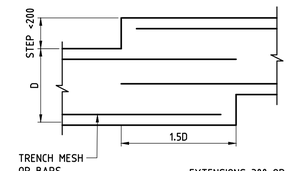
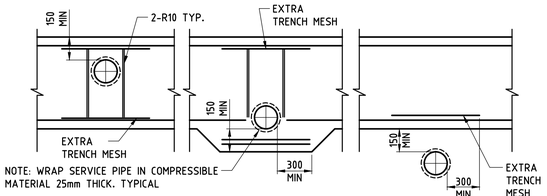
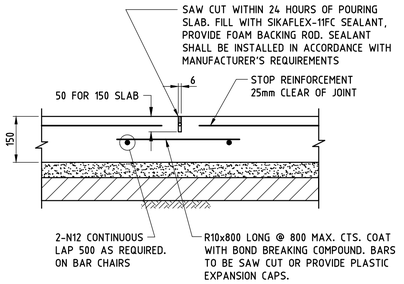




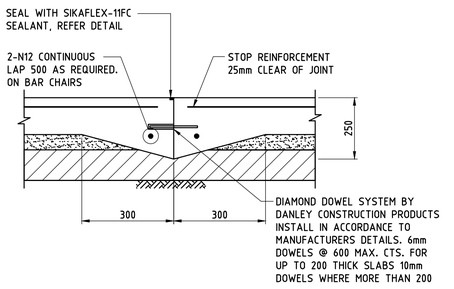
TYPICAL SERVICES PIPES THROUGH FOOTING

SCALE = 1:20



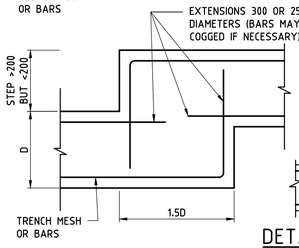
TYPICAL SAWCUT DETAIL 1:10

SHOWN — · — SC — · — ON PLAN



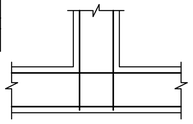
TYPICAL CONSTRUCTION JOINT DETAIL 1:10

SHOWN — · · — CJ — · · — ON PLAN



TYPICAL STEP TO STRIP FOOTINGS

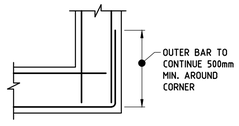
SCALE = 1:20



DETAIL- TYPICAL FOOTING / SLAB BEAM TOP AND BOTTOM REINFORCEMENT LAPPING DETAIL AT "T" INTERSECTION

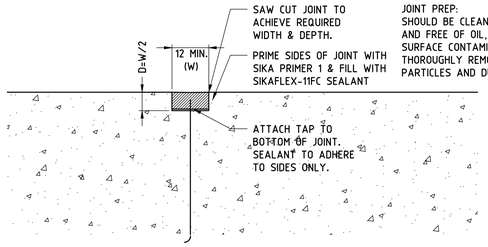
MESH TO LAP FULL WIDTH AT INTERSECTION

SCALE = 1:20



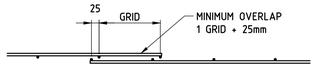
DETAIL- TYPICAL FOOTING / SLAB BEAM TOP AND BOTTOM REINFORCEMENT LAPPING DETAIL AT "L" INTERSECTION CORNER

SCALE = 1:20

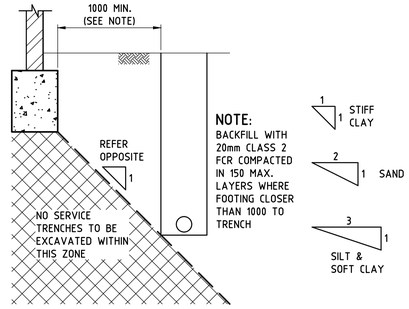


JOINT PREP:
SHOULD BE CLEAN, SOUND, DRY AND FREE OF OIL, GREASE AND SURFACE CONTAMINANTS THOROUGHLY REMOVE ALL LOOSE PARTICLES AND DUST.

DETAIL-TYPICAL SLAB SEALANT



TYPICAL DETAIL - FABRIC LAP SPLICE



TRENCH ADJACENT FOOTING

NOTE:
ALL CONCRETE TO BE CURED AS PER REQUIREMENTS OF AS3600-2011 CONCRETE STRUCTURES CODE.

DAMP CURE FOR AT LEAST 7 DAYS AFTER POUR.

PROVIDE AND MAINTAIN DAMP / WET HESSIAN CLOTH OVER SLAB OR FLOOD SLAB WITH WATER USING SAND WEIR AS PART OF DAMP CURE PROCESS

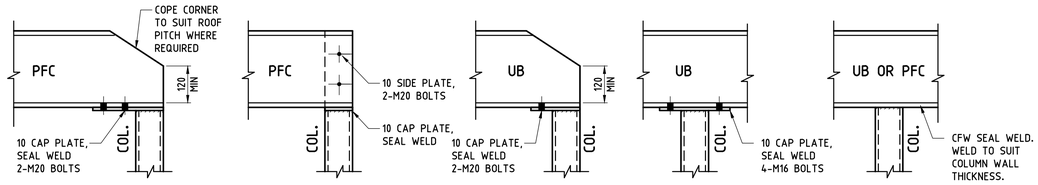
DO NOT POUR SLAB WHEN AMBIENT TEMPERATURE IS TO EXCEED 30 DEGREES CENTIGRADE WITHIN 48 HOURS AFTER POUR.

NOTE:
ALL FOOTINGS (UNO) ARE TO BE FOUND 100mm MIN. INTO UNDERLYING NATURAL STIFF CLAY OR BETTER WITH MINIMUM SAFE BEARING CAPACITY OF 150 kPa.

FOUNDING MATERIAL TO BE CONFIRMED BY ENGINEER OR GEOTECHNICAL ENGINEER.

NOTE:
ALL EXPOSED CONCRETE SLABS AND STAIRS, RETAINING WALLS, AND EXTERNAL AFS WALLS TO HAVE XYPEX WATERPROOFING SYSTEM ADDITIVE TO CONCRETE.
REFER XYPEX FOR RECOMMENDED DOSAGE RATE.

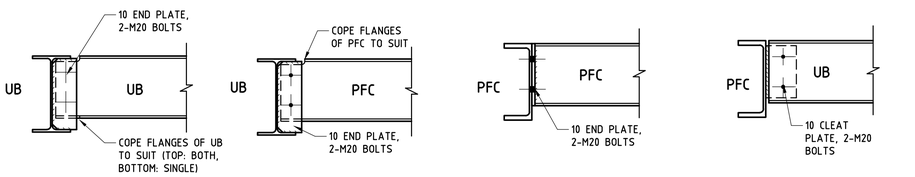
NOTE:
1. STEEL FABRICATOR MUST SUBMIT SHOP DRAWINGS TO CONSULTING ENGINEER FOR APPROVAL PRIOR TO FABRICATION
2. STEEL FABRICATOR SHALL LIAISE WITH BUILDER / TRUSS DETAILER PRIOR TO FABRICATION OF ANY STEELWORK.
3. ALL STEELWORK TO BE ONESTEEL GRADE 300



DETAIL-STEEL BEAM TO COL.

BOLTED BEAM CONNECTION SCHEDULE		
SECTION	**CLEAT**	**BOLTS REQ,D**
150,180,200,230 PFCs	10mm PLATE	2-M20 4.6/S
200 UB, UC	10mm PLATE	2-M20 4.6/S
250 UB, UC	10mm PLATE	2-M20 4.6/S
310 UB, UC	10mm PLATE	3-M20 8.8/S
360 UB	10mm PLATE	3-M20 8.8/S
410 UB	10mm PLATE	4-M20 8.8/S
460 UB	10mm PLATE	4-M20 8.8/S
530 UB	10mm PLATE	5-M20 8.8/S
610 UB	10mm PLATE	6-M20 8.8/S

NOTE:
TYPICAL BEAM CONNECTIONS WITH TO APPLY UNLESS DETAILED OTHERWISE. PROVIDE ADDITIONAL BOLTS AS REQUIRED SUIT BEAM SIZE.



DETAIL- UB TO UB

DETAIL- PFC TO UB

DETAIL- PFC TO PFC

DETAIL- UB TO PFC

PRELIMINARY ISSUE FOR CLIENTS REVIEW
(NOT FOR CONSTRUCTION)
DATE: 02.03.2023

STORMWATER DRAINAGE

D1 CONSTRUCT STORMWATER DRAINS AND PITS AS DETAILED AND/OR SCHEDULED. PITS TO BE PROVIDED WITH LIDS AND COVERS AS SCHEDULED. PITS WITH COVERS TO BE CAST INTO SLAB TO BE CONSTRUCTED TO +0/-20 OF FINAL LEVEL. LID TO BE INSTALLED BY CONTRACTOR.

D2 ALL DRAINS UNDER DRIVEWAYS AND PARKING AREAS TO BE REINFORCED CONCRETE CLASS X UNLESS NOTED OTHERWISE. SEWER QUALITY PVC DRAINS MAY BE USED ELSEWHERE.

D3 EXCAVATED MATERIAL TO BE REMOVED FROM SITE TO LEGAL POINT OF DISPOSAL UNLESS AGREED OTHERWISE.

D4 PIPE TO BE LAYED ON 75mm MINIMUM OF 12mm CRUSHED ROCK BEDDING.

D5 PIPES TO BE BACKFILLED TO 150mm ABOVE TOP OF PIPE WITH CLASS 2A FCR COMPACTED IN 150 MAXIMUM LAYERS TO 95% STANDARD COMPACTION. PIPES UNDER CRUSHED ROCK OR ASPHALT PAVING TO BE BACK FILLED FULL DEPTH WITH CLASS 2A FCR AS ABOVE. TOP 300mm TO BE COMPACTED TO 100% STANDARD COMPACTION. PIPES ELSEWHERE TO BE BACKFILLED WITH SELECTED MATERIAL IN 150 MAXIMUN LAYERS COMPACTED TO 95% STANDARD COMPACTION.

D6 LAYING OF DRAINS TO COMMENCE AT BOTTOM END OF DRAINS IN ALL CASES. CHECK LOCATIONS AT ALL OTHER RELEVANT SERVICES PRIOR TO COMMENCING LAYING.

D7 DRAINS TO BE INSPECTED AND APPROVED BY LOCAL AUTHORITY PRIOR TO BACK FILLING.

D8 DRAINS AND PITS TO BE CLEANED OUT ON COMPLETION OF ALL SITE WORKS.

D9 ANY FOOTPATHS, DRIVEWAYS, ROADWAYS, KERBS, R.O.W.s OR EXISTING FEATURES DISTURBED, BROKEN OR AFFECTED BY THE WORKS ARE TO BE REINSTATED TO THE COMPLETE SATISFACTION OF THE CITY ENGINEER OR HIS REPRESENTATIVE.

D10 ALL CONCRETE TO BE SAW CUT AND BROKEN OUT TO THE NEAREST JOINT.

D11 NO TREE ROOT SHALL BE CUT WITHOUT THE SPECIFIC PERMISSION OF THE CITY ENGINEER OR HIS REPRESENTATIVE.

FOOTINGS

F1 FOOTINGS ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED GROUND HAVING A SAFE BEARING CAPACITY OF **220** kPa. BEFORE ANY CONCRETE IS PLACED THE SAFE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED ENGINEER.

F2 REFER TO SOIL REPORT No. **25556-2** BY. **STATEWIDE GEOTECHNICAL** **DATED 18th OF AUGUST 2022** . . . .

CONCRETE

C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600

C2 MINIMUM COVER (mm) TO ALL REINFORCEMENT UNLESS OTHERWISE SHOWN SHALL BE AS FOLLOWS:-

ELEMENT	FORMED & NOT EXPOSED TO WEATHER	FORMED & EXPOSED TO GROUND WATER OR WEATHER.	NOT FORMED CAST AGAINST GROUND ETC.
COLUMNS & PEDESTALS	40	50	75
BEAMS	40	50	65
FOOTINGS	-	65	75
SLABS	20	30	65
WALLS	25		

C3 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

C4 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.

C5 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

C6 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE ENGINEER.

C7 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C8 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.

C9 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

C10 ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.

C11 REINFORCEMENT SYMBOLS:-
S STRUCTURAL GRADE DEFORMED BAR TO AS 1302.
N HOT-ROLLED DEFORMED BARS TO AS 4671
R STRUCTURAL GRADE PLAIN ROUND BAR TO AS 1302
RF HARD-DRAWN STEEL WIRE REINFORCING FABRIC TO AS 4671
THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES.

C12 CAMBER - FORMWORK TO BEAMS AND SLABS SHALL BE SET TO A PRE-DETERMINED LEVEL (ALLOWING FOR IMMEDIATE DEFLECTION OF SUPPORTING STRUCTURE AND FORMWORK SETTLEMENT) TO GIVE ZERO NEGATIVE CAMBER IMMEDIATELY AFTER CONCRETE PLACEMENT. ADDITIONAL POSITIVE CAMBERS SHALL BE AS NOTED ON THE DRAWINGS.

C13 CONCRETE COMPONENTS AND QUALITY SHALL BE AS FOLLOWS:-

ELEMENT	f'c MPa	DENSITY
PAD /STRIP FOOTINGS	25	NORMAL
RAFT SLAB	25	NORMAL
TOPPING/INFILL SLAB	32	NORMAL
BLINDING CONCRETE	15	NORMAL

RAFT SLABS

R1 ALL SLAB BEAM EXCAVATIONS TO BE KEPT DRY PRIOR TO POURING SLAB. SOFT AREAS TO BASE OF TRENCH MUST BE REMOVED AND FILLED WITH WEAK MIX CONCRETE (15MPa.)

R2 PROVIDE 50mm LAYER OF PACKING SAND TO ENTIRE SLAB AREA.

R3 PROVIDE 0.2mm POLYTHENE MEMBRANE LAPPED AND TAPPED AT ALL JOINTS AND TAPED AROUND ALL PIPES WHICH PENETRATE SLAB.

R4 REINFORCEMENT TO SLAB BEAMS TO BE LAPPED 500 MINIMUM AND HAVE 50 COVER, USE PLASTIC TRENCH MESH SUPPORT CHAIRS TO ALL REINFORCEMENT.

R5 REINFORCEMENT TO SLABS TO HAVE 25 TOP COVER AND TO BE SUPPORTED ON BAR CHAIRS AT 900 MAXIMUM CTS. BOTH WAYS. LAP 2 BARS + 25mm AS REQUIRED.

R6 CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 25MPa, MAXIMUM SLUMP TO BE 80mm.

R7 CONCRETE SHALL BE MECHANICALLY VIBRATED DURING PLACEMENT.

R8 SLAB SURFACE TO BE KEPT CONTINUALLY DAMP FOR 7 DAYS AFTER PLACEMENT USING EITHER SAND OR HESSIAN

R9 ALL DRAINAGE, SEWER AND WATER SUPPLY PIPES, AS WELL AS GUTTERS AND DOWNPIPES SHOULD BE PERIODICALLY CHECKED FOR LEAKAGE AND REPAIRED AS NECESSARY. SERVICE TRENCHES, LOCATED ALONGSIDE THE BUILDING SHOULD BE OFFSET A LATERAL DISTANCE DISTANCE AT LEAST EQUAL TO THEIR DEPTH. TRENCHES FORMED WITHIN A CLAY PROFILE SHALL BE BACKFILLED WITH CLAY WHICH IS PLACED IN LIFTS AND WELL COMPACTED SO AS TO CONTROL MOISTURE INGRESS.

R10 PROVIDE TERMITE PROTECTION AS PER LOCAL COUNCIL REQUIREMENTS & TO AS 3660.1-2000, & AS 3660.2 TERMITE MANAGEMENT CODES

TIMBER

T1 ALL TIMBER FRAMING TO BE IN ACCORDANCE WITH AS 1684.- RESIDENTIAL TIMBER-FRAMED CONSTRUCTION.

T2 SECURELY BRACE STUDWORK WITH TECO SPEED BRACING OR PLYWOOD IN ACCORDANCE WITH AS 1684, RESIDENTIAL TIMBER FRAMED CONSTRUCTION.

T3 SECURELY ANCHOR ALL ROOF FRAMING TO SUPPORTING WALLS IN ACCORDANCE WITH AS 1684

T4 PROVIDE DOUBLE JOISTS UNDER ALL WALLS PARALLEL WITH FLOOR JOISTS

T5 PROVIDE DOUBLE STUDS EACH SIDE OF OPENINGS WIDER THAN 1600mm. & LINTELS SUPPORTING GIRDER TRUSSES & TO END OF TIMBER BEAMS.

T6 ROOF TRUSSES TO MANUFACTURERS DESIGN & DETAIL. TRUSS LAYOUT IS TO BE SUBMITTED TO CONSULTING ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTING WALL FRAMES

T7 ALL EXPOSED TIMBER TO BE H3 PRESERVATIVE TREATED OR DURABILITY CLASS 1 OR 2. ALL IN GROUND TIMBER TO BE H5 PRESERVATIVE TREATED OR H6 IN SALT WATER CONTACT

T8 PROVIDE TERMITE PROTECTION AS PER LOCAL COUNCIL REQUIREMENTS & TO AS 3660.1-2000 & AS 3660.2, TERMITE MANAGEMENT CODES

T7 ALL EXPOSED TIMBER TO BE H3 PRESERVATIVE TREATED OR DURABILITY CLASS 1 OR 2. ALL IN GROUND TIMBER TO BE H5 PRESERVATIVE TREATED OR H6 IN SALT WATER CONTACT

T8 PROVIDE TERMITE PROTECTION AS PER LOCAL COUNCIL REQUIREMENTS & TO AS 3660.1-2000 & AS 3660.2, TERMITE MANAGEMENT CODES

BITUMINOUS CONCRETE PAVING

B1 CONSTRUCT PAVEMENT, KERBS, SPOON DRAINS, ETC. AS DETAILED TO FINISHED LEVELS AS SHOWN. REFER SITE PREPARATION NOTES FOR SUBGRADE PREPARATION.

B2 ALL PITS, DRAINS AND OTHER SERVICES TO BE COMPLETED PRIOR TO COMMENCEMENT OF SUB-BASE PREPARATION.

B3 CONSTRUCT KERBS, CHANNELS AND SPOON DRAINS, AS DETAILED.

B4 PLACE BASE COURSE AS DETAILED. SUPPLY CRUSHED ROCK AT OPTIMUM MOISTURE CONTENT OR PROVIDE WATER CARTS TO ENSURE PLACEMENT AT OPTIMUM MOISTURE CONTENT. PROVIDE SUITABLE EQUIPMENT TO COMPACT CRUSHED ROCK TO 100% STANDARD COMPACTION.

B5 COMPLETE BASE MATERIAL TO BE INSPECTED AND APPROVED BY CONSULTING ENGINEER. PROOF ROLL WITH FULLY LOADED TIP TRUCK

B6 SURFACE TOLERANCE TO BE +20/-0

B7 SWEEP PAVEMENT BASE SURFACE TO REMOVE ALL LOOSE MATERIAL AND REMOVE ALL CLAY SPOTS.

B8 PLACE 10mm MAXIMUM AGGREGATE ASPHALT TO COMPACTED THICKNESS AS DETAILED, COMPACT WITH SMOOTH STEEL DRUM ROLLER FOLLOWED BY PNEUMATIC-TYRED ROLLER. FINAL ROLL WITH SMOOTH STEEL DRUM ROLLER.

B9 ALLOW SURFACE TO COOL PRIOR TO ALLOWING ACCESS TO TRAFFIC

B10 LINE MARK CAR PARKING BAYS AND OTHER REQUIRED ROAD MARKINGS WITH 75mm WIDE WHITE ROAD MARKING PAINT.

GENERAL

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE PROJECT MANAGER FOR DECISION BEFORE PROCEEDING WITH THE WORK.

G2 ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. THE ENGINEERS DRAWINGS SHALL NOT BE SCALED.

G3 DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.

G4 WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT S.A.A. CODES INCLUDING ALL AMENDMENTS AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

G5 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE ENGINEER, BUT IS NOT AN AUTHORIZATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE PROJECT MANAGER BEFORE WORK COMMENCES.

G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL LEVELS ARE EXPRESSED IN METRES.

G7 THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:-

AREA	LIVE LOAD kN/m ^{2}
FOOTPATH	X kPa
X	X
X	X

G8 ALL PROPS AND FORMWORK FOR BEAMS AND SLABS SHALL BE REMOVED BEFORE CONSTRUCTION OF ANY MASONRY WALLS OR PARTITIONS ON THE FLOOR.

G9 ALL NON-LOADBEARING WALLS SHALL BE KEPT CLEAR OF THE UNDERSIDE OF SLABS AND BEAMS BY 20mm UNLESS OTHERWISE SHOWN OTHERWISE.

SITE PREPARATION

P1 EARTHWORKS SHALL BE COMPLETED IN ACCORDANCE WITH REQUIREMENTS OF AS 3798 - "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS". **25556-2 BY STATEWIDE GEOTECHNICAL**

P2 REFER SITE INVESTIGATION No: **DATED 18th OF AUGUST 2022**

P3 REMOVE ALL TOP SOIL, UNCOMPACTED FILL, ROOT ZONE MATERIAL, TREES STUMPS,

P4 PIPELINES, PREVIOUS CONSTRUCTION AND OTHER MATERIALS UNSUITABLE FOR INCORPORATION IN THE WORKS. TOP SOIL MAY BE STOCKPILED FOR LATER USE. ALL OTHER MATERIAL TO BE REMOVED FROM SITE OTHER THAN BEST OF FILL, SUFFICIENT OF WHICH SHALL BE RETAINED TO BALANCE FILLING.

P5 PRIOR TO PLACEMENT OF ANY FILL MATERIAL, THE EXPOSED SURFACE IS TO BE PROOF ROLLED WITH FULLY LOADED TANDEM TIPPER WITH TYRES INFLATED TO 550kPa. THIS MUST BE CARRIED OUT IMMEDIATELY AFTER COMPLETION OF COMPACTION. ANY MATERIAL SHOWING MOVEMENT TO BE REMOVED AND REPLACED FOR RETESTING.

P6 MINIMUM RELATIVE COMPACTION OF COMPLETED WORKS SHALL BE AS FOLLOWS:-
BUILDING AREAS
98% STANDARD COMPACTION
ROAD, DRIVEWAY AND CARPARK AREA
>0.3m BELOW PAVEMENT SUBGRADE - 95% STANDARD COMPACTION
<0.3m BELOW PAVEMENT SUBGRADE - 100% STANDARD COMPACTION

P7 FILL MATERIAL SHALL BE IMPORTED GRANULAR MATERIAL, SANDSTONE, MUDSTONE OR STABLE SILURIAN CLAY. SAMPLES AND SOURCE SHALL BE PROVIDED FOR APPROVAL OFF CONSULTING ENGINEER. MATERIAL IN STOCKPILE MAY BE USED.

P8 ALLOW FOR THREE COMPACTION TESTS ON COMPLETED WORKS.

P9 COMPLETED SURFACE LEVEL TOLERANCE TO BE 20mm OF DESIGN LEVELS.

P10 ENSURE THAT WORKS ARE KEPT FREE DRAINING AT ALL TIMES. CONSTRUCT TEMPORARY SURFACE DRAINS AS REQUIRED.

P11 UNLESS NOTED ON PLAN, NO TREES TO BE REMOVED WITHOUT THE CONSENT OF THE LOCAL COUNCIL AND PROJECT MANAGER.

STRUCTURAL STEELWORK

S1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100

S2 WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.

S3 HIGH STRENGTH FRICTION GRIP BOLTING SHALL BE IN ACCORDANCE WITH AS 1511

S4 THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

S5 CONCRETE ENCASED STEELWORK SHALL BE WRAPPED WITH RF41 FABRIC UNLESS OTHERWISE SHOWN.

S6 THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES CONTINUOUS FILLET WELDED UNLESS OTHERWISE SHOWN.

S7 CAMBER TO BE AS NOTED ON THE DRAWINGS.

S8 BEFORE FABRICATION IS COMMENCED THE CONTRACTOR SHALL SUBMIT COPIES OF THE SHOP DRAWINGS TO THE PROJECT MANAGER FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.

S9 UNLESS OTHERWISE SPECIFIED ALL STEELWORK SHALL BE PAINTED ONE SHOP COAT OF INORGANIC ZINC SILICATE. MEMBERS ENCASED IN CONCRETE, FIRE SPRAYED AND FRICTION-GRIP BOLTED CONNECTIONS MUST NOT BE PAINTED.

S10 EXCEPT WHERE OTHERWISE SHOWN WELDS SHALL BE 6mm CONTINUOUS FILLET.

REV/No.	REVISION/ISSUE	BY	DATE
P1	PRELIMINARY ISSUE P1	ET	02.03.23

GEORGE E APTED & ASSOCIATES
PTY. LTD.
CONSULTING ENGINEERS
33 BROUGHAM STREET, ELTHAM, 3095
A.B.N. 73 093 450 161
FAX. (03) 9439-5121 TEL. (03) 9439-4144

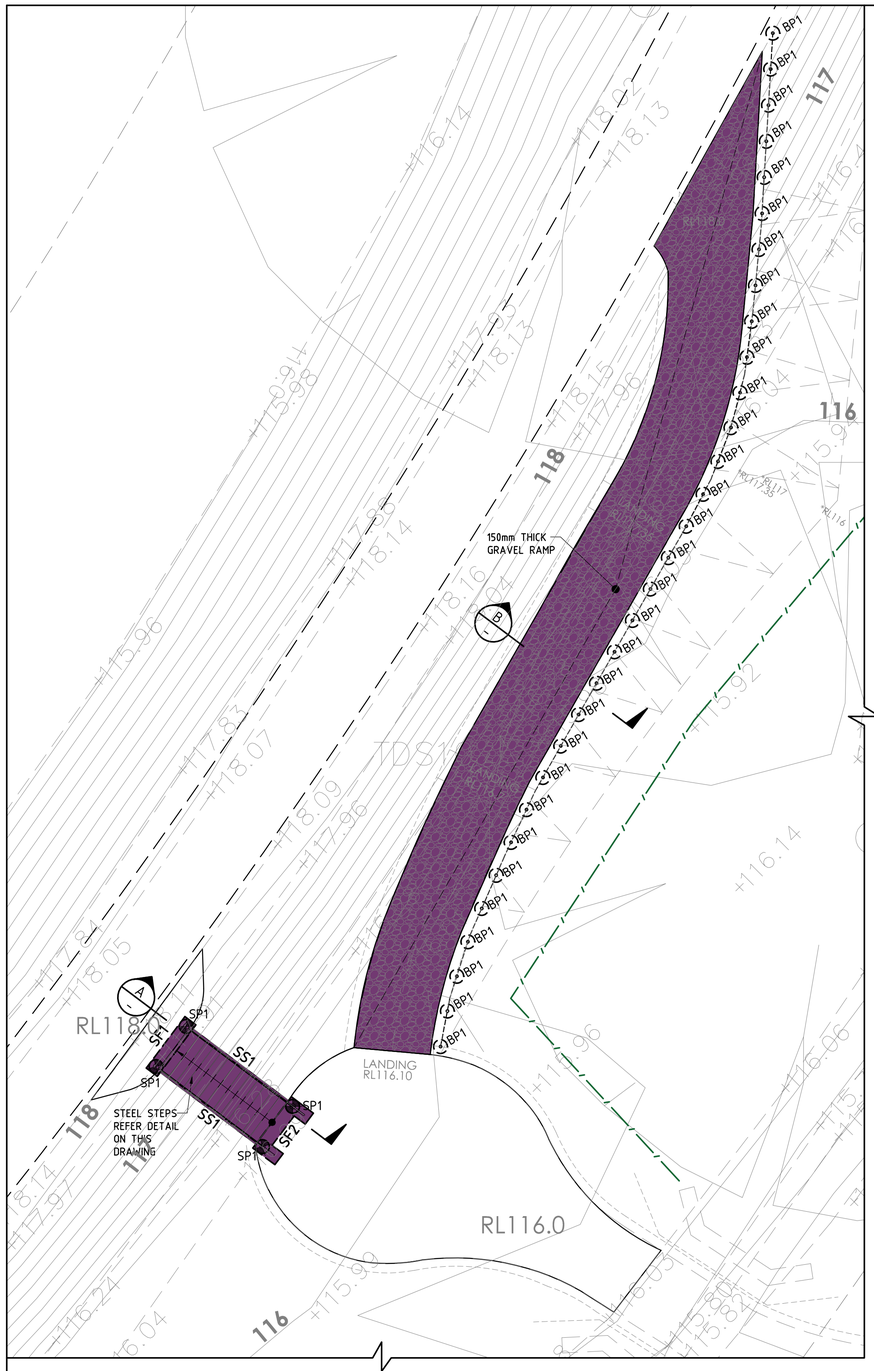
PROJECT
BRIDGE + CULVERTS (LANDSCAPE)
LITTLE YARRA RIVER TRAIL
RIVERSDALE ROAD
YARRA JUNCTION

ARCHITECT/CLIENT
JO HENRY

DESIGNED	DRAWN
K.A.	E.T.
DATE: PRELIMINARY	SCALE: 1:100 @ A1

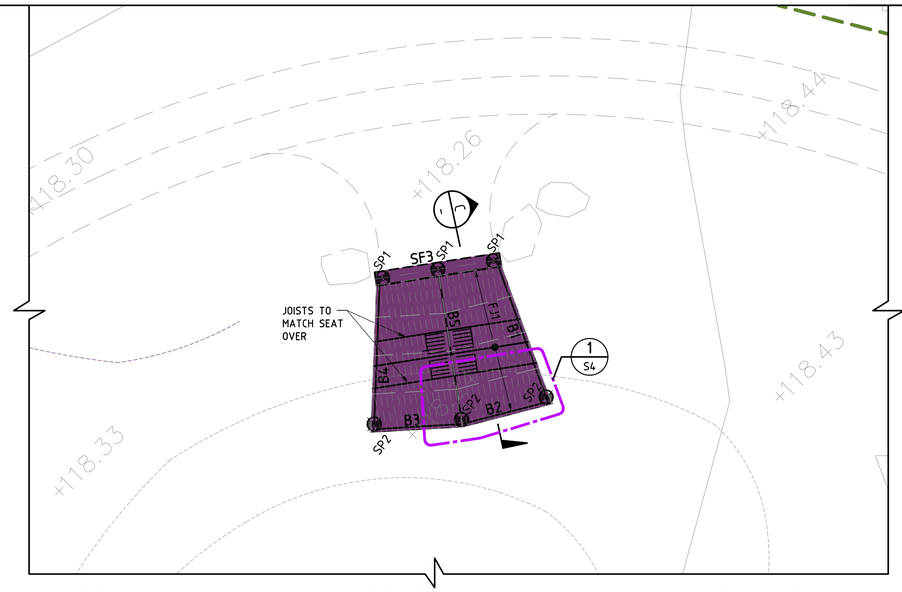
DRAWING TITLE
NOTES, SECTIONS AND DETAILS

DRAWING No. 22096-S1 REV. P1



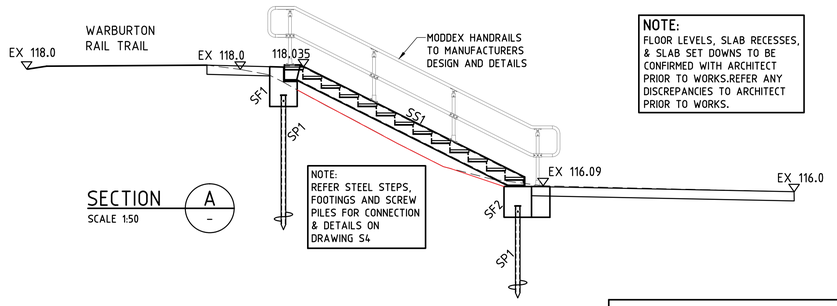
STEEL STEPS & GRAVEL RAMP: FRAMING AND FOOTING PLAN

SCALE 1:100



WETLAND VIEWING PLATFORM: FRAMING AND FOOTING PLAN

SCALE 1:100

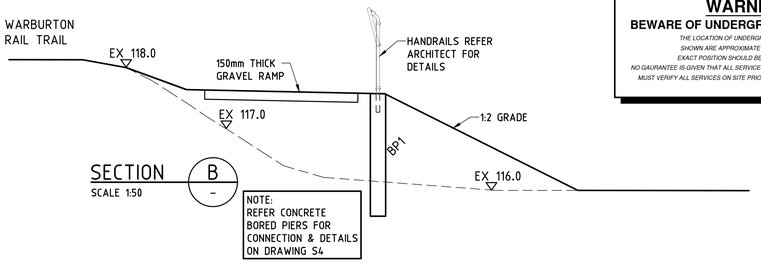


SECTION A

SCALE 1:50

NOTE:
REFER STEEL STEPS, FOOTINGS AND SCREW PILES FOR CONNECTION & DETAILS ON DRAWING S4

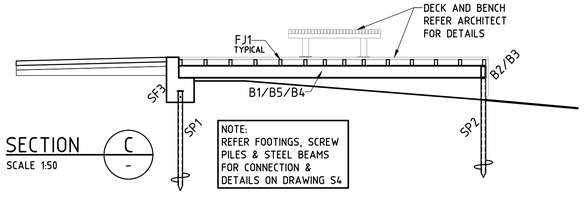
NOTE:
FLOOR LEVELS, SLAB RECESSES, & SLAB SET DOWNS TO BE CONFIRMED WITH ARCHITECT PRIOR TO WORKS.REFER ANY DISCREPANCIES TO ARCHITECT PRIOR TO WORKS.



SECTION B

SCALE 1:50

NOTE:
REFER CONCRETE BORED PIERS FOR CONNECTION & DETAILS ON DRAWING S4



SECTION C

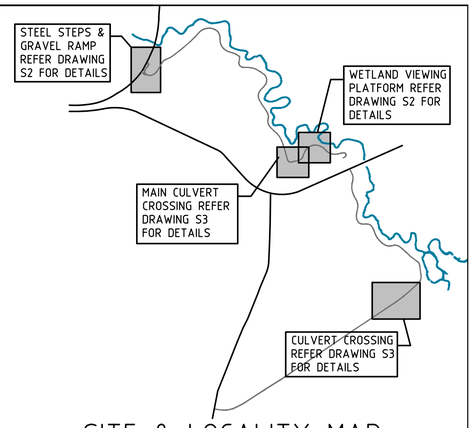
SCALE 1:50

NOTE:
REFER FOOTINGS, SCREW PILES & STEEL BEAMS FOR CONNECTION & DETAILS ON DRAWING S4

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATION OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GAURANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN. THE CONTRACTOR MUST VERIFY ALL SERVICES ON SITE PRIOR TO ANY EXCAVATION WORKS.



SITE & LOCALITY MAP

NOT TO SCALE

MEMBER SCHEDULE		
MARK	**SIZE**	**REMARKS**
B1	200 PFC	HOT DIPPED GALVANISED
B2,B3	200 PFC	MITRE CUT + FSBW, HOT DIPPED GALVANISED
B4	200 PFC	HOT DIPPED GALVANISED
B5	200 UB 29.8	HOT DIPPED GALVANISED
FJ1	100x50x3.0 RHS C350LO CONTINUOUS @ 450 CTS. MAX.	HOT DIPPED GALVANISED
SS1	250 PFC - STEPS STRINGER	HOT DIPPED GALVANISED

NOTE:

1. STEEL FABRICATOR MUST SUBMIT SHOP DRAWINGS TO CONSULTING ENGINEER FOR APPROVAL PRIOR TO FABRICATION
2. STEEL FABRICATOR SHALL LIAISE WITH TILT PANEL SHOP DETAILER PRIOR TO FABRICATION OF ANY STEELWORK.
3. ALL STEELWORK TO BE ONESTEEL GRADE 300

STRIP FOOTINGS & BORED PIERS & SCREW PILES SCHEDULE	
MARK No.	**SIZE + REINFORCEMENTS + REMARKS**
SF1	450 WIDE x 600 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT & PROFILE ON DRAWING S4 FOR DETAILS
SF2	450 WIDE x 500 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT & PROFILE ON DRAWING S4/S2 FOR DETAILS
SF3	450 WIDE x 600 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT & PROFILE ON DRAWING S4 FOR DETAILS
SF4	450 WIDE x 600 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT & PROFILE ON DRAWING S5 FOR DETAILS
SF5	450 WIDE x 600 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT ON DRAWING S5 FOR DETAILS SUPPORTING WING WALL (WW1)
SF6	450 WIDE x 600 DEEP MIN. STRIP FOOTING, REFER REINFORCEMENT ON DRAWING S4 FOR DETAILS
SP1/SP2	NOMINAL 76mm DIAMETER HOT DIPPED GALVANISED SCREW PILES TO PILE MANUFACTURERS DESIGN, DETAIL, AND CERTIFICATION. PILES TO HAVE MIN. SAFE WORKING LOAD OF 75 kN.
BP1	450Ø x 2000 MIN. DEEP BORED PIER SUPPORTING TRAIL HANDRAILS. HANDRAIL TO MANUFACTURERS DESIGN AND DETAIL.

PRELIMINARY ISSUE FOR CLIENTS REVIEW

(NOT FOR CONSTRUCTION)

DATE: 02.03.2023

REV/No.	REVISION/ISSUE	BY	DATE
P1	PRELIMINARY ISSUE P1	ET	02.03.23

GEORGE E APTED & ASSOCIATES
PTY. LTD.
CONSULTING ENGINEERS
33 BROUGHAM STREET, ELTHAM, 3095
A.B.N. 73 093 450 161
FAX. (03) 9439-5121 TEL. (03) 9439-4144

PROJECT

BRIDGE + CULVERTS (LANDSCAPE)
LITTLE YARRA RIVER TRAIL
RIVERSDALE ROAD
YARRA JUNCTION

ARCHITECT/CLIENT

JO HENRY

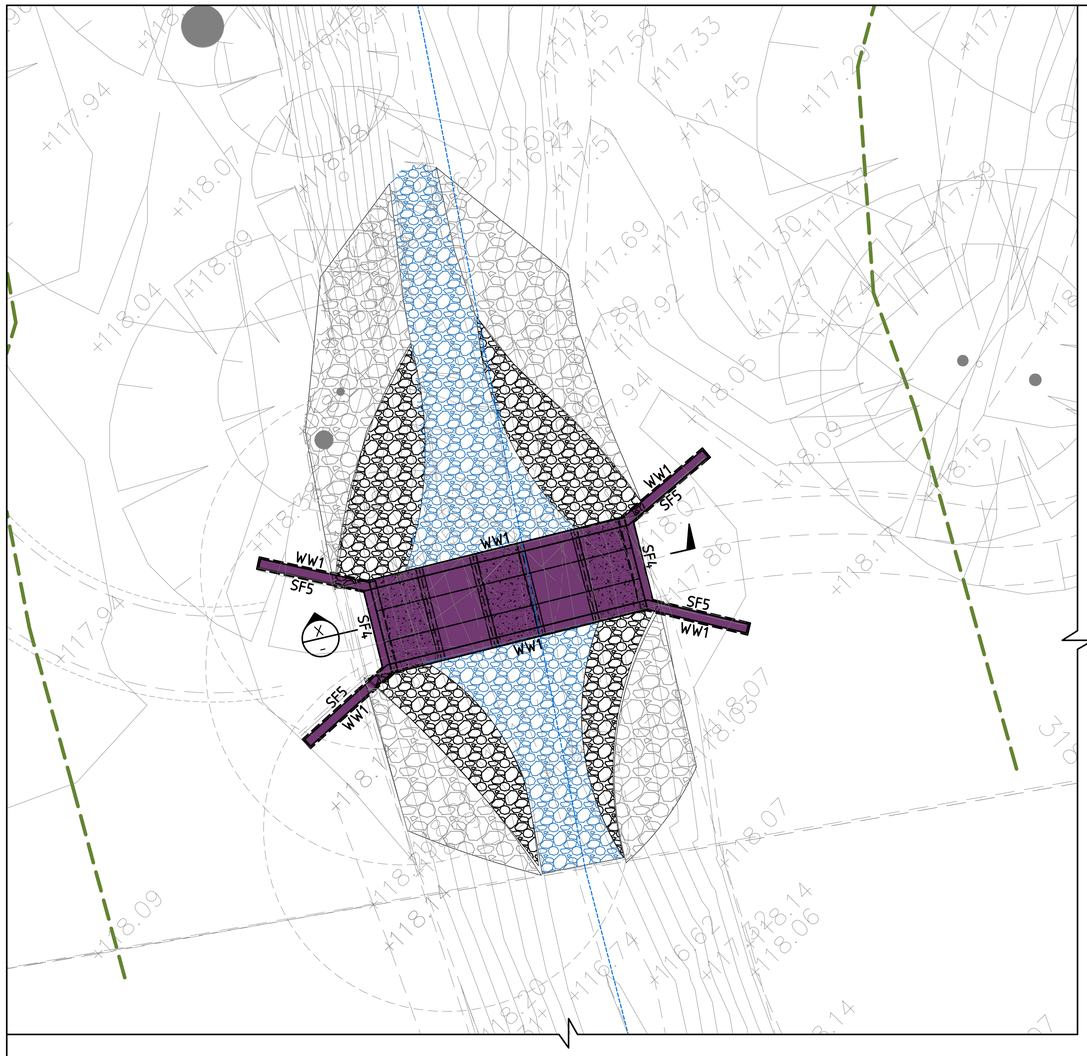
DESIGNED	DRAWN
K.A.	E.T.
DATE	**SCALE**
PRELIMINARY	1:100 @ A1

DRAWING TITLE

FOOTINGS & FRAMING PLANS, SECTION A,B & C

NORTH

DRAWING No. 22096-S2 REV. P1



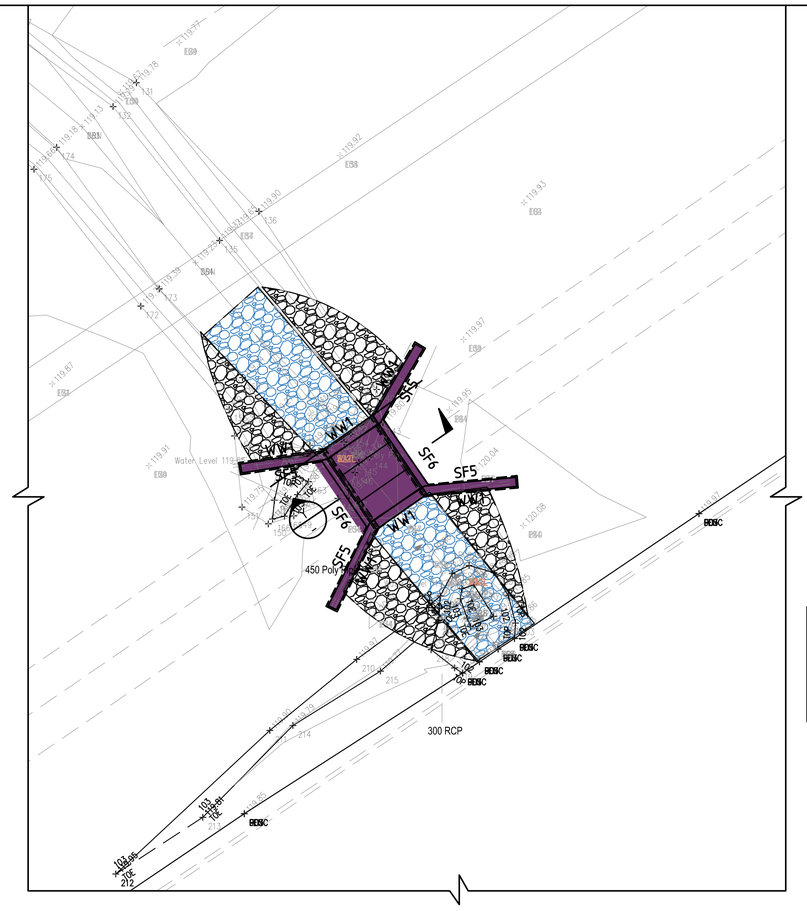
MAIN CULVERT CROSSING NEW DRAIN NEAR WARBURTON HWY: FOOTING PLAN

SCALE 1:100

LEGEND:

WW1 - CONCRETE WING WALL REFER DRAWING S5 FOR SIZE AND REINFORCEMENT DETAILS

SF* - STRIP FOOTINGS REFER FOOTING SCHEDULE ON DRAWING S2 FOR DETAILS



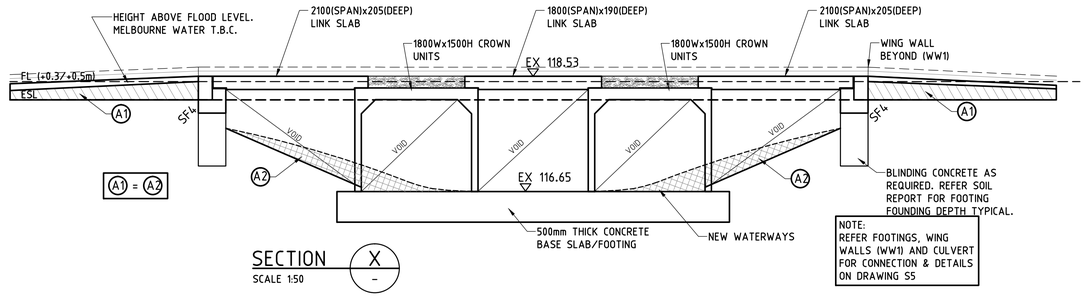
CULVERT CROSSING NEAR DRAIN ON PIPE TRACK: FOOTING PLAN

SCALE 1:100

LEGEND:

WW1 - CONCRETE WING WALL REFER DRAWING S5 FOR SIZE AND REINFORCEMENT DETAILS

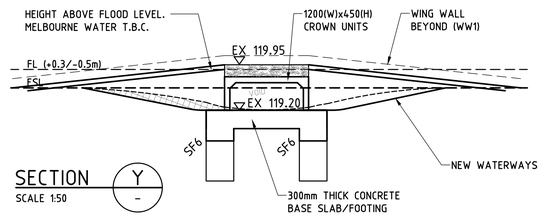
SF* - STRIP FOOTINGS REFER FOOTING SCHEDULE ON DRAWING S2 FOR DETAILS



NOTE:
REFER FOOTINGS, WING WALLS (WW1) AND CULVERT FOR CONNECTION & DETAILS ON DRAWING S5

SECTION X

SCALE 1:50



SECTION Y

SCALE 1:50

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATION OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GAURANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN. THE CONTRACTOR MUST VERIFY ALL SERVICES ON SITE PRIOR TO ANY EXCAVATION WORKS.

NOTE:
FLOOR LEVELS, SLAB RECESSES, & SLAB SET DOWNS TO BE CONFIRMED WITH ARCHITECT PRIOR TO WORKS.REFER ANY DISCREPANCIES TO ARCHITECT PRIOR TO WORKS.

NOTE:
STRIP FOOTING REFER FOOTING SCHEDULES ON DRAWING FOR DETAILS

PRELIMINARY ISSUE FOR CLIENTS REVIEW
(NOT FOR CONSTRUCTION)
DATE: 02.03.2023

REV/No.	REVISION/ISSUE	BY	DATE
P1	PRELIMINARY ISSUE P1	ET	02.03.23

GEORGE E APTED & ASSOCIATES
PTY. LTD.
CONSULTING ENGINEERS
33 BROUGHAM STREET, ELTHAM, 3095
A.B.N. 73 093 450 161
FAX. (03) 9439-5121 TEL. (03) 9439-4144

PROJECT
BRIDGE + CULVERTS (LANDSCAPE)
LITTLE YARRA RIVER TRAIL
RIVERSDALE ROAD
YARRA JUNCTION

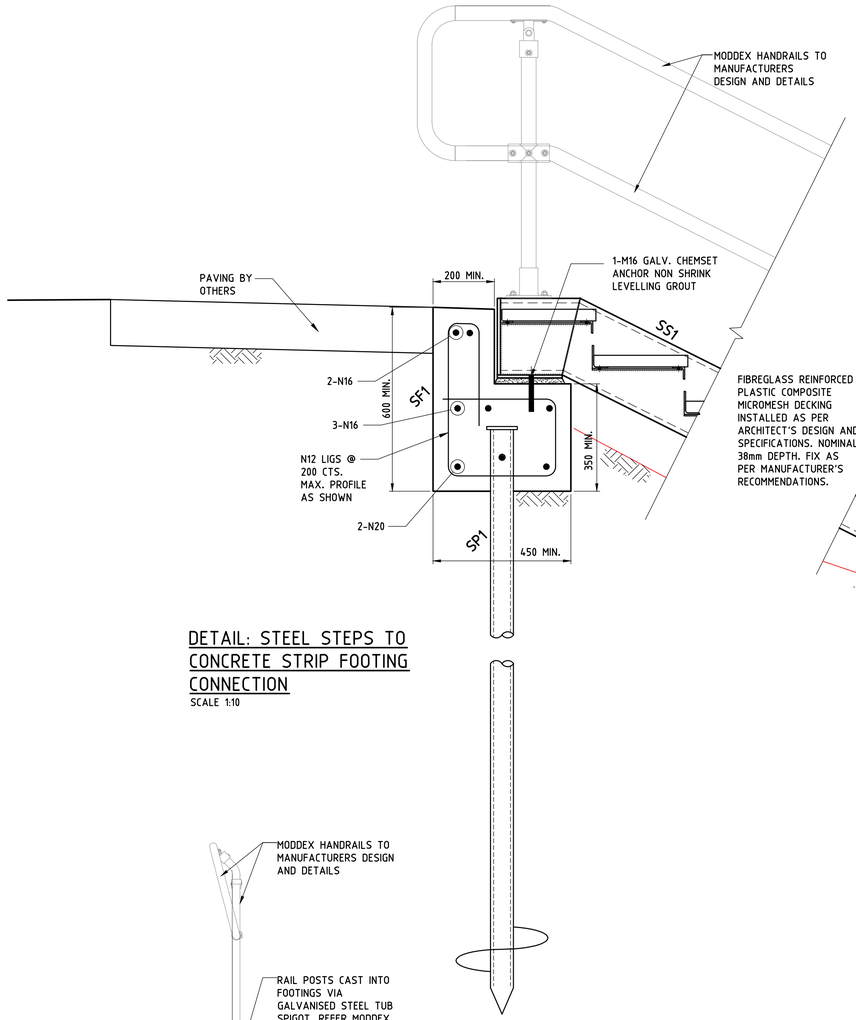
ARCHITECT/CLIENT
JO HENRY

DESIGNED	DRAWN
K.A.	E.T.
DATE: PRELIMINARY	SCALE: 1:100 @ A1

DRAWING TITLE
CULVERTS CROSSING: FOOTING AND SECTION DETAILS

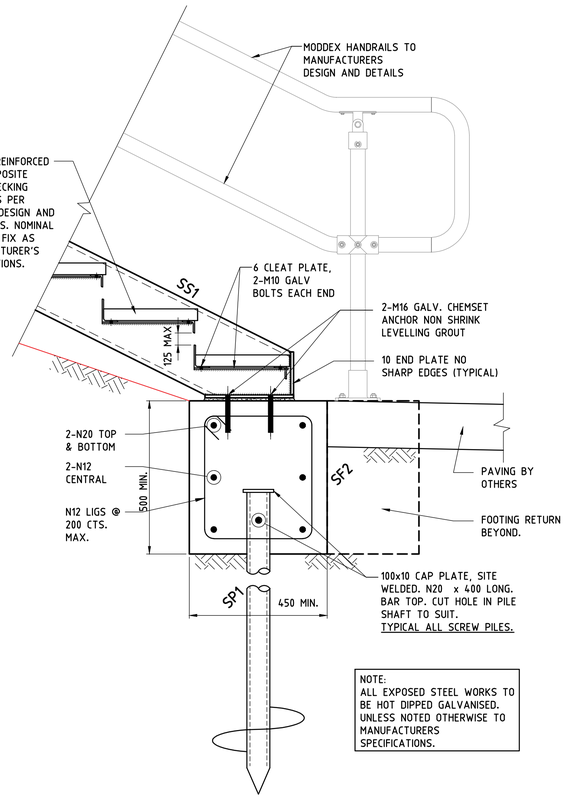
N O R T H

DRAWING No. 22096-S3 REV. P1

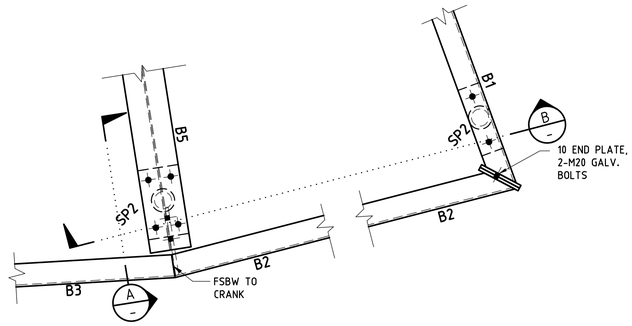


DETAIL: STEEL STEPS TO CONCRETE STRIP FOOTING CONNECTION

SCALE 1:10

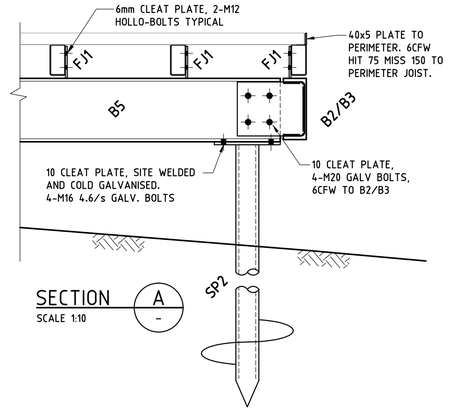


NOTE:
ALL EXPOSED STEEL WORKS TO BE HOT DIPPED GALVANISED. UNLESS NOTED OTHERWISE TO MANUFACTURERS SPECIFICATIONS.



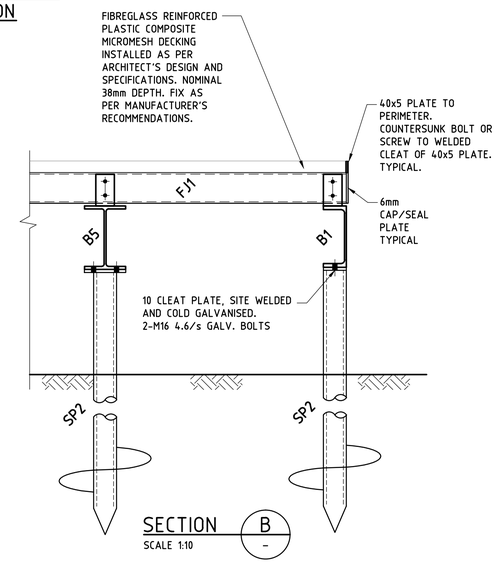
DETAIL 1/S2 DETAIL: STEEL BEAMS TO STEEL BEAMS TO SP2 CONNECTION

SCALE 1:10



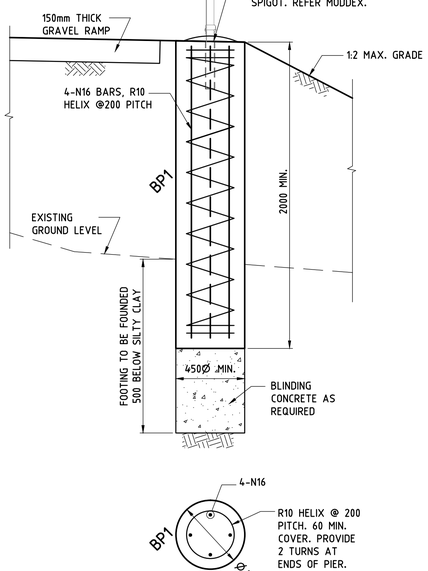
SECTION A

SCALE 1:10



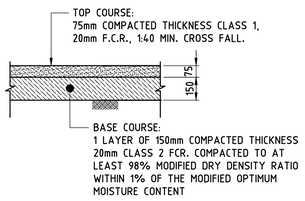
SECTION B

SCALE 1:10



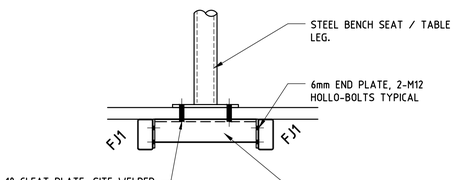
DETAIL: TYPICAL BORED PIER (BP1) CONNECTION

SCALE 1:20



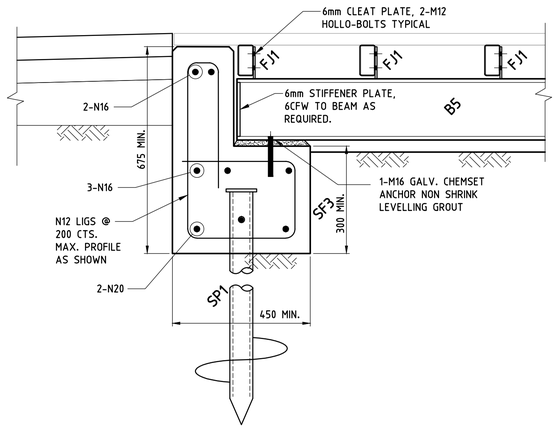
DETAIL: TYPICAL GRAVEL PATH BEDDING

SCALE 1:20



DETAIL: STEEL BEAM TABLE TO FLOOR JOISTS

SCALE 1:10



DETAIL: STEEL BEAM TO FLOOR JOIST TO CONCRETE STRIP FOOTING CONNECTION

SCALE 1:10

PRELIMINARY ISSUE FOR CLIENTS REVIEW
(NOT FOR CONSTRUCTION)
DATE: 02.03.2023

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GAURANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN. THE CONTRACTOR MUST VERIFY ALL SERVICES ON SITE PRIOR TO ANY EXCAVATION WORKS.

NOTE:
FLOOR LEVELS, SLAB RECESSES, & SLAB SET DOWNS TO BE CONFIRMED WITH ARCHITECT PRIOR TO WORKS.REFER ANY DISCREPANCIES TO ARCHITECT PRIOR TO WORKS.

REV/No.	REVISION/ISSUE	BY	DATE
P1	PRELIMINARY ISSUE P1	ET	02.03.23

GEORGE E APTED & ASSOCIATES
PTY. LTD.
CONSULTING ENGINEERS
33 BROUGHAM STREET, ELTHAM, 3095
A.B.N. 73 093 450 161
FAX. (03) 9439-5121 TEL. (03) 9439-4144

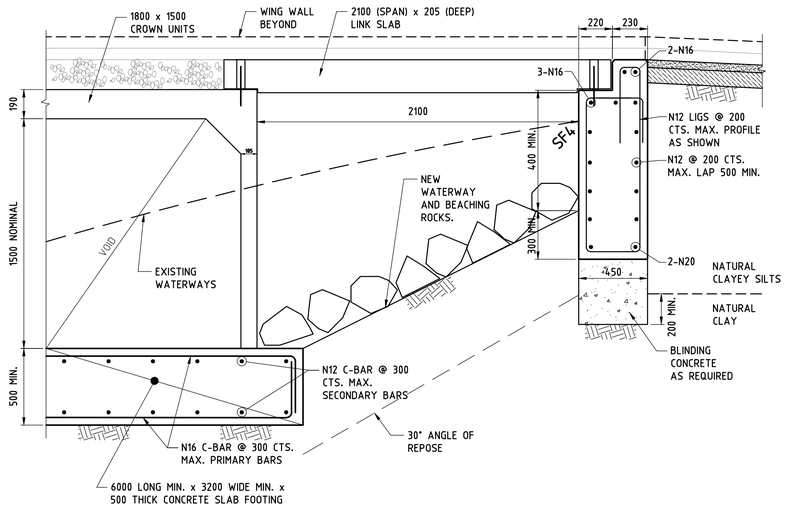
PROJECT
BRIDGE + CULVERTS (LANDSCAPE)
LITTLE YARRA RIVER TRAIL
RIVERSDALE ROAD
YARRA JUNCTION

ARCHITECT/CLIENT
JO HENRY

DESIGNED	DRAWN
K.A.	E.T.
DATE	**SCALE**
PRELIMINARY	1:100 @ A1

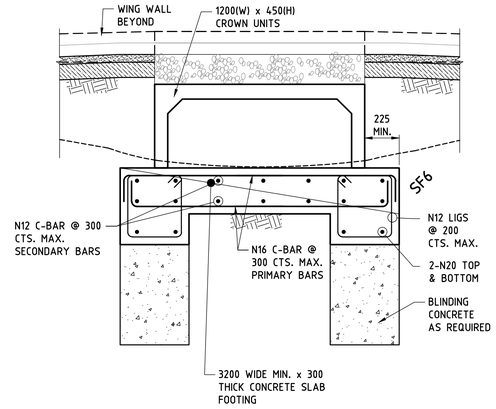
DRAWING TITLE
SECTIONS & DETAILS: SHEET 1

DRAWING No.	REV.
22096-S4	P1



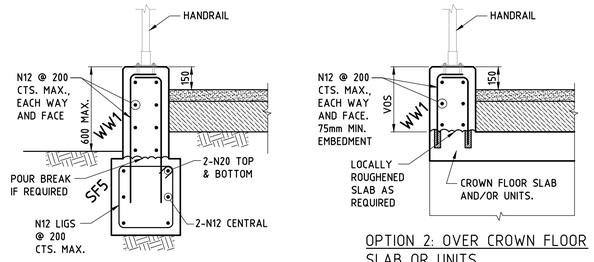
DETAIL: TYPICAL CONC. STRIP FOOTING TO CULVERT TO 500mm THICK CON. SLAB CONNECTION

SCALE 1:20



DETAIL: TYPICAL CONC. STRIP FOOTING TO CULVERT TO 300 THICK CONC. SLAB CONNECTION

SCALE 1:20



OPTION 1: OVER STRIP FOOTING

OPTION 2: OVER CROWN FLOOR SLAB OR UNITS

DETAIL: TYPICAL CONCRETE WING WALL (WW1) CONNECTION

SCALE 1:20

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATION OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GAURANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN. THE CONTRACTOR MUST VERIFY ALL SERVICES ON SITE PRIOR TO ANY EXCAVATION WORKS.

NOTE:
FLOOR LEVELS, SLAB RECESSES, & SLAB SET DOWNS TO BE CONFIRMED WITH ARCHITECT PRIOR TO WORKS.REFER ANY DISCREPANCIES TO ARCHITECT PRIOR TO WORKS.

REV/No.	REVISION/ISSUE	BY	DATE
P1	PRELIMINARY ISSUE P1	ET	02.03.23

GEORGE E APTED & ASSOCIATES
PTY. LTD.
CONSULTING ENGINEERS
33 BROUGHAM STREET, ELTHAM, 3095
A.B.N. 73 093 450 161
FAX. (03) 9439-5121 TEL. (03) 9439-4144

PROJECT

BRIDGE + CULVERTS (LANDSCAPE)
LITTLE YARRA RIVER TRAIL
RIVERSDALE ROAD
YARRA JUNCTION

ARCHITECT/CLIENT

JO HENRY

DESIGNED	DRAWN
K.A.	E.T.
DATE: PRELIMINARY	SCALE: 1:100 @ A1

DRAWING TITLE
SECTIONS & DETAILS: SHEET 2

DRAWING No. 22096-S5 REV. P1

PRELIMINARY ISSUE FOR CLIENTS REVIEW
(NOT FOR CONSTRUCTION)
DATE: 02.03.2023

N O R T H