

SITE PREPARATION/EARTHWORKS

- GENERAL
- SP1 ALL EARTHWORKS, SITE PREPARATION AND MATERIALS TO BE IN ACCORDANCE WITH AUSTROADS AND THE GEOTECHNICAL ENGINEERS REPORT UNO
- SP2 BERMING AND EROSION CONTROL MEASURES AS DESCRIBED MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF WORK
- SP3 10% EROSION AREA AS REQUIRED TO CONSTRUCT NEW WORKS BEING ANY TYPICAL VEGETATION, GRASSING OR SOFT MATERIAL FROM SITE
- SP4 THE CUT AND FILL SURFACE SHALL BE PROTECTED TO PREVENT EROSION AND TO BE IN ACCORDANCE WITH AUSTROADS AND THE GEOTECHNICAL ENGINEERS REPORT UNO
- SP5 CONCRETE SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE CONTRACTOR. A MINIMUM OF 10% OF THE TOTAL MASS SHOULD BE PLACED IN THE LOWER 10% OF THE DEPTH OF THE CONCRETE. THE AREA OF MOVEMENT JOINTS SHALL BE ENHANCED AND REINFORCED. MATERIAL SHALL BE BACKFILLED WITH APPROVED FILL. FILL SHALL NOT EXCEEDING 150MM PER LAYER. FILL SHALL BE COMPACTED TO 95% OF STANDARD VOLUMETRIC CONTENT
- SP6 WHERE THERE HAS BEEN AN EXTENDED DRY PERIOD THE SURFACE SHALL BE ENHANCED BY THE APPLICATION OF A SURFACE TREATMENT TO PREVENT CRACKS FORMING. THE SURFACE SHALL BE ENHANCED BY THE APPLICATION OF A SURFACE TREATMENT TO PREVENT CRACKS FORMING. THE SURFACE SHALL BE ENHANCED BY THE APPLICATION OF A SURFACE TREATMENT TO PREVENT CRACKS FORMING.

REINFORCEMENT

- SP7 COMPACTION TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL REINFORCEMENT. ALL REINFORCEMENT SHALL BE PROTECTED TO PREVENT DAMAGE TO THE REINFORCEMENT. ALL REINFORCEMENT SHALL BE PROTECTED TO PREVENT DAMAGE TO THE REINFORCEMENT.
- SP8 ANY FILL MATERIAL REQUIRED SHALL BE WELL GRADED WITH A MAXIMUM PARTICLE SIZE OF 60mm
- SP9 ALL FILL MATERIAL SHALL BE INTERNAL PLACED IN LAYERS NOT EXCEEDING 200mm LOCAL REINFORCEMENT
- SP10 ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD VOLUMETRIC CONTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL REINFORCEMENT. ALL REINFORCEMENT SHALL BE PROTECTED TO PREVENT DAMAGE TO THE REINFORCEMENT.
- SP11 PART FOUNDATIONS ARE DESCRIBED AS FOLLOWS: ALL PART FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REINFORCEMENT SPECIFICATIONS. ALL PART FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REINFORCEMENT SPECIFICATIONS.
- SP12 SERVICE BRICKWORK SHALL BE CONSTRUCTED WITH UNDERGROUND SERVICES SHALL BE COMPLETED IN LAYERS OF 100mm LOCAL REINFORCEMENT

CONCRETE

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C2 READY MIX CONCRETE SUPPLY SHALL COMPLY WITH AS 1379
- C3 CONCRETE QUALITY ALL THE REQUIREMENTS OF THE AUSTROADS CURB AND GUTTER DESIGN. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C4 PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C5 NO ADJUSTMENTS SHALL BE MADE IN CONCRETE UNLESS APPROVED IN WRITING
- C6 CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR CONCRETE SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C7 DURABLE REQUIREMENTS FOR CONCRETE SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C8 ALL REINFORCEMENT SHALL BE INTERNAL PLACED IN LAYERS NOT EXCEEDING 200mm LOCAL REINFORCEMENT

- C9 NO HOLES, CHASES OR EMBEDMENTS OF PIPE OTHER THAN THOSE SPECIFIED IN THE DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER
- C10 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER
- C11 ALL CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATION
- C12 THE ENGINEER SHALL BE GIVEN 24 HOUR NOTICE FOR REINFORCEMENT INSPECTIONS AND CONCRETE CASTING INSPECTIONS. ALL REINFORCEMENT SHALL BE PROTECTED TO PREVENT DAMAGE TO THE REINFORCEMENT.
- C13 REINFORCEMENT SHALL BE INTERNAL PLACED IN LAYERS NOT EXCEEDING 200mm LOCAL REINFORCEMENT
- C14 REINFORCEMENT BARS AND ANCHORS SHALL BE INTERNAL PLACED IN LAYERS NOT EXCEEDING 200mm LOCAL REINFORCEMENT
- C15 HOT ROLLED DEFORMED BAR GRADE 500 NORMAL DUCTILITY AS 467-02001
- C16 HOT ROLLED ROUND BAR GRADE 250 NORMAL DUCTILITY AS 467-02001
- C17 COLD DRAWN ROUND WIRE GRADE 500 LOW DUCTILITY AS 467-02000
- C18 POOL STEEL
- C19 HOT ROLLED DEFORMED BAR GRADE 250 NORMAL DUCTILITY AS 467-02001
- C20 REINFORCEMENT FABRIC COLD DRAWN WIRE BAR DIMENSIONS IN ACCORDANCE WITH AS 467
- C21 REINFORCEMENT FABRIC COLD DRAWN WIRE BAR DIMENSIONS IN ACCORDANCE WITH AS 467
- C22 RECTANGULAR COLD DRAWN WIRE BAR GRADE 500, LOW DUCTILITY AS 467-02000
- C23 TYPICAL WIRE COLD DRAWN WIRE BAR GRADE 500, LOW DUCTILITY AS 467-02000
- C24 NOTE THE REINFORCEMENT SPECIFICATIONS AND NOT NECESSARILY IN THE PROTECTION OF THE STRUCTURE
- C25 REINFORCEMENT SHALL BE MADE ONLY IN POSITIVE SHOWS OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. ALL REINFORCEMENT SHALL BE MADE ONLY IN POSITIVE SHOWS OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER.
- C26 REINFORCEMENT SHALL BE MADE ONLY IN POSITIVE SHOWS OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER.
- C27 REINFORCEMENT SHALL BE MADE ONLY IN POSITIVE SHOWS OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER.

BAR DIAMETER	MIN. LAP LENGTH (mm)	MIN. COVER LENGTH (mm)
R12	500	180
R16	500	200
R20	500	250
R25	500	300
R32	500	350
R40	500	400

CONCRETE (CONTINUED)

- C18 DEPTH OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS
- C19 CONCRETE BEAMS DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES
- C20 REFER TO ARCHITECTS DETAILS FOR CHAMFERED CORNERS
- C21 USE FINISHES AS SPECIFIED ON THE DRAWINGS. ALL FINISHES SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C22 ALL FINISHES SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C23 PROPPING WHICH SUPPORTS CONSTRUCTION OTHER THAN THAT SPECIFIED IN THE DRAWINGS SHALL BE IN ACCORDANCE WITH AUSTROADS CURB AND GUTTER DESIGN.
- C24 ALL CONCRETE SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE CONTRACTOR. A MINIMUM OF 10% OF THE TOTAL MASS SHOULD BE PLACED IN THE LOWER 10% OF THE DEPTH OF THE CONCRETE.

- C25 MINIMUM HEADS
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MEMBER TYPE	MEMBER	EFFECTIVE SPAN (m)	MINIMUM STRIPPING TIME (HOURS)	MINIMUM STRIPPING TIME PERIOD FROM TO STRIPPING (HOURS)
VERTICAL WALL COLUMN UNFINISHED	WALL	0	2	3
	COLUMN	0	2	3
	FINISHED	0	2	3
VERTICAL COLUMN OR BEARING STRUCTURE	COLUMN	0	5	6
	BEARING	0	5	6
	FINISHED	0	5	6
HORIZONTAL SLAB	SLAB	0	3	4
	UNDER 3	0	3	4
	OVER 3	0	3	4
HORIZONTAL BEAM	BEAM	0	3	4
	UNDER 3	0	3	4
	OVER 3	0	3	4

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STRUCTURAL STEEL

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- SP2 BERMING AND EROSION CONTROL MEASURES AS DESCRIBED MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF WORK
- SP3 10% EROSION AREA AS REQUIRED TO CONSTRUCT NEW WORKS BEING ANY TYPICAL VEGETATION, GRASSING OR SOFT MATERIAL FROM SITE
- SP4 THE CUT AND FILL SURFACE SHALL BE PROTECTED TO PREVENT EROSION AND TO BE IN ACCORDANCE WITH AUSTROADS AND THE GEOTECHNICAL ENGINEERS REPORT UNO
- SP5 CONCRETE SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE CONTRACTOR. A MINIMUM OF 10% OF THE TOTAL MASS SHOULD BE PLACED IN THE LOWER 10% OF THE DEPTH OF THE CONCRETE.

- SP6 WHERE THERE HAS BEEN AN EXTENDED DRY PERIOD THE SURFACE SHALL BE ENHANCED BY THE APPLICATION OF A SURFACE TREATMENT TO PREVENT CRACKS FORMING. THE SURFACE SHALL BE ENHANCED BY THE APPLICATION OF A SURFACE TREATMENT TO PREVENT CRACKS FORMING.
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- SP8 ALL REINFORCEMENT SHALL BE INTERNAL PLACED IN LAYERS NOT EXCEEDING 200mm LOCAL REINFORCEMENT
- SP9 HOT ROLLED DEFORMED BAR GRADE 500 NORMAL DUCTILITY AS 467-02001
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	COLUMN	0	2	3
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	BEARING	0	5	6
	FINISHED	0	5	6
HORIZONTAL SLAB	SLAB	0	3	4
	UNDER 3	0	3	4
	OVER 3	0	3	4
HORIZONTAL BEAM	BEAM	0	3	4
	UNDER 3	0	3	4
	OVER 3	0	3	4

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COLD-FORMED STRUCTURAL STEEL

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- SP2 BERMING AND EROSION CONTROL MEASURES AS DESCRIBED MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF WORK
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- SP5 CONCRETE SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE CONTRACTOR. A MINIMUM OF 10% OF THE TOTAL MASS SHOULD BE PLACED IN THE LOWER 10% OF THE DEPTH OF THE CONCRETE.

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GENERAL NOTES

PROPOSED ALTS. & ADDS.

1719 HILL END ROAD

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CHRISTOPHER CLEGG

1719 HILL END ROAD

GRATAI

TRIXIAL CONSULTING

180 RFA 294 | TRIAL.COM.AU

71 GIBSONS ROAD EASTWOOD SA 5061

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TO BE PRINTED IN COLOUR

COMPLEX PROBLEMS RESOLVED SIMPLY

DATE: SEP 2020

SCALE: 1:100

PROJECT: TX15048.00 - S1.02 0

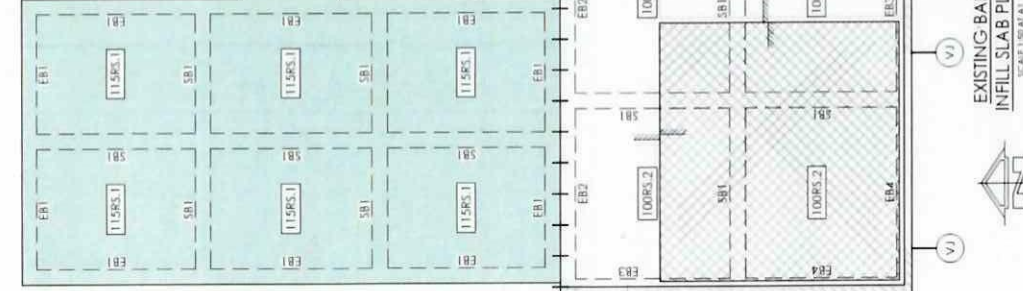
FOR CONSTRUCTION

POLISHED CONCRETE SLAB NOTE

THE POLISHED CONCRETE SLAB HAS BEEN PROVIDED WITH REINFORCEMENT THAT PROVIDES A MINIMUM 10% OVERLAP OF REINFORCEMENT. THE OVERLAP SHALL BE PROVIDED IN A MANNER THAT PREVENTS SLAB CRACKING OCCURRING TO AVOID THE RISK OF CRACK OCCURRING TO THE MAXIMUM EXTENT PRACTICAL. ADDITIONAL CONSTRUCTION DETAILS SHOULD BE CONSIDERED SUCH AS: POLISHED CONCRETE FINISH, POLISHED CONCRETE SLAB FINISH, POLISHED CONCRETE SLAB FINISH, POLISHED CONCRETE SLAB FINISH, POLISHED CONCRETE SLAB FINISH.

CONCRETE QUALITY

ELEMENT	A53000 EXPOSURE CLASS.	A51379 CONCRETE CLASS.	F _c (MPa) CHARACTERISTIC STRENGTH	CEMENT TYPE	ADMITTURES	MAX. AGGREGATE SIZE (mm)	SLUMP	NOTES
FOOTINGS	A	N	35	OP	14L	20	80	
STANDARD SLAB	A	N	35	OP	14L	20	80	
POLISHED SLAB - SURFACED FINISH	A	N	40	OP	14L	20	80	600 MAX MICROFIBRE CONCRETE AT SLABS



FOOTING SCHEDULE

MARK	SIZE (MM/MIN)	REINFORCEMENT
100RS.1	300 WIDE x 400 DEEP EDGE BEAM	3x11MM B1M
100RS.2	300 WIDE x 400 DEEP SUPPORTING BEAM	3x11MM B1M

FOOTING MARKS NOTED ON PLAN WITH A DEPTH SET TO BE AS 300 MAXIMUM CENTRES.

SLAB SPECIFICATION

MARK	TYPE	THICKNESS	REINFT	COMMENT
100RS.1	RAFT SLAB	115 MM B1M	3x11 TOP AND 2 LAYERS OF SLAB OVER 100MM COVER	
100RS.2	RAFT SLAB	100 MM B1M	SLAB TOP	

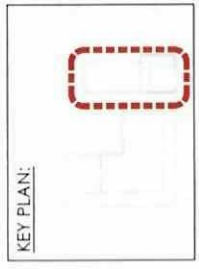
FOOTING NOTES:

- FOR ADDITIONAL REINFORCEMENT AND OTHER REQUIREMENTS, REFER TO DETAILS.
- REFER TO DETAILS AND REQUIREMENTS IN FOOTING CONSTRUCTION.
- ALL FOOTINGS TO BE EMBEDDED 200MM INTO NATURAL GROUND OR COMPACTED SUBGRADE.
- ALL FOOTINGS TO BE CONCRETE.
- REINFORCEMENT SHALL BE PROVIDED TO ALL SERVICE PIPES AND DRAINS.
- REFER TO DETAILS.
- BEAM SLAB AND BEAM DEPTH IS MARKED AT ALL JOINTS.
- DEPTH OF UNCONTROLLED FILL NOT TO EXCEED 400MM. IF FILL EXCEEDS 400MM IN DEPTH, THE FILL SHALL BE COMPACTED TO 95% PROCTOR DENSITY. THE FILL SHALL BE TO BE THICKENED TO 150MM WITH AN ADDITIONAL LAYER OF BOTTOM REINFT.
- IF FILL EXCEEDS 150MM WITH AN ADDITIONAL LAYER OF BOTTOM REINFT, THE FILL SHALL BE THICKENED TO 150MM WITH AN ADDITIONAL LAYER OF BOTTOM REINFT.
- DURING CONSTRUCTION, WATER RUNOFF SHALL BE COLLECTED & CHANNELLED AWAY FROM THE BUILDING.
- ALL FOOTINGS TO BE CONCRETE WITH SLAB TOP AS NOTED.
- ALL FOOTINGS TO BE CONCRETE WITH SLAB TOP AS NOTED.

FOOTING STEP NOTE:
BUILD TO ENSURE FOOTING DEPTH IS ALWAYS MARKED REFER TO DETAILS FOR FOOTING STEP REQUIREMENTS.

CONCRETE COVER U.O.
REFER TO DETAILS TO HAVE THE FOLLOWING CLEAR CONCRETE COVER:
CAST AGAINST MEMBRANE = 20mm
CAST AGAINST FORMWORK = 30mm
INTERNAL SURFACES = 30mm
EXTERNAL SURFACES = 40mm

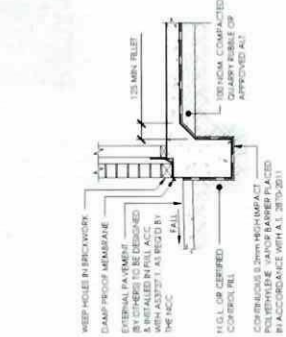
VERTICAL JOINT NOTE
VERTICAL JOINTS SHALL BE FULL HEIGHT AND LOCATED AS SHOWN ON THE PLAN. ALL JOINTS SHALL BE FULL HEIGHT AND LOCATED AS SHOWN ON THE PLAN. ALL JOINTS SHALL BE FULL HEIGHT AND LOCATED AS SHOWN ON THE PLAN. ALL JOINTS SHALL BE FULL HEIGHT AND LOCATED AS SHOWN ON THE PLAN. ALL JOINTS SHALL BE FULL HEIGHT AND LOCATED AS SHOWN ON THE PLAN.



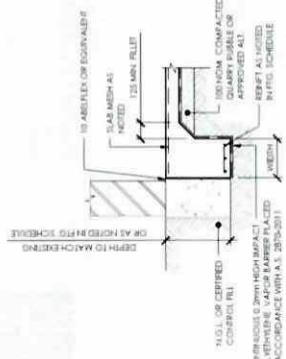
LEGEND:

(VJ)	VERTICAL JOINT	REFER TO VERTICAL JOINT NOTE
(V)	STEP IN SLAB TO ARCHIT DETAILS	
115RS.1	RAFT SLAB AS NOTED IN SLAB SPECIFICATION TABLE	
100RS.2	RAFT SLAB AS NOTED IN SLAB SPECIFICATION TABLE	
[Green Box]	POLISHED CONCRETE	REFER TO POLISHED CONCRETE NOTE

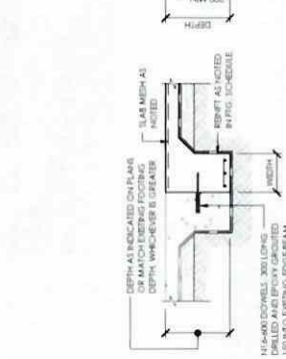




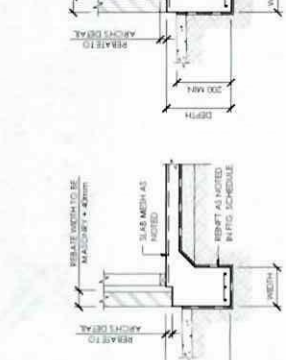
EBC - EDGE BEAM DETAIL
N.T.S.



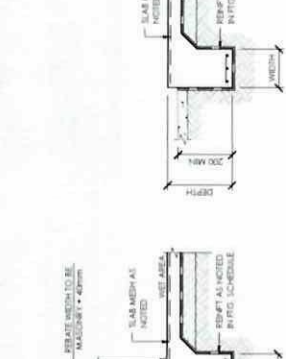
EB1 - EDGE BEAM DETAIL
N.T.S.



EB2 - EDGE BEAM DETAIL
N.T.S.



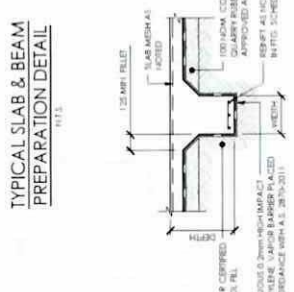
EB3 - EDGE BEAM DETAIL
N.T.S.



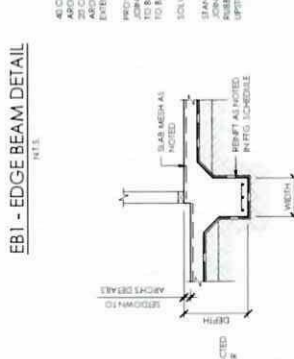
EB4 - EDGE BEAM DETAIL
N.T.S.



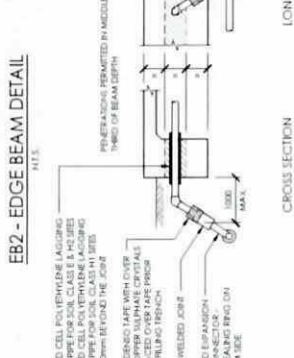
EB5 - EDGE BEAM DETAIL
N.T.S.



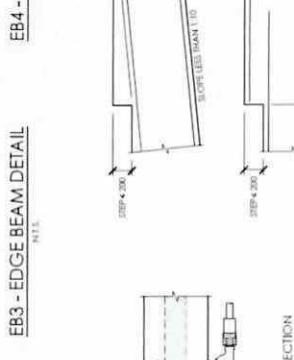
SB1 - STIFFENING BEAM DETAIL
N.T.S.



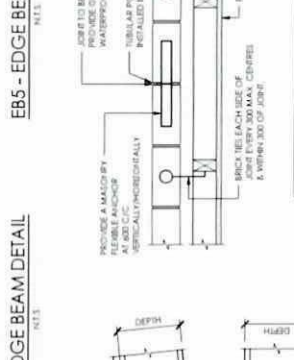
SB2 - STIFFENING BEAM DETAIL
N.T.S.



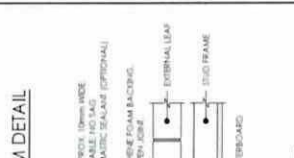
FLEXIBLE COUPLING DETAIL AND
PREFERRED ZONE FOR PENETRATIONS
N.T.S.



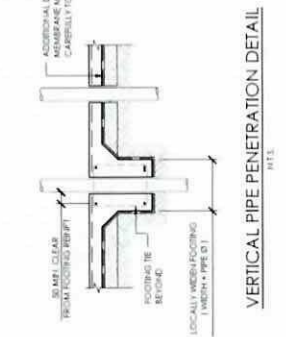
MASONRY VENEER
ARTICULATION JOINT DETAIL
N.T.S.



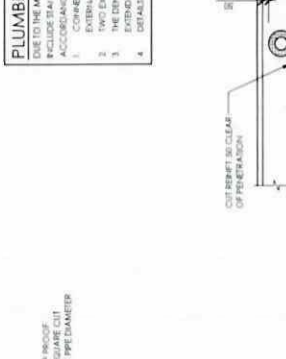
FOOTING STEP DETAILS
LESS THAN 2D
N.T.S.



BEAM CORNER REINF DETAILS
N.T.S.



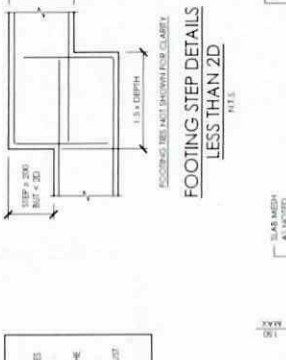
VERTICAL PIPE PENETRATION DETAIL
N.T.S.



DETAILS WHERE PENETRATIONS UNAVOIDABLE
CLASH WITH REINFORCEMENT
N.T.S.



PLUMBING JOINT NOTE:
N.T.S.



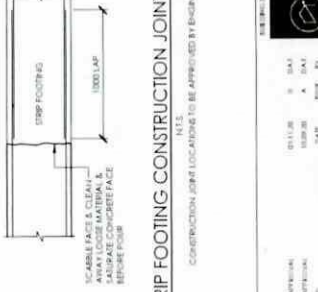
FOOTING STEP DETAILS
LESS THAN 2D
N.T.S.



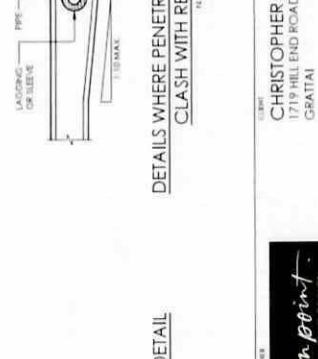
BEAM CORNER REINF DETAILS
N.T.S.



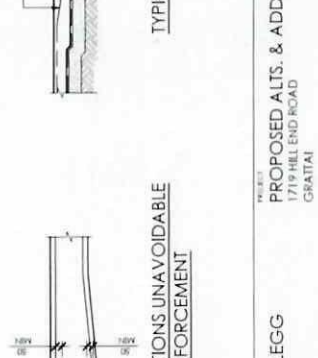
BEAM CORNER REINF DETAILS
N.T.S.



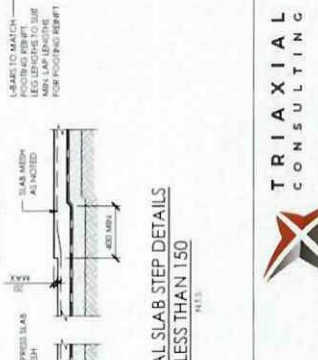
STRIP FOOTING CONSTRUCTION JOINT DETAIL
N.T.S.



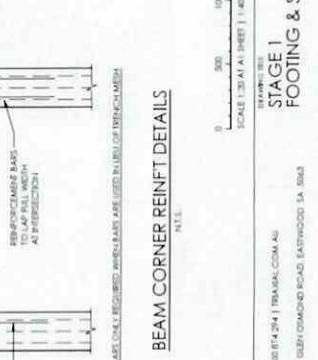
TYPICAL SLAB STEP DETAILS
LESS THAN 150
N.T.S.



FOOTING STEP DETAILS
LESS THAN 2D
N.T.S.



BEAM CORNER REINF DETAILS
N.T.S.



BEAM CORNER REINF DETAILS
N.T.S.



BEAM CORNER REINF DETAILS
N.T.S.

FOR CONSTRUCTION

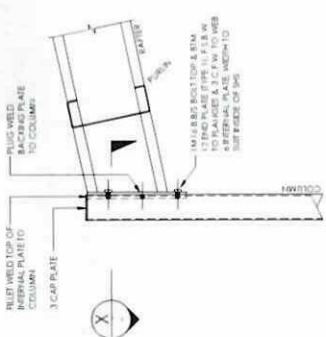
DATE: 11/11/2011
DRAWN BY: [Name]
CHECKED BY: [Name]
SCALE: 1:30 (A1) SHEET 11 OF 13 SHEET

CHRISTOPHER CLEGG
1719 HILL END ROAD
GRATAI

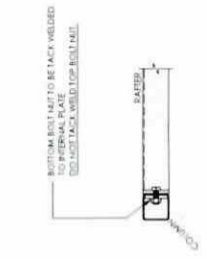
PROPOSED ALTS. & ADDS.
1719 HILL END ROAD
GRATAI

TRIAxIAL CONSULTING
COMPLEX PROBLEMS
RESOLVED SIMPLY

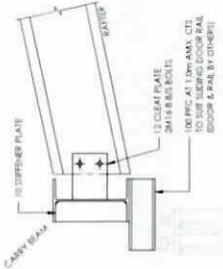
STAGE 1 FOOTING & SLAB DETAILS
PROJECT NO. TX15048.00 - \$3.01



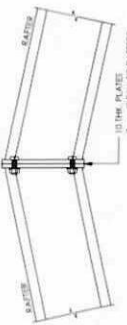
TYPICAL COLUMN TO RAFTER KNEE CONNECTION DETAILS N.T.S.



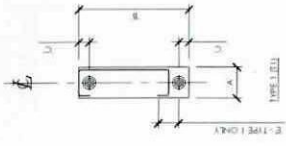
SECTION N.T.S.



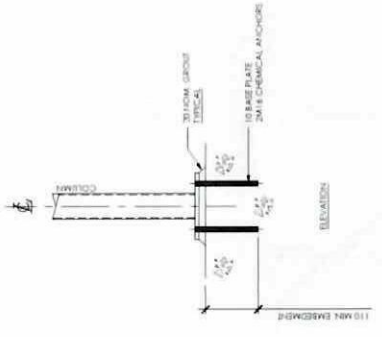
CARRY BEAM TO RAFTER CONNECTION DETAIL N.T.S.



TYPICAL RAFTER RIDGE CONNECTION DETAIL N.T.S.



TYPICAL RAFTER END PLATE DIMENSION LAYOUT N.T.S.

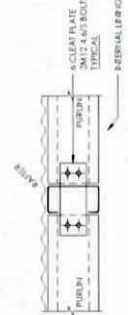


COLUMN BASE PLATE DETAIL N.T.S.

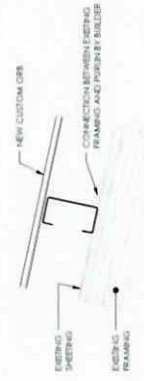
RAFTER SIZE (RIDGE PLATE TYPE)	END PL/WELD	BACKING PL/WELD	STIFFENER PL/WELD	BOLT SPEC.	FINA FOR BORED COLUMN CONNECTION
C200-15 (TYPE 1)	10 THICK PLATE 3 CF W TO RIB	8 THICK PLATE 3 CF W	10 THICK PLATE 3 CF W	2M16 SBST	FINA FOR BORED COLUMN CONNECTION
C200-15 (TYPE 2)	10 THICK PLATE 3 CF W TO RIB	10 THICK PLATE 3 CF W	10 THICK PLATE 3 CF W	2M16 SBST	FINA FOR BORED COLUMN CONNECTION

RAFTER END PLATE DIMENSIONS (MIN.)					
SIZE	'A' (mm)	'B' (mm)	'C' (mm)	'D' (mm)	'E' (mm)
C200	90	240-250 ONLY	250-260 ONLY	28	118-120 ONLY
					N/A

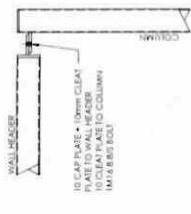
WELD NOTE:
ALL WELDS TO BE M16
3mm C/P W. EXCEPT
UNLESS NOTED OTHERWISE



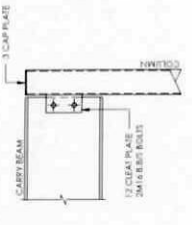
TYPICAL PURLIN CONNECTION DETAILS N.T.S.



EXISTING FRAMING TO NEW DETAIL N.T.S.

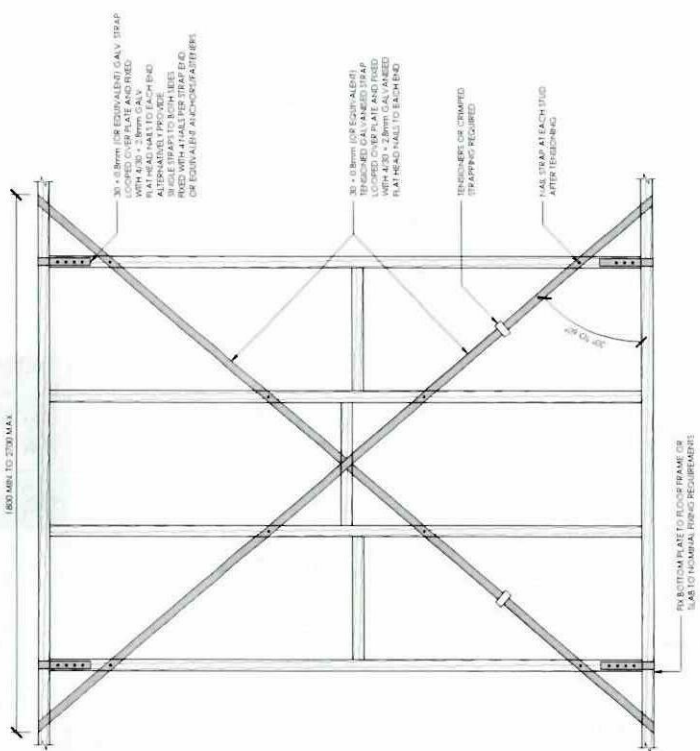


TYPICAL WALL HEADER TO COLUMN CONNECTION DETAIL N.T.S.



CARRY BEAM TO COLUMN CONNECTION DETAIL N.T.S.





WB2 - TENSIONED STRAP WALL BRACING DETAIL
TIT

NOTE:
ALL CONNECTIONS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. SIMILAR OR EQUIVALENT ALTERNATIVE CONNECTIONS ARE ALLOWED SUBJECT TO PRIOR APPROVAL FROM THE ENGINEER.



STAGE 2
FRAMING DETAILS
SHEET 2
TX15048.00 - \$5.02 0

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DATE: SEP 2022
DRAWN: DAF
CHECKED: CHL

CHRISTOPHER CLEGG
1719 HILL END ROAD
GRATAI



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