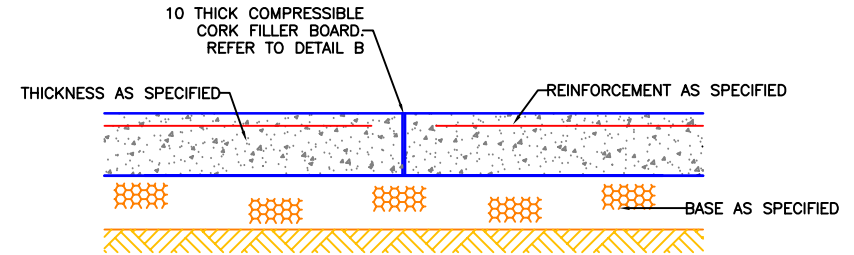
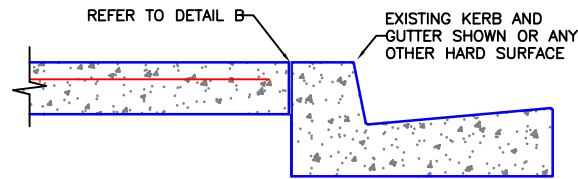


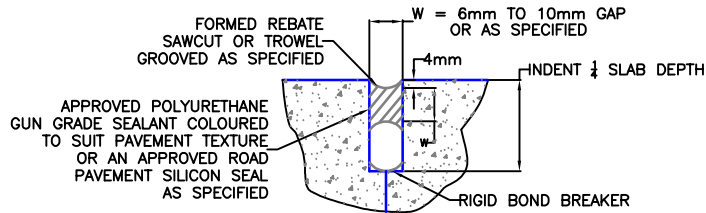
**WEAKENED PLANE TOOLED JOINT (TJ) IN RIGID PAVEMENT DETAIL**  
SCALE A



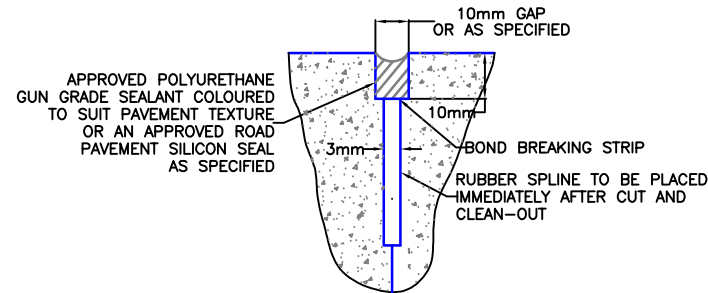
**LIGHT DUTY EXPANSION JOINT (EJ-L) IN RIGID PAVEMENT DETAIL**  
SCALE A



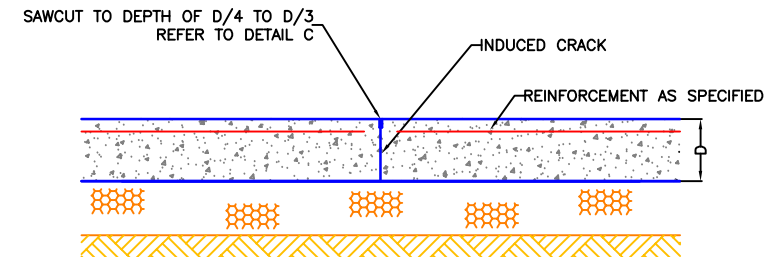
**ISOLATION JOINT (IJ) DETAIL**  
SCALE A



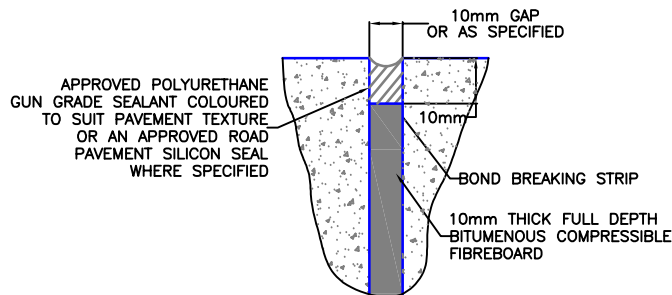
**DETAIL A**  
SCALE - NOT TO SCALE



**DETAIL C**  
SCALE - NOT TO SCALE



**SAWN JOINT (SJ) IN RIGID PAVEMENT DETAIL**  
SCALE A  
**IMPORTANT NOTE:** SAWCUT IS TO BE MADE AT MAXIMUM OF 36 HOURS AFTER SLAB HAS BEEN POURED



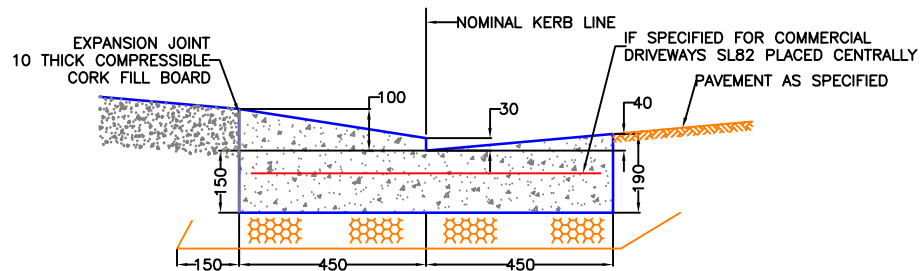
**DETAIL B**  
SCALE - NOT TO SCALE

### STANDARD JOINT NOTES

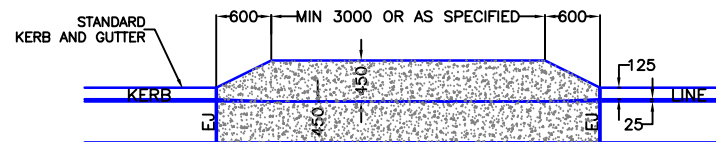
1. KEYED JOINTS AND DOWELS ARE TO BE PLACED AND STAKED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
2. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa MINIMUM UNLESS NOTED OTHERWISE (U.N.O.).
3. CONCRETE SHALL BE PLACED WITH A MAXIMUM SLUMP OF 80mm.
4. REINFORCEMENT MESH OR BAR MAY BE BENT TO ACCOMMODATE DOWELS.
5. DOWELLING OF LAYBACK TO DRIVEWAY ONLY REQUIRED WHERE POOR SUB-BASE IS ENCOUNTERED.
6. ALL DOWELS ARE TO BE GRADE 300 STEEL TO AS3679.1.
7. ALL DOWELS AND DEFORMED BARS ARE TO BE CENTRALLY PLACED.
8. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES U.N.O.

### WEAKENED PLANE JOINT NOTES

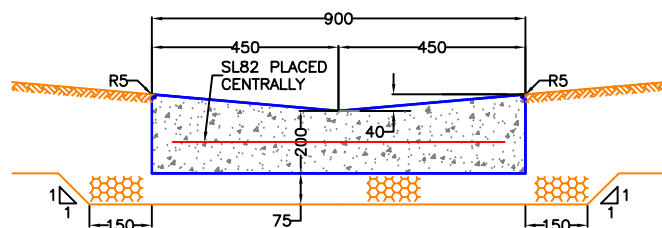
1. SAWN JOINTS - PERFORMED WHEN CONCRETE HAS SET. SAWN JOINTS ARE TO BE USED ONLY ON RELATIVELY HEAVY DUTY OR THICK SLABS WHERE A DEEPER PENETRATION CUT IS REQUIRED. SAWCUT DEPTH IS APPROXIMATELY D/4. SAWN JOINTS ARE NOT TO BE USED FOR FOOTPATH CONSTRUCTION.
2. TOOLED JOINTS - PERFORMED WHEN CONCRETE IS STILL IN A "PLASTIC" STATE. TO BE USED ON LIGHT DUTY OR THIN SLABS SUCH AS FOOTPATH SLABS WHERE A SMALL GROOVE PENETRATION IS SUFFICIENT.



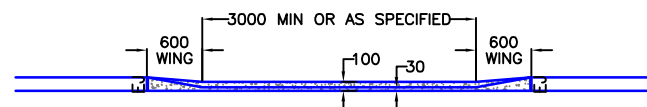
STANDARD CONCRETE LAYBACK DETAIL  
NOT TO SCALE



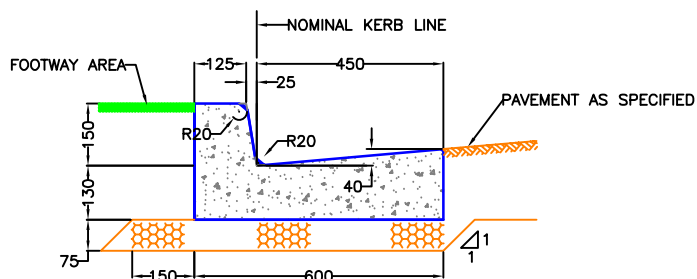
CONCRETE LAYBACK - PLAN  
NOT TO SCALE



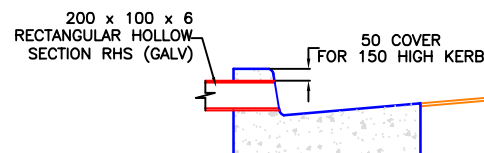
CONCRETE DISH DRAIN DETAIL  
NOT TO SCALE



CONCRETE LAYBACK - FRONT ELEVATION  
NOT TO SCALE



CONCRETE KERB & GUTTER DETAIL  
NOT TO SCALE



PRIVATE PIPE CONNECTION TO KERB DETAIL  
SCALE - NOT TO SCALE

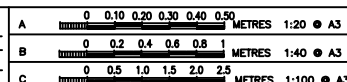
### STANDARD KERB AND GUTTER NOTES

1. KERB AND GUTTER, CONCRETE EDGING, DISH DRAINS AND THE LIKE SHALL BE POURED IN PLAIN CONCRETE AND FINISHED WITH A STEEL TROWEL.
2. THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 25MPa AT 28 DAYS.
3. FOR ELEMENTS CONSTRUCTED USING SLIPFORM, REINFORCEMENT WILL NOT BE REQUIRED PROVIDED THAT THE CONCRETE COMPRESSIVE STRENGTH IS NOT LESS THAN 32MPa AT 28 DAYS.
4. WHERE COUNCIL OR ITS REPRESENTATIVE DIRECTS THAT THE GUTTER IS TO BE RETAINED, THE CONTRACTOR SHALL PLACE A 75mm DEEP SAW CUT IN THE GUTTER INVERT AND REMOVE THE KERB AND OR LAYBACK.
5. WHERE EXISTING KERB AND ASSOCIATED ELEMENT IS TO BE REPLACED SAW CUT IN THE ASPHALT MINIMUM 500mm FROM LIP OF GUTTER, COMPACT SUBGRADE AND INSTALL ASPHALT STRIP TO MAKE SMOOTH TRANSITION.
6. THE CONSTRUCTION OF ALL VEHICLE CROSSINGS AND ASSOCIATED WORKS WITHIN THE ROAD RESERVE MUST BE UNDERTAKEN BY A COUNCIL APPROVED CONTRACTOR.

LEVEL DATUM: AHD		PLOT DATE: 07/07/2022
CO-ORD SYSTEM: N.A.		DESIGNED BY: THOMAS LAU
SURVEYED: N.A.		DATED: 20/04/18
WORK-AS-EXECUTED		APPROVED BY: E. HAVENSTEIN
BY: N.A.		DESIGN MANAGER
DATE: **/**/****		INITIATED BY: STEVE WATSON
INITIALS		(ASSET MANAGER)

DESIGN APPROVED  
DESIGNED BY: THOMAS LAU  
DATED: 20/04/18  
APPROVED BY: E. HAVENSTEIN  
DESIGN MANAGER

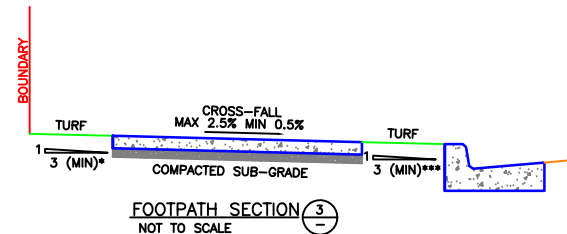
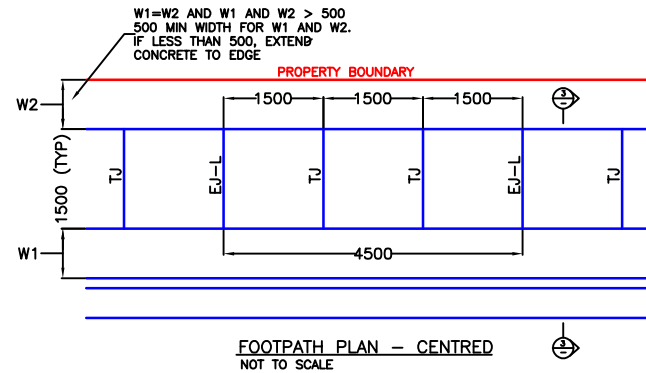
APPROVED FOR CONSTRUCTION  
PROJ. MGR: N.A.  
DATE: (\*\*/\*\*/\*\*\*\*)  
APPROVED BY: THOMAS LAU  
PRINCIPAL ENGINEER



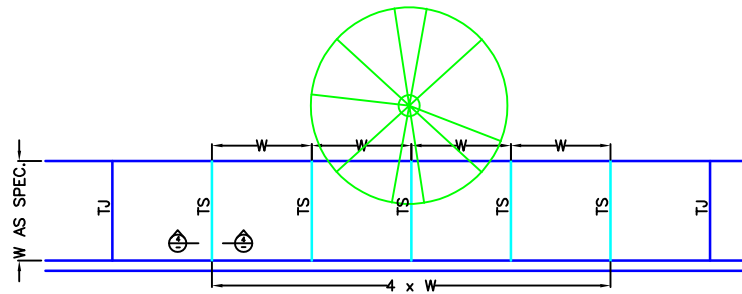
STANDARD DRAWINGS  
CONCRETE KERB DETAILS AND NOTES  
CONCRETE DISH DRAIN AND LAYBACK DETAILS & NOTES

DRAWING NO. 3

REVISION: 1



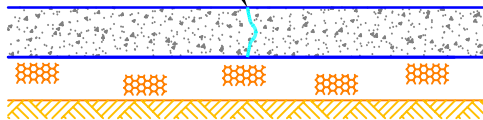
\*\*\*NOTE: WHERE BATTER EXCEEDS 1 IN 3, RETAINING WALL  
OR EDGE BEAM MAY BE REQUIRED UPSIDE OF FOOTPATH  
(REFER DETAIL). LOCATION TO BE DETERMINED ON SITE



FOOTPATH PLAN NEAR TREE PLAN

NOT TO SCALE

"TRIPSTOP" OR  
EQUIVALENT  
JOINTING SYSTEM



TRANSVERSE JOINTING SYSTEM NEAR TREE ROOTS (TS) SECTION 4

SCALE 0 0.25 0.50 0.75 1.00 1.25 METRES  
(1:50 • A3, 1:25 • A1)

FOOTPATH SCHEDULE

FOOTPATH WIDTH (mm)	SLAB THICKNESS (mm)	DISTANCE BETWEEN TOOLED JOINTS (mm)	DISTANCE BETWEEN EXPANSION JOINTS (mm)	REINFORCEMENT (SHRINKAGE CONTROL ONLY)
1500 <sup>1</sup>	75	1500	4500	NIL
1800 <sup>2</sup>	75	1800	5400	NIL
2000 <sup>3</sup>	100	2000	6000	NIL
2500	100 130	2500 2500	7500 7500	SL72 NIL
>2500	130 <sup>4</sup> 150	WIDTH OF SLAB WIDTH OF SLAB	3 x SLAB WIDTH 3 x SLAB WIDTH	SL72 SL72

NOTES

1. MINIMUM FOOTPATH WIDTH
2. CATEGORY 2 PEDESTRIAN AREA
3. CATEGORY 1 PEDESTRIAN AREA
4. SHARED PATH THROUGH RESERVES

STANDARD CONCRETE FOOTPATH NOTES

1. FOOTPATHS TO HAVE A MAX. 2.5% CROSSFALL TOWARDS THE KERB (APPROXIMATELY 37.5mm FALL OVER A 1.5m WIDE FOOTPATH), BROOM FINISHED U.N.O.
2. CONCRETE EDGES SHALL BE FINISHED WITH AN EDGING TOOL.
3. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa MINIMUM UNLESS OTHERWISE SPECIFIED.
4. CONCRETE SHALL BE PLACED WITH A MAXIMUM SLUMP OF 80mm.
5. MINIMUM CONCRETE COVER (TO REINFORCEMENT) TO BE 30mm UNLESS NOTED OTHERWISE.
6. CONCRETE FOOTPATHS SHALL BE LAID ON A MINIMUM 75mm THICK ROAD BASE DGB20 (COMPACTED TO MINIMUM 98% MAXIMUM DRY DENSITY) OR 50mm THICK SAND (WELL COMPACTED TO DENSITY INDEX OF NOT LESS THAN 65%).
7. COUNCIL REQUIRES 24 HOURS NOTICE PRIOR TO POURING OF CONCRETE TO INSPECT THE FORMWORK. NO CONCRETE SHALL BE POURED UNTIL THE EXCAVATION AND FORMWORK HAVE BEEN INSPECTED.
8. EXCAVATE TO MINIMUM UNIFORM CONCRETE SLAB THICKNESS AND BEDDING COURSE AS SPECIFIED. REFER TO DETAILS.
9. PLAIN CONCRETE IS TO BE USED EXCEPT FOR PEDESTRIAN RAMPS (PRAM RAMPS) WHICH WILL BE COLOURED "DARK TERRACOTTA" OXIDE TINT OR EQUIVALENT.
10. WHERE THE SLAB IS TO BE POURED ONTO EXISTING ROCK OR ONTO A CONCRETE SUBGRADE, PROVIDE A COAT OF RIGID BOND BREAKER BETWEEN THE INTERFACE TO ENSURE THAT THE CONCRETE WILL SET EVENLY THROUGHOUT THE WHOLE SECTION OF THE SLAB (EVEN SHRINKAGE CONTROL).
11. PLACE REINFORCEMENT FABRIC CENTRALLY USING SEATS AS PROPS AND ENSURING THAT THERE WILL BE AT LEAST 30mm MINIMUM COVER (FOR FOOTWAY SLABS) BETWEEN THE REINFORCEMENT AND EXTERNAL SURFACE OF THE SLAB.
12. CONCRETE IS TO BE FULLY CURED TO ENSURE THAT IT DOES NOT RESULT IN SHRINKAGE CRACKS. HIGHER STRENGTH CONCRETES TEND TO SET QUICKER AND REQUIRES PROPER CURING BY KEEPING IT CONTINUOUSLY WET FOR A MINIMUM OF 7 DAYS IMMEDIATELY AFTER THE POUR OR BY COVERING WITH CLEAR PLASTIC SHEETS.
13. ALL CONCRETE WORKS SHALL BE IN ACCORDANCE WITH AS 3600.
14. COMPRESSIBLE FILLER BOARD USED AS CONSTRUCTION JOINTS SHALL BE BITUMEN IMPREGNATED FIBREBOARD.
15. SAWN JOINTS WHERE REQUIRED ARE TO BE CUT AFTER THE CONCRETE HAS SUFFICIENTLY HARDENED THAT IT WILL NOT BE DAMAGED BY THE SAWING BUT BEFORE SHRINKAGE CRACKS CAN OCCUR.
16. PROVIDE "SMART URBAN" OR "LOCK SOCKETS" AS SPECIFIED FOR ALL SIGN POSTS U.N.O.
17. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING.

TRANSVERSE DISPLACEMENT JOINT NOTES

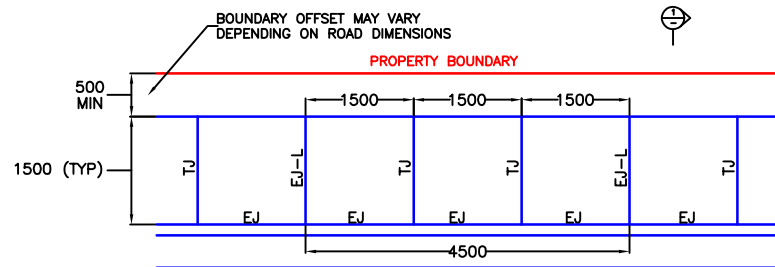
1. WHERE THERE IS LIKELY TO BE TRANSVERSE OR VERTICAL MOVEMENT OF JOINTS IN THE RIGID PAVEMENT (FOR EXAMPLE, NEAR A TREE, WHERE ENVASIVE ROOTS ARE LIKELY TO DISPLACE THE PAVEMENT), A JOINTING SYSTEM WHICH ALLOWS VERTICAL DISPLACEMENT OF THE SLAB WITHOUT SEPARATION OF THE JOINTS AND CAUSING A TRIP HAZARD, IS TO BE USED.
2. COUNCIL'S TREE OFFICER/ARBORIST IS TO BE CONSULTED AS TO DETERMINE ADEQUATE TOPSOIL COVER OVER EXISTING TREE ROOTS REQUIRED PRIOR TO INSTALLATION.
3. "TRIPSTOP" JOINTING SYSTEM OR EQUIVALENT SHALL BE USED IN NEW OR REPLACEMENT FOOTPATHS WHERE THE SLAB IS TO BE INSTALLED NEAR OR ADJACENT TO A TREE.
4. "TRIPSTOP" OR EQUIVALENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES.
5. THE "TRIPSTOP" 'S' PROFILE OR EQUIVALENT SHALL BE INSTALLED TO MATCH THE FOLLOWING SLAB THICKNESSES:
  - (a) TS75S - 75mm THICK CONCRETE SLAB
  - (b) TS125S - 130mm THICK CONCRETE SLAB
  - (c) TS150S - 150mm THICK CONCRETE SLAB
6. "TRIPSTOP" JOINTING STRIPS OR EQUIVALENT MUST BE INSTALLED FOR THE FULL DEPTH AND WIDTH OF THE SLAB.
7. THESE STRIPS MUST HAVE UP TO 5mm OF CLEARANCE AT EACH END OF THE "TRIPSTOP" TO ALLOW FOR AN EDGING TOOL TO BE PASSED WITHOUT INTERRUPTION.
8. THE "TRIPSTOP" EDGING OR EQUIVALENT MUST BE INSTALLED WITHIN A 5mm TOLERANCE OF VERTICAL.
9. WHEN INSTALLED IN STRAIGHT SECTIONS OF PAVEMENT, INSTALL TO +/- 30mm PER METER OF WIDTH FROM A RIGHT ANGLE TO THE LENGTH OF PAVEMENT.
10. WHEN INSTALLED IN CURVED PAVEMENTS, INSTALL RADIALLY TO THE CURVE AT +/- 30mm PER METER FROM THE RADIAL LINE.
11. "TRIPSTOP" STRIPS OR EQUIVALENT SHALL BE POSITIONED DIRECTLY IN LINE WITH THE MOST AGGRESSIVE TREE ROOT. ONE STRIP SHALL BE PLACED IN LINE WITH THE CENTRE OF THE TREE TRUNK. CONTINUE WITH INSTALLATION OF MORE SECTIONS OUTWARDS UNTIL AT THE END OF THE DRIP LINE.

1	16/06/22	INITIATE DRAWINGS	JM	DATE: 16/06/22	INITIATED BY: STEVE WATSON (ASSET MANAGER)
		AMENDMENTS	INITIALS		

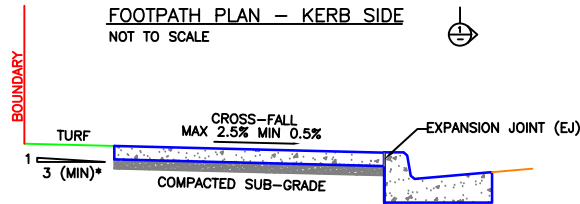
LEVEL DATUM: AHD	PLOT DATE: 07/07/2022	DESIGN APPROVED	APPROVED FOR CONSTRUCTION
CO-ORD SYSTEM: N.A.	PRELIMINARY	DESIGNED BY: THOMAS LAU	PROJ. MGR: N.A.
SURVEYED: N.A.	DRAWN BY: THOMAS LAU	DATED: 20/04/18	DATE: (*/*/****)
WORK-AS-EXECUTED	DATED: 20/04/18	APPROVED BY: E. HAVENSTEIN	APPROVED BY: THOMAS LAU
BY: N.A.	DATE: */*/****	DESIGN MANAGER	PRINCIPAL ENGINEER



STANDARD DRAWINGS	CONCRETE FOOTPATH JOINTING PLANS AND ELEVATIONS
	JOINTING SYSTEM FOR FOOTPATH NEAR TREES PLAN & DETAIL
	STANDARD CONCRETE FOOTPATH NOTES AND SCHEDULE
	TRANSVERSE DISPLACEMENT JOINT NOTES
DRAWING NO. 4	REVISION: 1

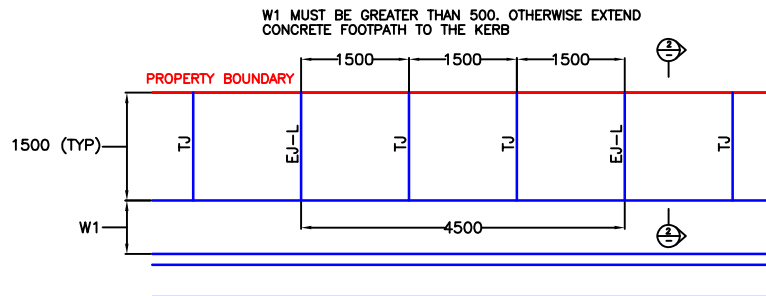


FOOTPATH PLAN – KERB SIDE  
NOT TO SCALE

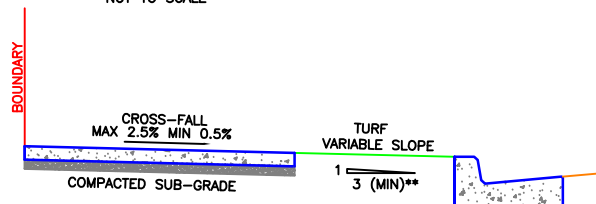


FOOTPATH SECTION 1  
NOT TO SCALE

\*NOTE: IF BATTER EXCEEDS 1 IN 3, RETAINING WALL OR  
EDGE BEAM MAY BE REQUIRED UPSIDE OF FOOTPATH  
(REFER DETAIL). LOCATION TO BE DETERMINED ON SITE



FOOTPATH PLAN – BOUNDARY SIDE  
NOT TO SCALE



FOOTPATH SECTION 2  
NOT TO SCALE

\*\*NOTE: IF BATTER EXCEEDS 1 IN 3, FOOTPATH WILL NEED  
TO BE CONSTRUCTED AGAINST KERB LINE

#### FOOTPATH SCHEDULE

FOOTPATH WIDTH (mm)	SLAB THICKNESS (mm)	DISTANCE BETWEEN TOOLED JOINTS (mm)	DISTANCE BETWEEN EXPANSION JOINTS (mm)	REINFORCEMENT (SHRINKAGE CONTROL ONLY)
1500	75	1500	4500	NIL
1800	75	1800	5400	NIL
2000	100	2000	6000	NIL
2500	100 130	2500 2500	7500 7500	SL72 NIL
>2500	130 150	WIDTH OF SLAB WIDTH OF SLAB	3 x SLAB WIDTH 3 x SLAB WIDTH	SL72 SL72

#### NOTES

1. MINIMUM FOOTPATH WIDTH
2. CATEGORY 2 PEDESTRIAN AREA
3. CATEGORY 1 PEDESTRIAN AREA
4. SHARED PATH THROUGH RESERVES

#### STANDARD CONCRETE FOOTPATH NOTES

1. FOOTPATHS TO HAVE A MAX. 2.5% CROSSFALL TOWARDS THE KERB (APPROXIMATELY 37.5mm FALL OVER A 1.5m WIDE FOOTPATH), BROOM FINISHED U.N.O.
2. CONCRETE EDGES SHALL BE FINISHED WITH AN EDGING TOOL.
3. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 25MPa MINIMUM UNLESS OTHERWISE SPECIFIED.
4. CONCRETE SHALL BE PLACED WITH A MAXIMUM SLUMP OF 80mm.
5. MINIMUM CONCRETE COVER (TO REINFORCEMENT) TO BE 30mm UNLESS NOTED OTHERWISE.
6. CONCRETE FOOTPATHS SHALL BE LAID ON A MINIMUM 75mm THICK ROAD BASE DGB20 (COMPACTED TO MINIMUM 98% MAXIMUM DRY DENSITY) OR 50mm THICK SAND (WELL COMPACTED TO DENSITY INDEX OF NOT LESS THAN 65%)
7. COUNCIL REQUIRES 24 HOURS NOTICE PRIOR TO POURING OF CONCRETE TO INSPECT THE FORMWORK. NO CONCRETE SHALL BE POURED UNTIL THE EXCAVATION AND FORMWORK HAVE BEEN INSPECTED.
8. EXCAVATE TO MINIMUM UNIFORM CONCRETE SLAB THICKNESS AND BEDDING COURSE AS SPECIFIED. REFER TO DETAILS.
9. PLAIN CONCRETE IS TO BE USED EXCEPT FOR PEDESTRIAN RAMPS (PRAM RAMPS) WHICH WILL BE COLOURED "DARK TERRACOTTA" OXIDE TINT OR EQUIVALENT.
10. WHERE THE SLAB IS TO BE POURED ONTO EXISTING ROCK OR ONTO A CONCRETE SUBGRADE, PROVIDE A COAT OF RIGID BOND BREAKER BETWEEN THE INTERFACE TO ENSURE THAT THE CONCRETE WILL SET EVENLY THROUGHOUT THE WHOLE SECTION OF THE SLAB (EVEN SHRINKAGE CONTROL).
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