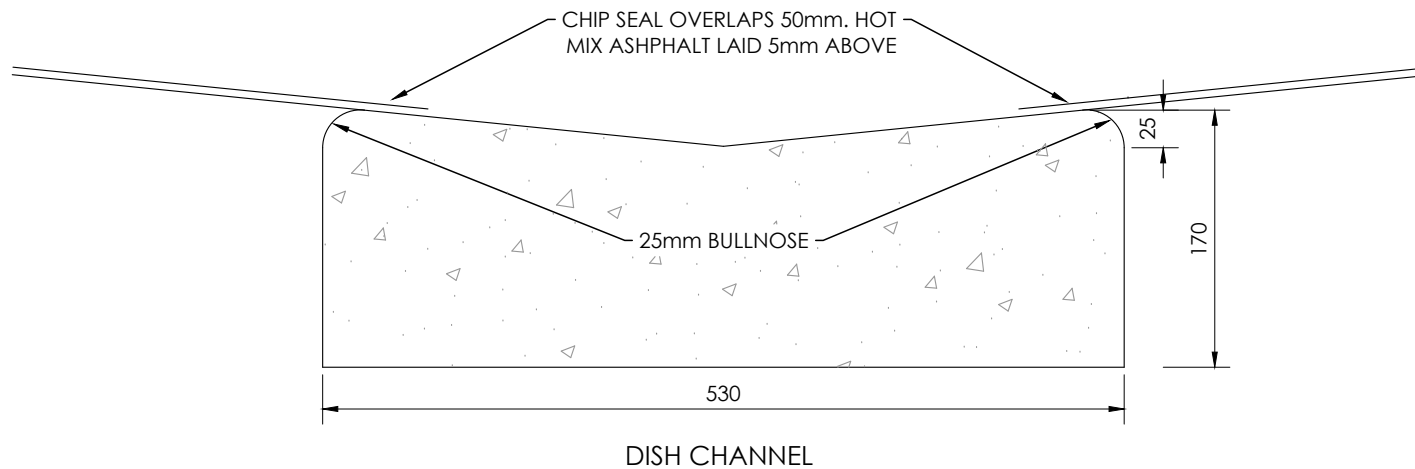


KERB AND NIB



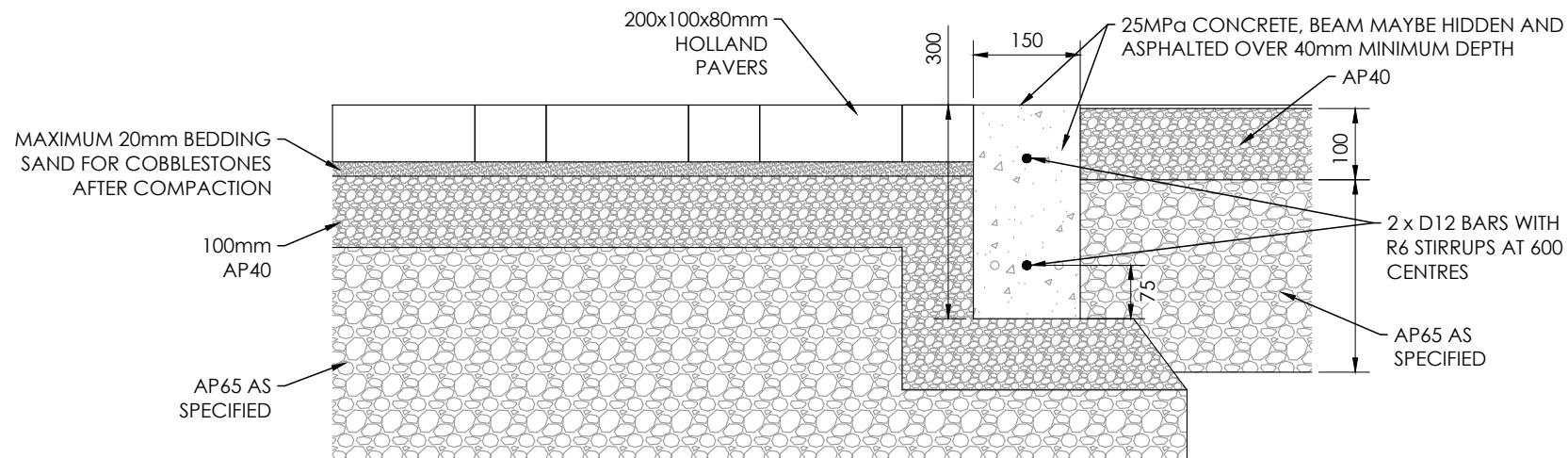
**NOTES:**

- 1) CONCRETE TO COMPLY WITH NZS 3114 CLAUSE 3
- 2) CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 25 MPA AT 28 DAYS
- 3) 150mm EXTRA CONCRETE BASE WHERE DIRECTED FOR BUS STOPS, CORNER ROUNDINGS, LIGHT INDUSTRIAL AREAS AS REQUIRED. D12 BARS 75mm COVER
- 4) PEDESTRIAN CROSSING CUTDOWN IS TO INVERT OF CHANNEL.
- 5) FOR DRIVEWAY SERVICING TWO LOTS / DWELLINGS CUTDOWN REQUIRED WITH 25mm BULLNOSE FROM CHANNEL.



**NOTES:**

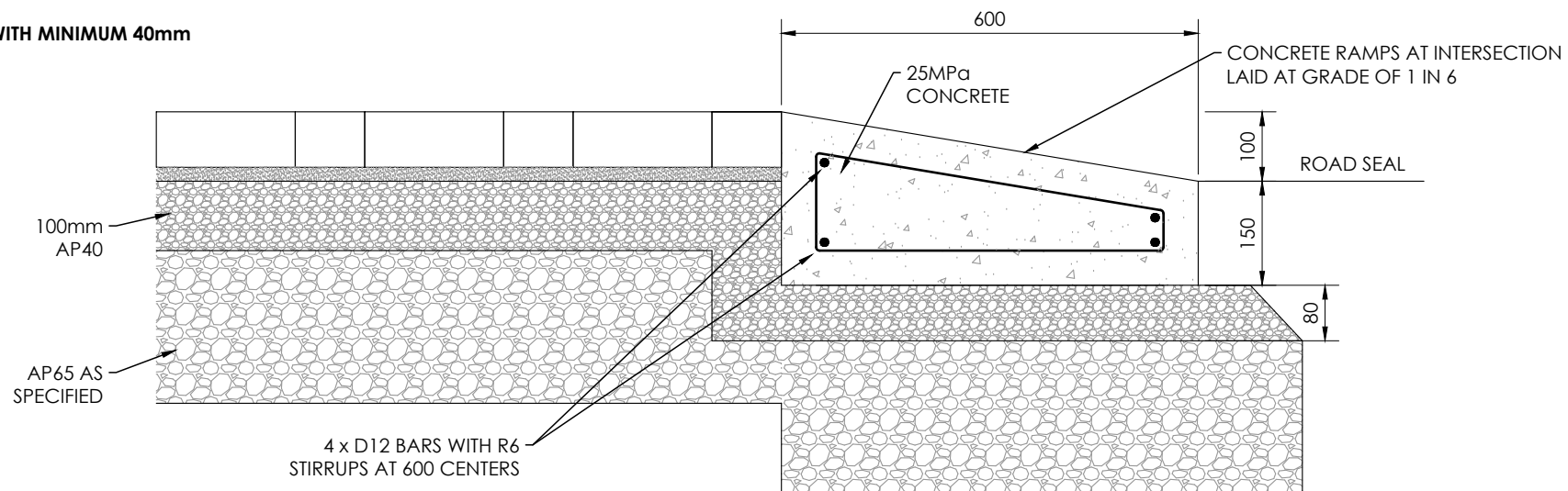
- 1) CONCRETE TO COMPLY WITH NZS 3114 CLAUSE 3
- 2) CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 25 MPA AT 28 DAYS



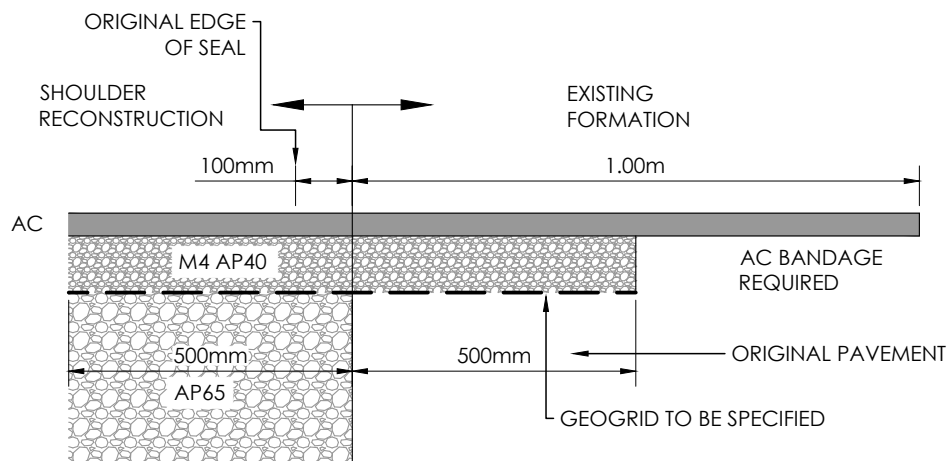
**NOTES:**

- 1) CONCRETE TO COMPLY WITH NZS 3114 CLAUSE 3
- 2) CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 25 MPA AT 28 DAYS
- 3) BEAM CAN BE HIDDEN WITH MINIMUM 40mm ASPHALT THICKNESS

EXPOSED CONCRETE BEAM TO BE LAID BESIDE COBBLED ROAD CROSSINGS



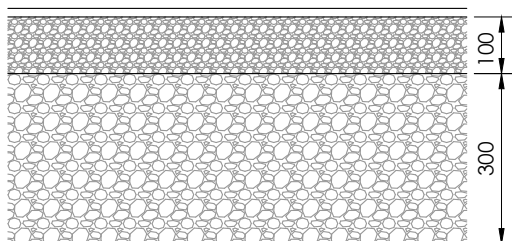
RAISED PLATFORM TO BE LAID BESIDE COBBLED ROAD CROSSINGS



**NEW ROAD FOUNDATION  
AND SHOULDER RECONSTRUCTION**

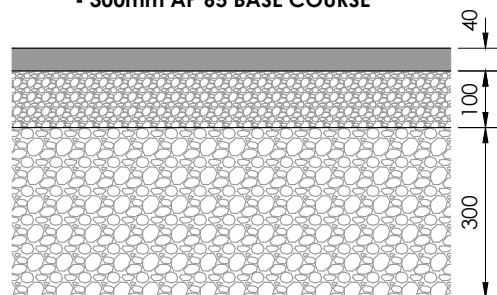
**WHERE NEW SHOULDER MEETS EXISTING CARRIAGEWAY FORMATION,  
M4 AP40 TO EXTEND 500mm TO KEY INTO EXISTING.**

**-TWO COAT SEAL GRADE 4-6 CHIP  
-100mm M4 AP40  
-300mm AP 65 BASE COURSE**



**NEW ROAD FOUNDATION  
AND SHOULDER RECONSTRUCTION**

**- DG-10 40mm  
- 100mm M4 AP40  
- 300mm AP 65 BASE COURSE**



**NEW ROAD FOUNDATION  
AND SHOULDER RECONSTRUCTION**

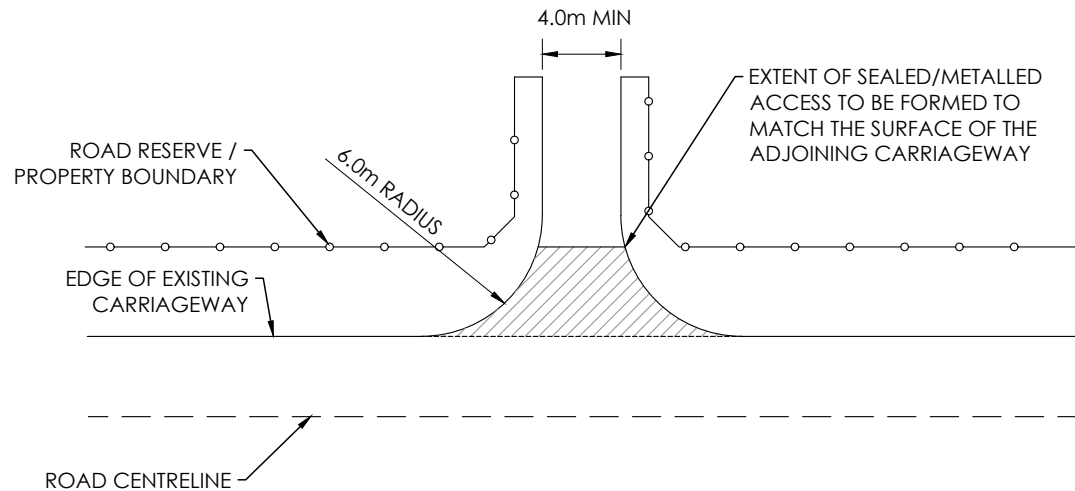
**CUT TO WASTE BERM UNDER THE NEW CONSTRUCTION  
TO UPGRADE 340 mm BELOW NEW SEAL LEVEL.  
BACKFILL WITH 250mm DEPTH OF CRUSHED AP65 IN  
PREPARATION FOR FINAL CARRIAGEWAY  
CONSTRUCTION USING M4 AP40.**

**ADDITIONAL BASE AND SUB BASE MAY BE REQUIRED  
WHEN DIRECTED BY THE ENGINEER OR IN CBR /  
TESTING INDICATE ADDITION MATERIAL IS REQUIRED  
OR SITUATIONS REQUIRE ALTERNATIVE SOLUTIONS.**

**EXTRA BASE AND SUB BASE MAY BE REQUIRED WHEN  
DIRECTED BY THE ENGINEER OR IN SITUATIONS E.G.**

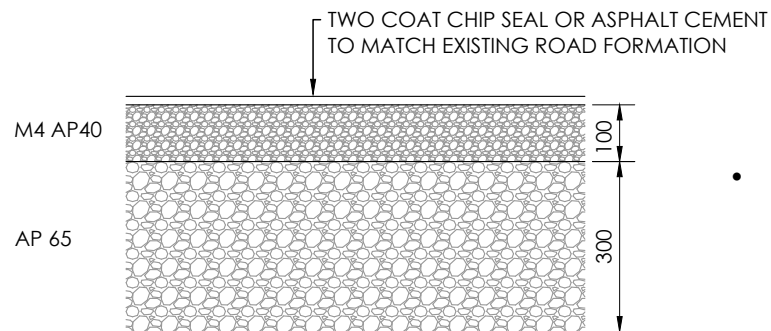
- **COMMERCIAL ENTRANCEWAY**
- **INDUSTRIAL SITES**
- **BUS STOPS**
- **CORNER ROUNDING**
- **LARGE TURNING MOVEMENTS.**

**ALL CARRIAGEWAY WORKS SHALL COMPLY WITH ANY  
STANDARDS PUBLISHED, ADOPTED OR ENDORSED BY  
WAKA KOTAHİ NZTA AND STANDARDS NEW ZEALAND  
THAT APPLY TO THE TYPE AND NATURE OF THE WORK.  
ALL BASECOURSE AND SUB BASECOURSE MATERIALS ARE  
TO COMPLY WITH WAKA KOTAHİ NZTA B/2 M/4:AP40**



TYPE C1

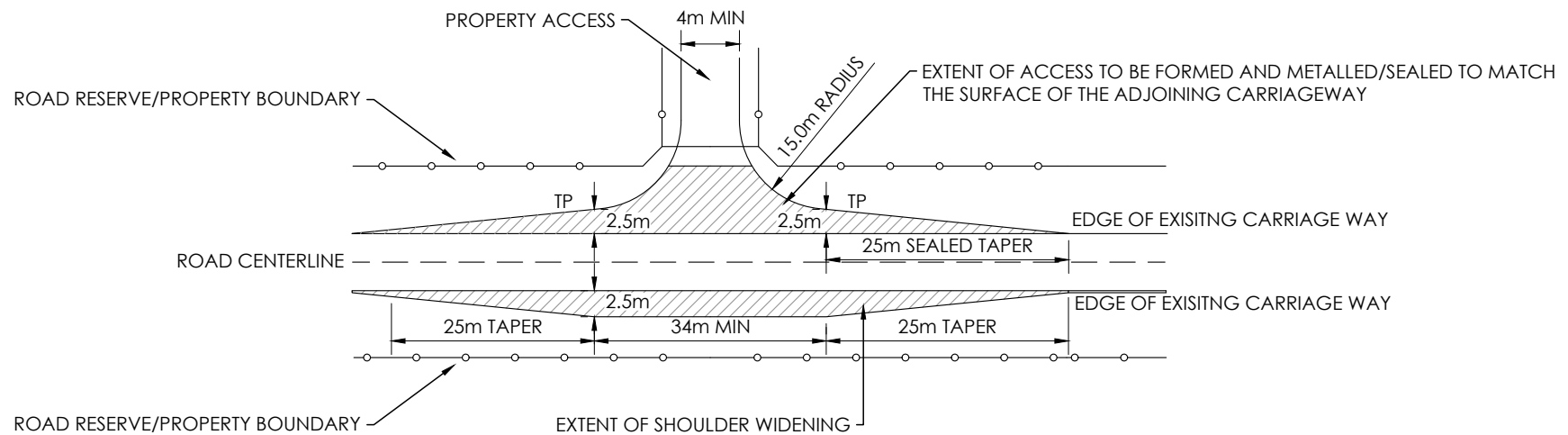
NOTE: ALL DIMENSIONS IN METRES



- IF THE ROAD IS NOT SEALED, THE ENTRANCEWAY BACK TO THE BOUNDARY SHALL BE EXCAVATED AND FORMED WITH AT LEAST 300mm OF AP 65 AND TOPPED WITH A MINIMUM OF 100mm AP40 BASECOURSE

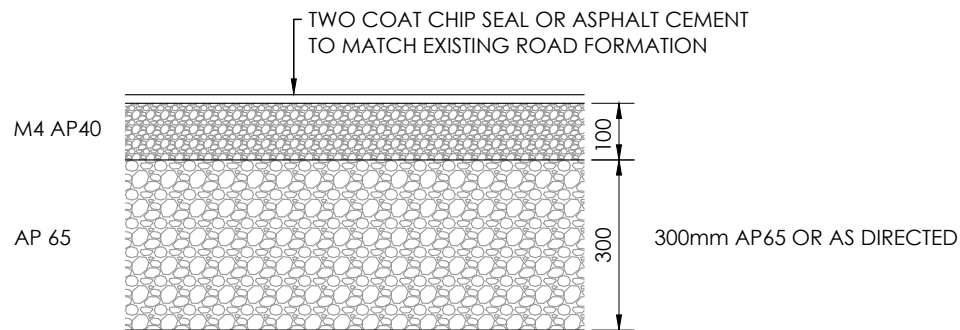
DETAIL FOR NEW FOUNDATION AND SHOULDER RECONSTRUCTION



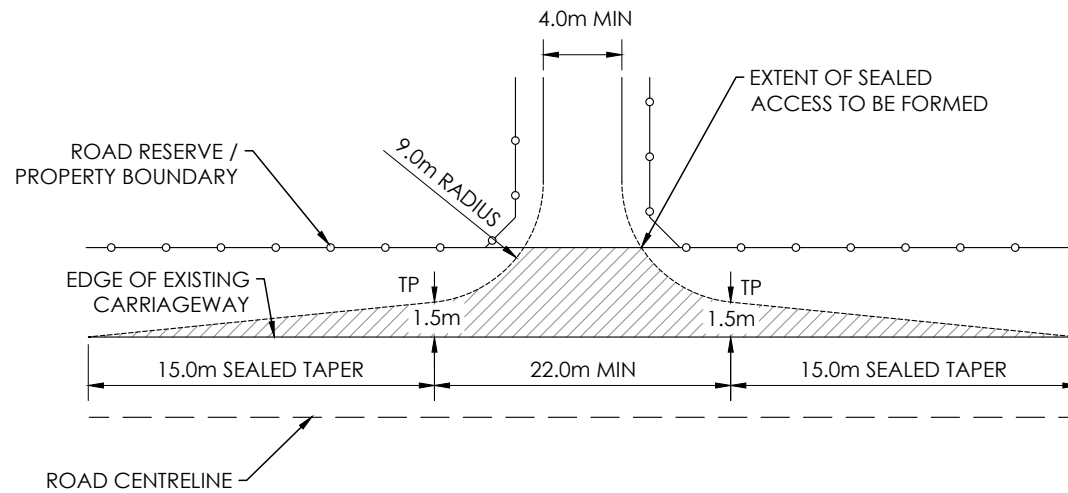


TYPE D

**NOTE: ALL DIMENSIONS IN METRES**

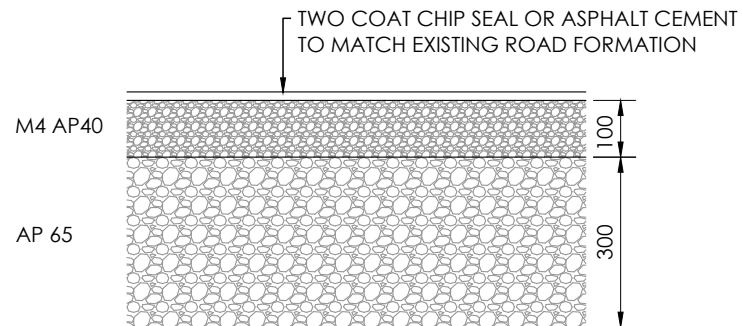


DETAIL FOR NEW HEAVY DUTY  
FOUNDATION AND SHOULDER  
RECONSTRUCTION

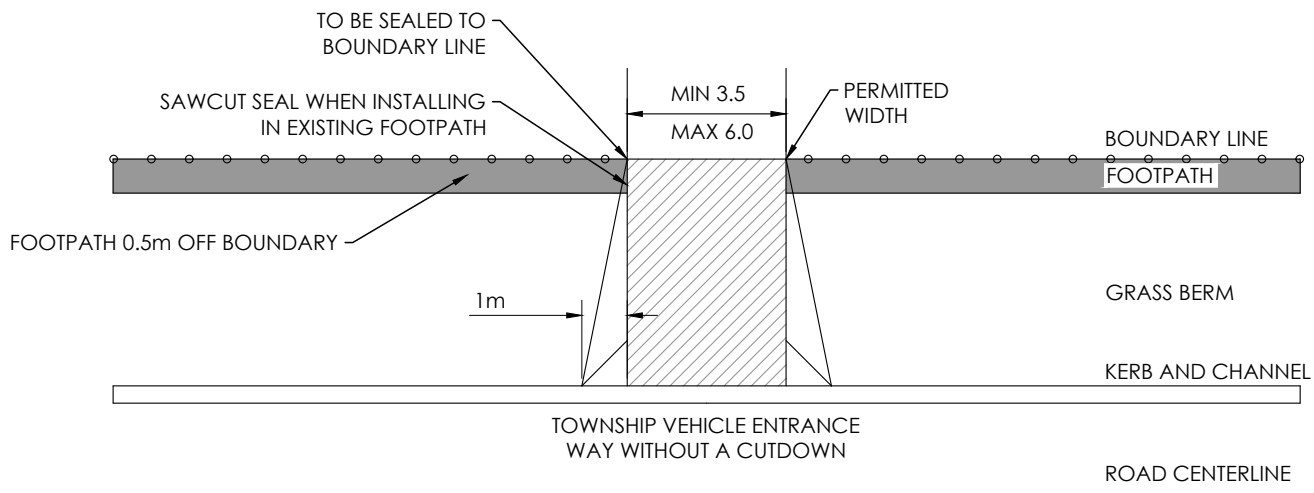


TYPE C2

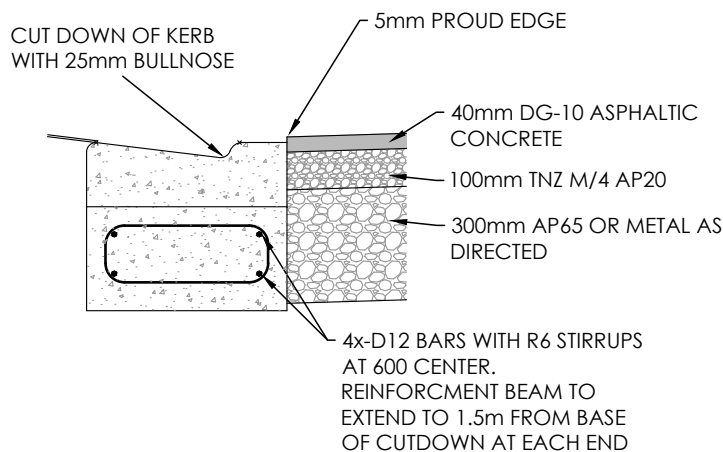
**NOTE: ALL DIMENSIONS IN METRES**



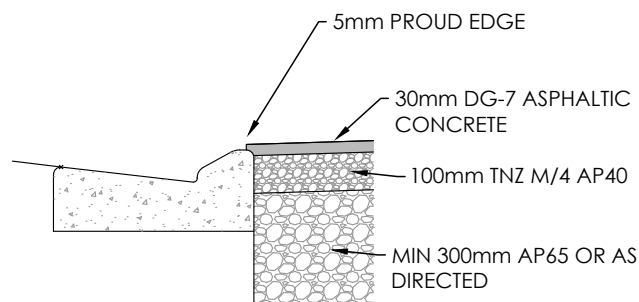
DETAIL FOR NEW FOUNDATION AND SHOULDER RECONSTRUCTION



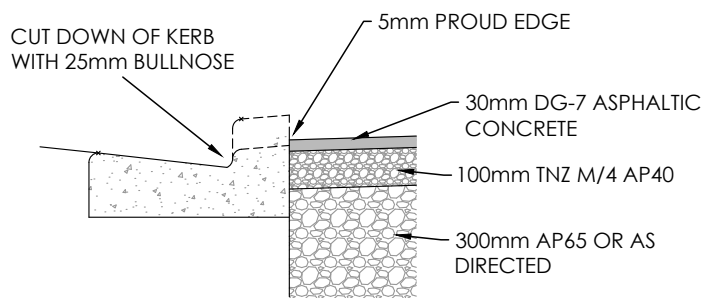
### TOWNSHIP VEHICLE ENTRANCEWAY WITH FOOTPATH AT BOUNDARY LINE



HEAVY DUTY KERB AND CHANNEL WITH CUTDOWN  
FOR COMMERCIAL AND FOR THREE OR MORE LOTS  
OFF A RIGHT OF WAY



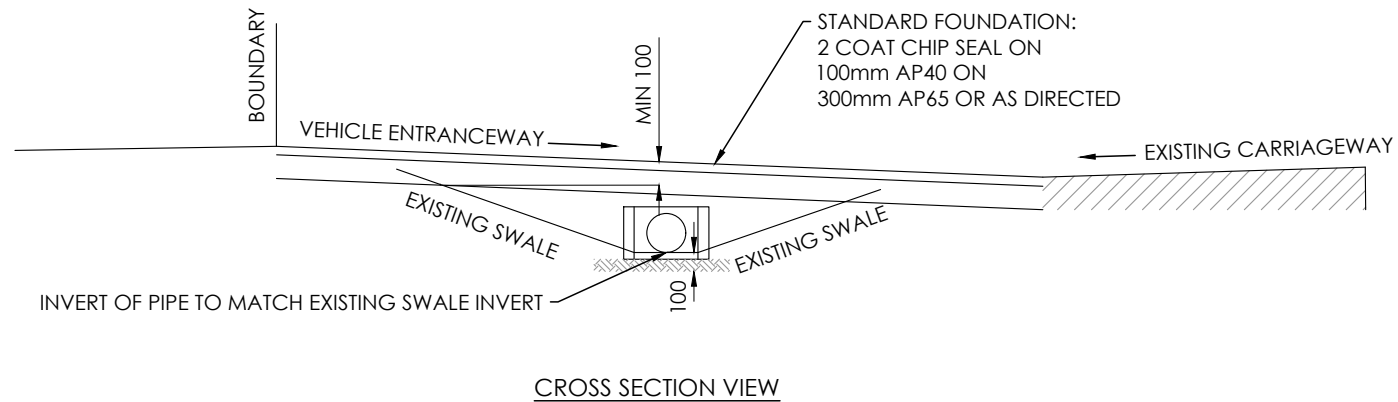
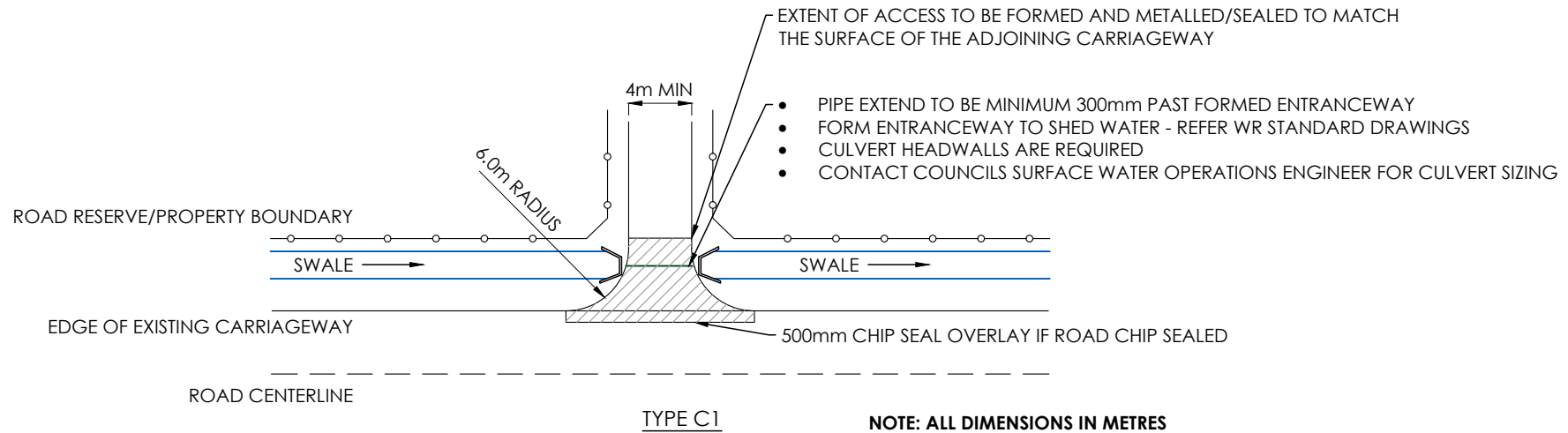
LOW PROFILE KERB AND CHANNEL  
CROSSING FOR SINGLE PROPERTY



STANDARD KERB AND CHANNEL CROSSING TO  
RIGHTS OF WAYS SERVICING TWO LOTS

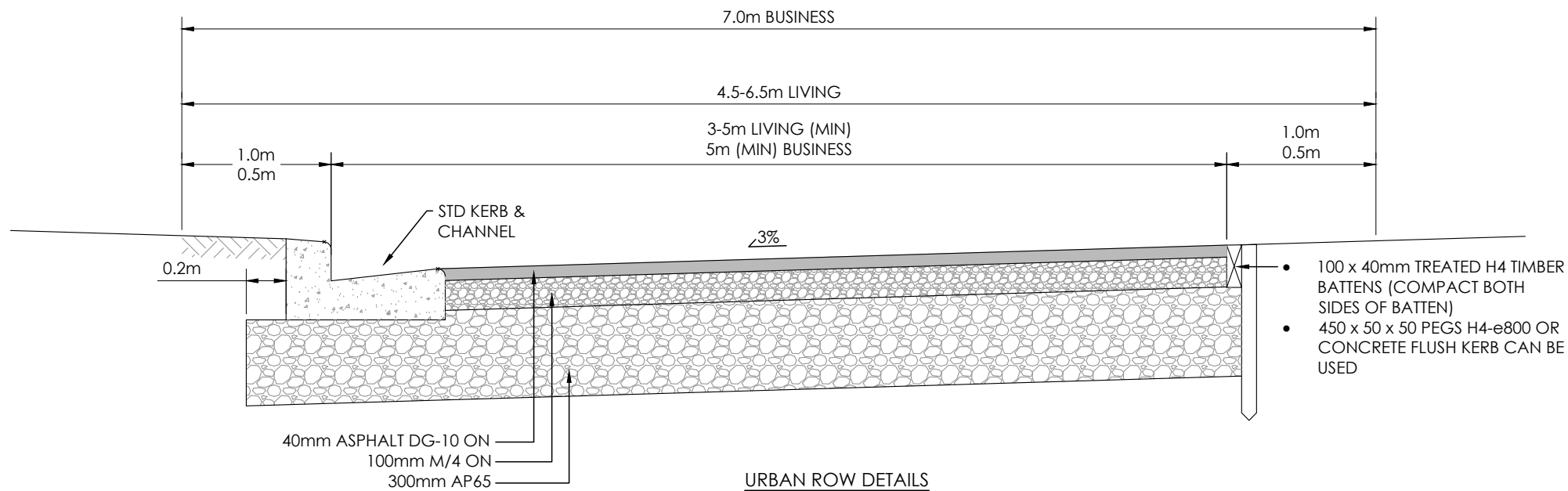
#### NOTES:

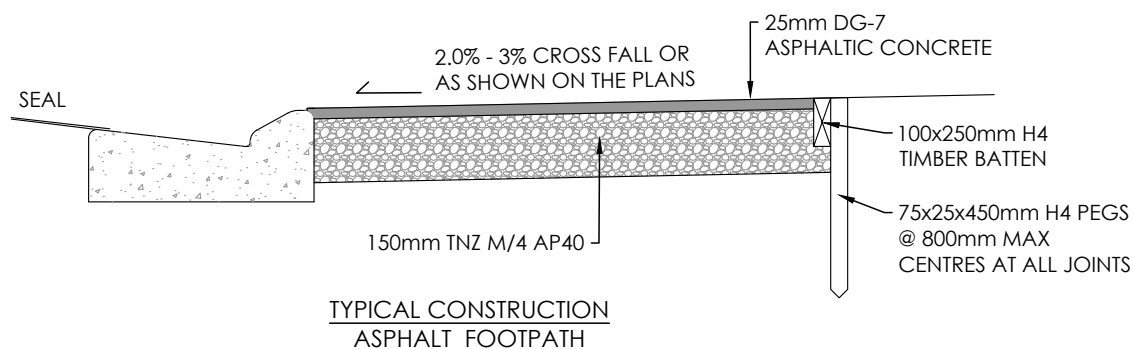
- DEPTH OF BASECOURSE IS THE MINIMUM
- EXTRA DEPTH MAY BE NEEDED DEPENDING ON SUBGRADE TO ACHIEVE COMPACTED STRENGTH
- CROSSFALL TO BE NOMINALLY 3% (MIN 1%, MAX 4.5%) OR AS SHOWN ON PLANS
- BATTENS NOT REQUIRED WHERE METALCOURSE CONTAINED BY CONCRETE KERBS OR CONCRETE FOUNDATIONS
- ALL EXISTING SEALED PATHS (FOOTPATHS) AND DRIVES TO BE SAWCUT AT LIMIT OF NEW PATHS
- NO CUTDOWN OF KERB ON LOW PROFILE KERBS UNLESS FOR PEDESTRIAN CROSSING



**NOTES:**

- REFER WR STANDARD DRAWINGS FOR PIPE SIZES, PIPE TYPES & COVER DETAILS
- PRECAST HEADWALLS ARE APPROVED. ALL OTHER OPTIONS MUST HAVE PRIOR APPROVAL BY SDC WATER SERVICES ENGINEER

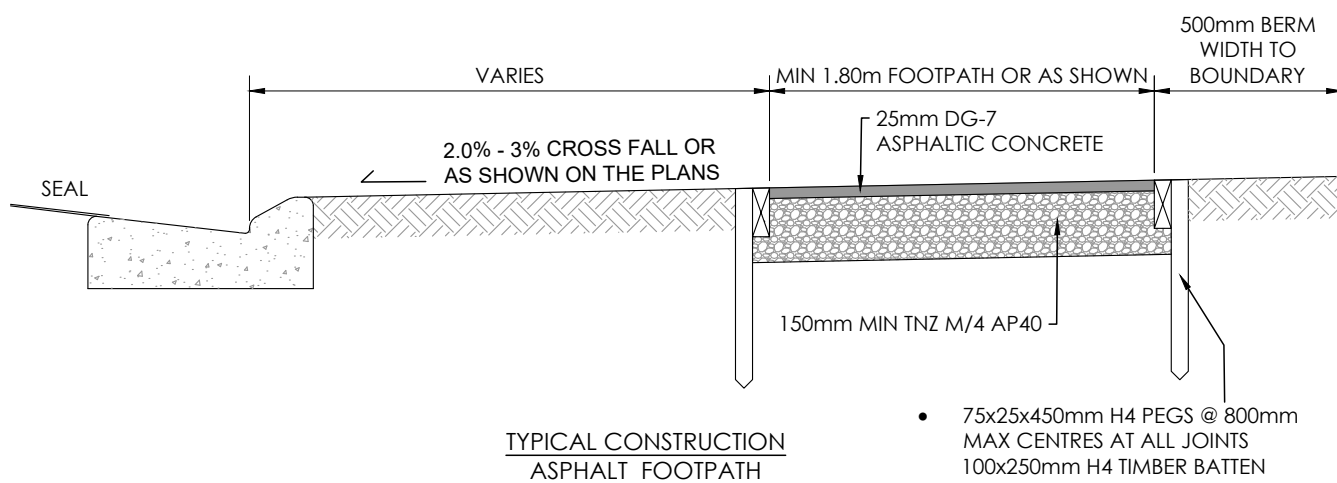




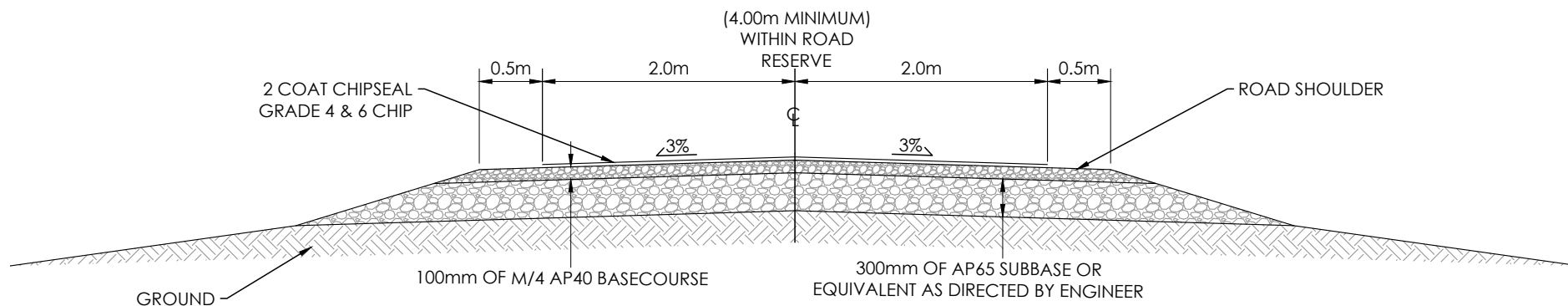
**NOTES:**

- DEPTH OF BASECOURSE IS THE MINIMUM.
- EXTRA DEPTH MAY BE NEEDED DEPENDING ON THE SUBGRADE TO ACHIEVE THE COMPACTED STRENGTH.
- CROSSFALL TO BE NOMINALLY 2% ( MIN 1.25%) OR AS SHOWN ON PLANS.
- BATTENS NOT REQUIRED WHERE METAL COURSE CONTAINED BY CONCRETE KERBS OR CONCRETE FOUNDATIONS
- ALL EXISTING SEALED PATHS (FOOTPATHS ) AND DRIVES TO BE SAWCUT AT LIMIT OF NEW PATHS.

**AREAS WHERE THERE IS NO KERBING  
BATTENS ARE TO BE USED**



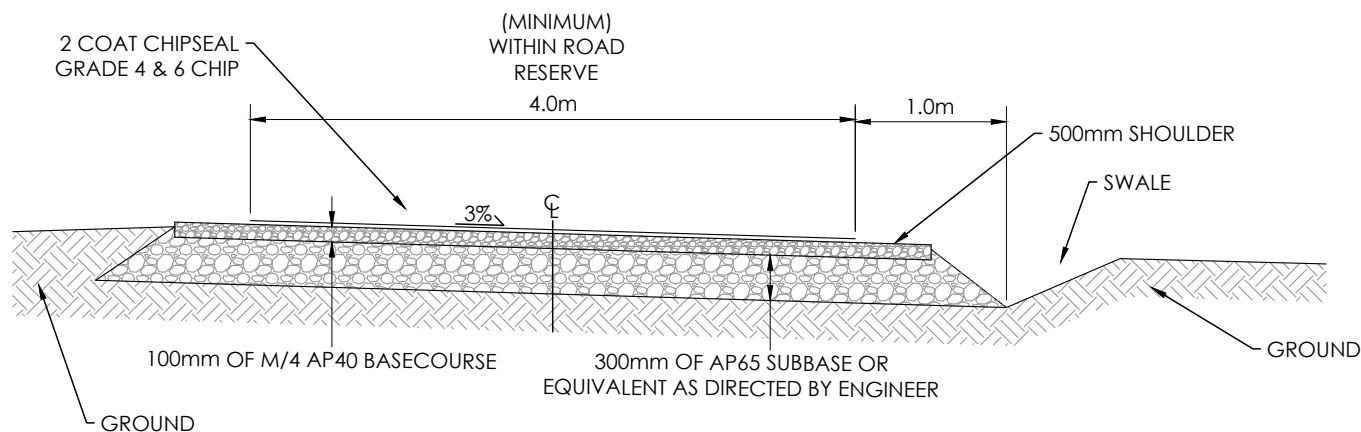
- 75x25x450mm H4 PEGS @ 800mm MAX CENTRES AT ALL JOINTS
- 100x250mm H4 TIMBER BATTEN
- FOOTPATH WIDTHS - REFER ENGINEERING CODE OF PRACTICE
- CONCRETE PATHS : DESIGN TO BE ENGINEERED FOR SDC APPROVAL



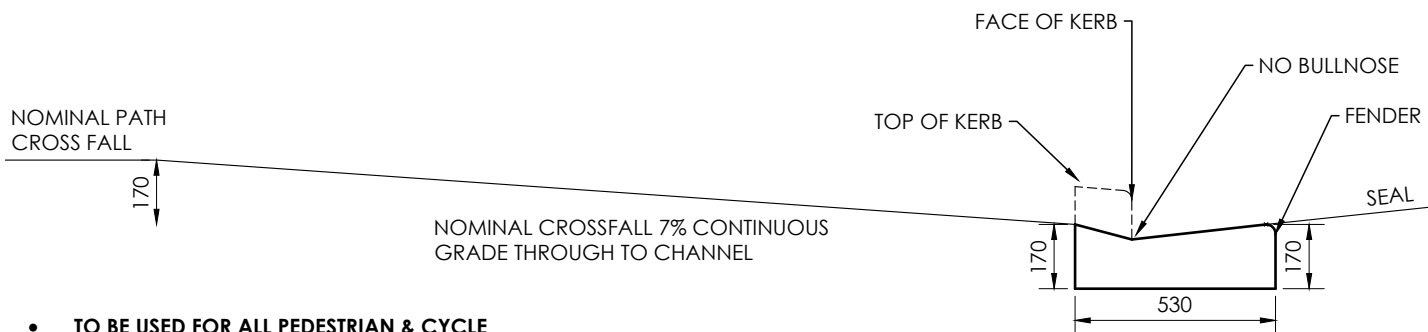
TWO WAY CROSS FALL

**NOTES:**

- 300mm OF AP65 SUBBASE MAY BE SUFFICIENT DEPENDING ON THE STRENGTH OF THE SUBGRADE MATERIAL. MINIMUM SUBGRADE STRENGTH OF CBR  $\geq 10.0$  REQUIRED (CLEGG IMPACT VALUE  $\geq 25$ ).
- FOR HEAVY DUTY VEHICLE USE CBR  $\geq 7.0$  (CLEGG IMPACT VALUE  $\geq 35$ )
- SUBBASE TO BE COMPLETED TO 95% (MINIMUM) OF OPTIMUM DRY DENSITY
- MINIMUM WIDTH OF 4.0m FROM EDGE OF SEAL TO ROAD/PROPERTY BOUNDARY
- MINIMUM WIDTH OF ACCESSORY ON PRIVATE PROPERTY MAY VARY (SEE DISTRICT PLAN).

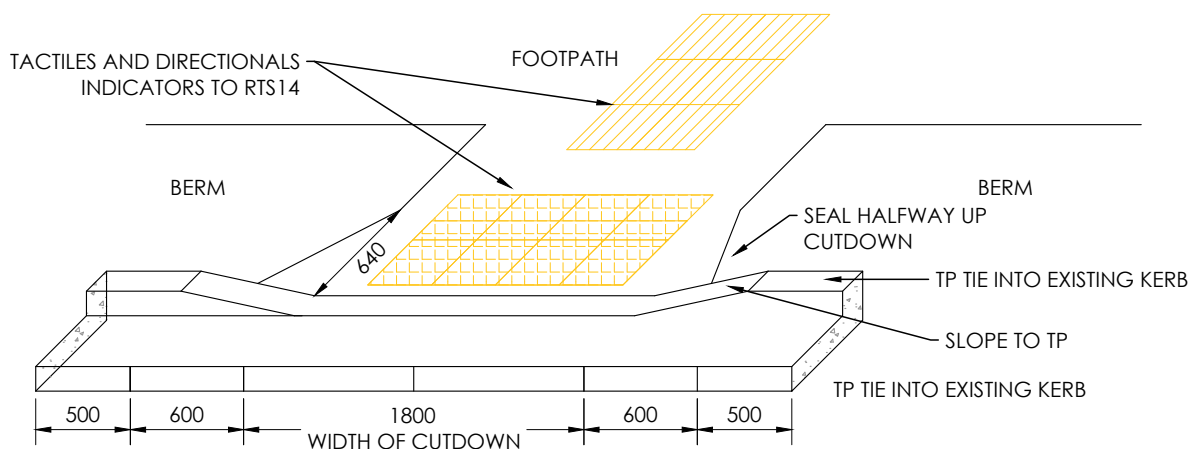


ONE WAY CROSS FALL

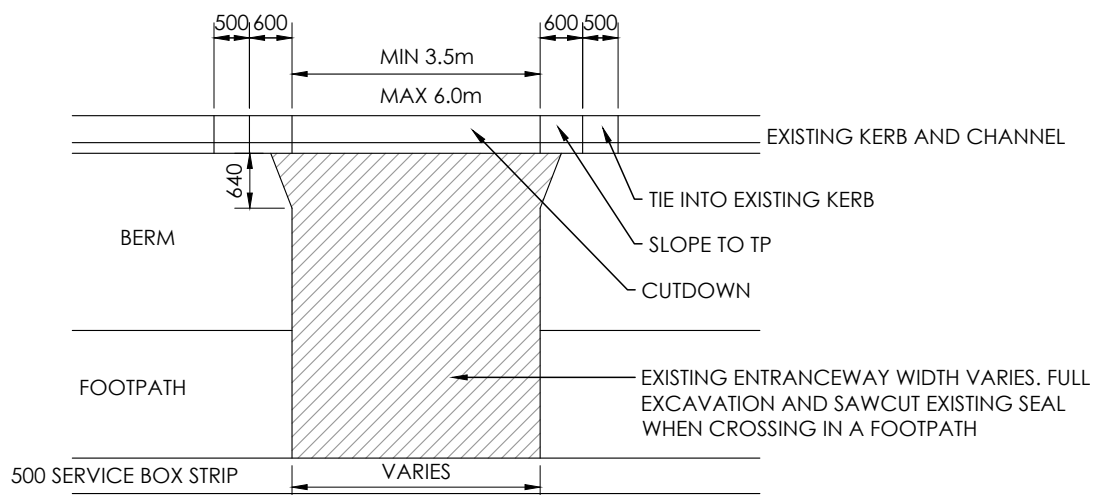


- TO BE USED FOR ALL PEDESTRIAN & CYCLE CUTDOWNS & ENTRANCEWAYS (WHEN REQUIRED)
- MAXIMUM GRADIENT OF PATH TO BE 12.5%
- BATTENS TO BE LAID TO TOP OF CUTDOWN SHOULDER WHEN ADJACENT AREA IS COBBLESTONE OR LANDSCAPING

KERB AND CHANNEL WITH PEDESTRIAN CUT DOWN



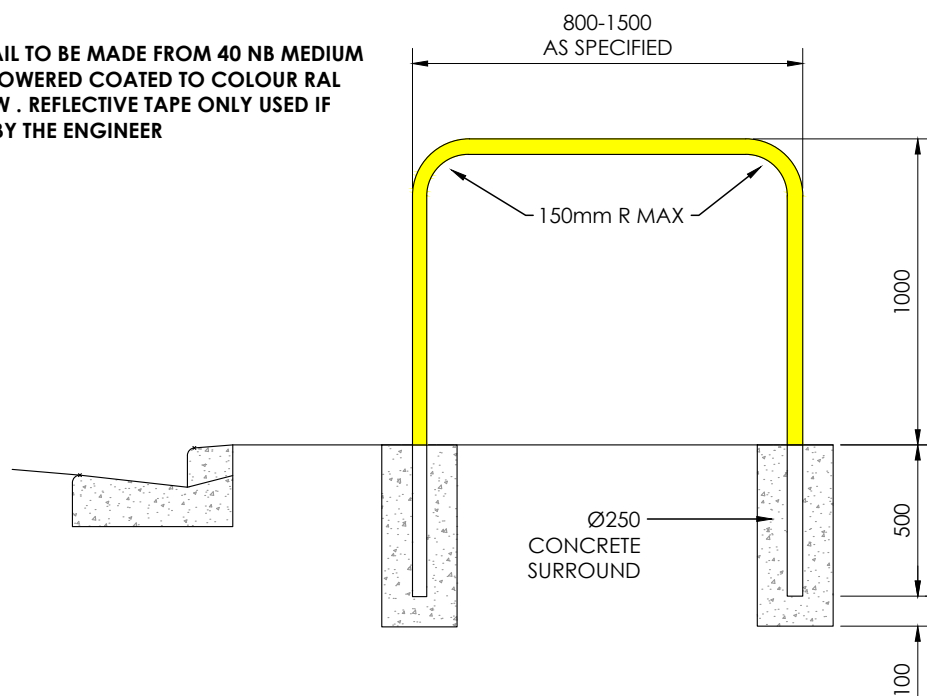
KERB AND CHANNEL WITH CUT DOWN WITH WARNING TACTILES



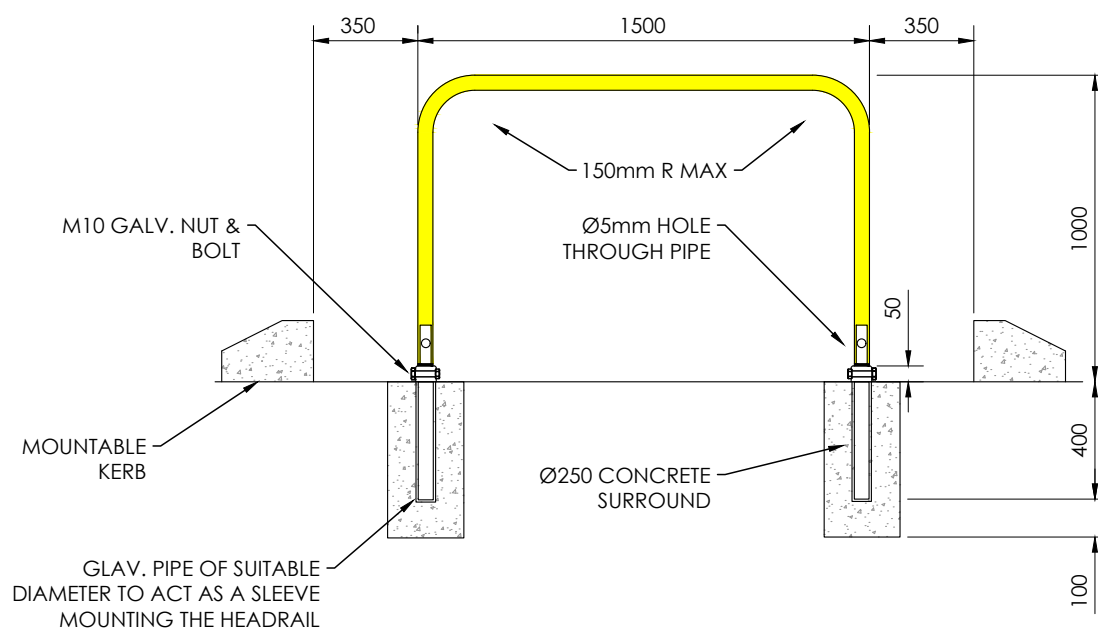
KERB AND CHANNEL WITH CUTDOWN



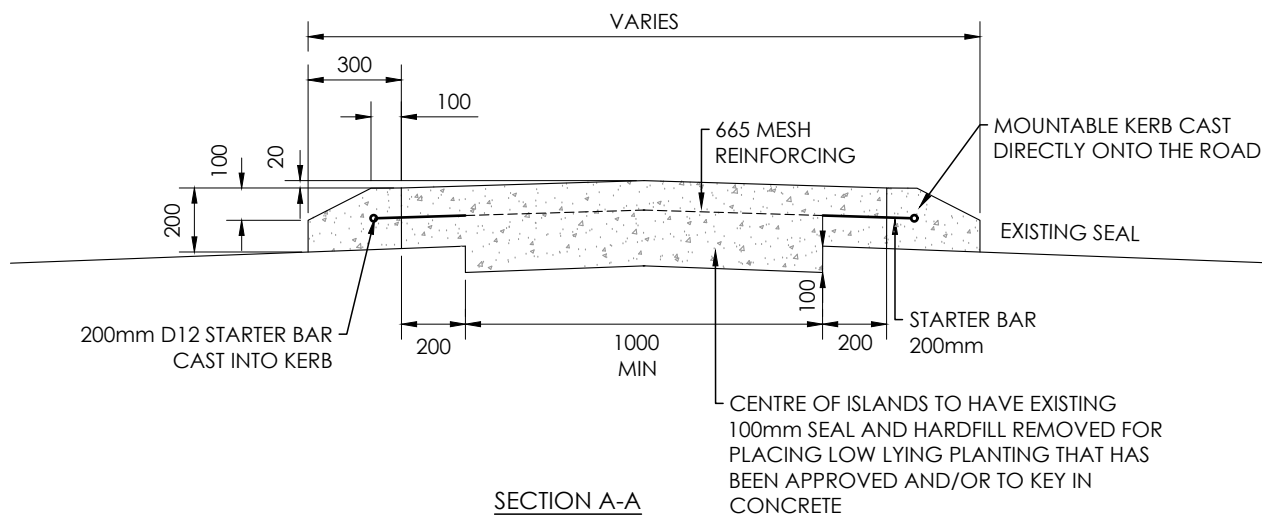
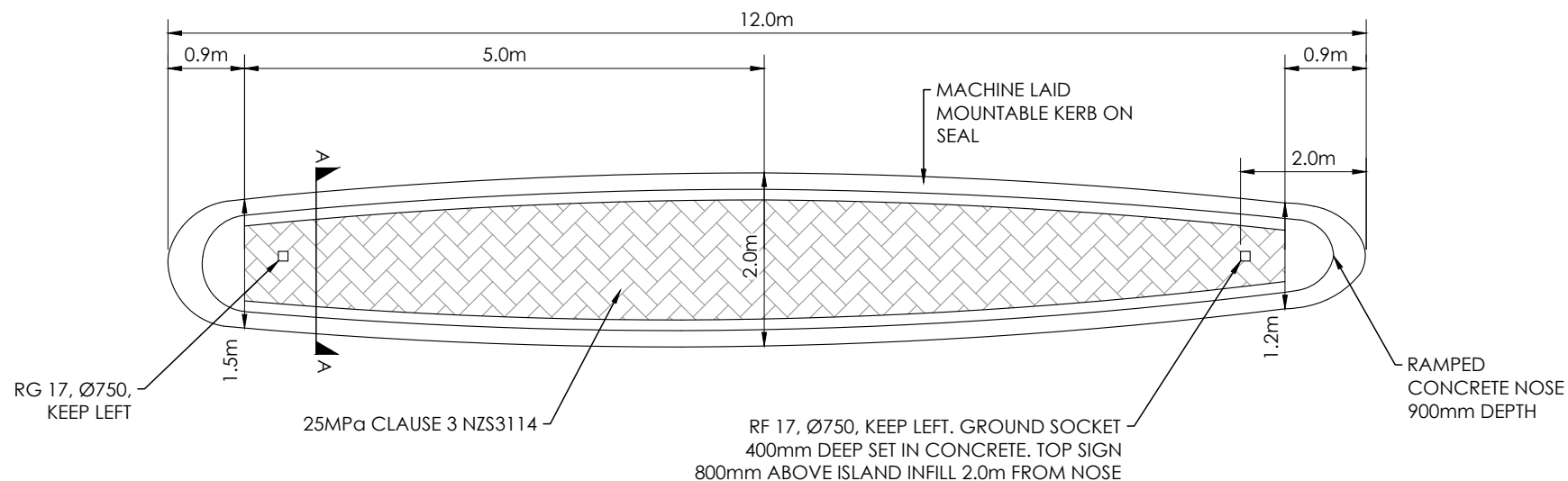
**NOTES:**  
**HOLDING RAIL TO BE MADE FROM 40 NB MEDIUM GALV. PIPE POWERED COATED TO COLOUR RAL 1021-YELLOW . REFLECTIVE TAPE ONLY USED IF REQUESTED BY THE ENGINEER**



CYCLE HOLDING RAIL FOOTPATH DETAIL



CYCLE HOLDING RAIL MEDIAN ISLAND FRANGIBLE DETAIL



#### NOTES:

- CONCRETE INFILL TO BE MINIMUM 100mm ON COMPACTED AP40
- COLOUR AND TEXTURE TO BE APPROVED BY SELWYN DISTRICT COUNCIL
- COBBLESTONE INFILL MAY BE APPROVED
- REFER TO CCC-SD 635 FOR ISLAND SIZING AND DIMENSIONS