

APPENDIX A - PLANS



TEYS AUSTRALIA WAGGA WAGGA BOMEN NSW PLANT NEW CATTLE YARDS 23 - 15492



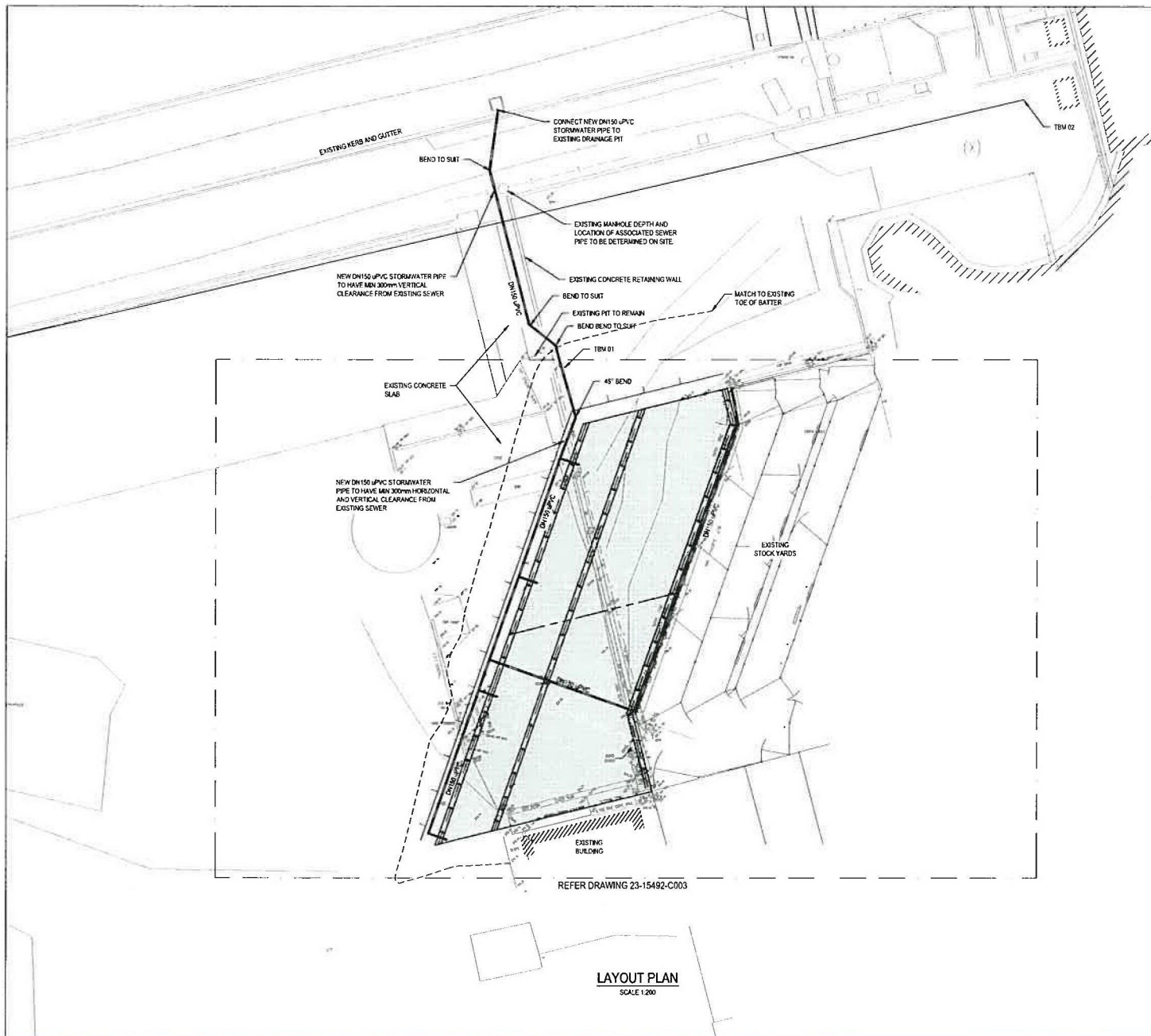
DRAWING LIST

DRG No.	DRAWING TITLE
23-15492-C001	LOCALITY PLAN
23-15492-C002	GENERAL ARRANGEMENT LAYOUT PLAN
23-15492-C003	NEW SLAB AND STORMWATER DRAINAGE LAYOUT
23-15492-C004	TYPICAL SECTIONS AND DETAILS
23-15492-S001	GENERAL NOTES
23-15492-S002	CONCRETE FLOOR SLAB PLAN
23-15492-S003	ROOF STEELWORK PLAN + LIGHTING LAYOUT
23-15492-S004	STEELWORK ELEVATIONS
23-15492-S005	CONCRETE FLOOR SLAB DETAILS
23-15492-S006	ROOF STEELWORK DETAILS

PRELIMINARY

						DO NOT SCALE	Drawn: P CHILDS	Designer: S RASMUSSEN	Client: TEYS AUSTRALIA WAGGA WAGGA
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							Approved (Project Director): S FARRELL	Date: 25/06/2015	Title: NEW CATTLE YARDS
							Scale: AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	Original Size: A1
									Drawing No: 23-15492-C001
									Rev: A

Plot Date: 25 June 2015 - 3:41 PM
Printed by: Philippa Childs
Cust File No: G:\2\15492\CADD\Drawings\23-15492-C001.dwg



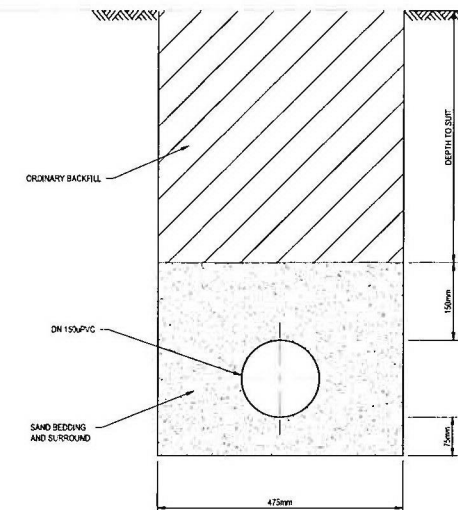
LEGEND

	NEW STORMWATER DRAINAGE PIPE
	EXISTING SEWER PIPE
	TOE OF BATTER
	TOP OF BATTER
	NEW CONCRETE SLAB

NOTES:

1. REFER STRUCTURAL DRAWINGS 23-15496-5001 TO 5004 FOR ROOF AND SLAB DETAILS.
2. ALL WORKS TO BE IN ACCORDANCE WITH AS1500 - PLUMBING AND DRAINAGE.

SURVEY SETOUT POINTS			
POINT	EASTING	NORTHING	ELEVATION
TBM01	537337.823	6118377.189	227.350
TBM02	537362.599	6115403.351	227.401
TBM03	537155.915	6118431.515	226.376



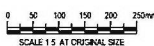
TYPICAL TRENCH SECTION DETAIL

SCALE 1:5

LAYOUT PLAN

SCALE 1:200

PRELIMINARY



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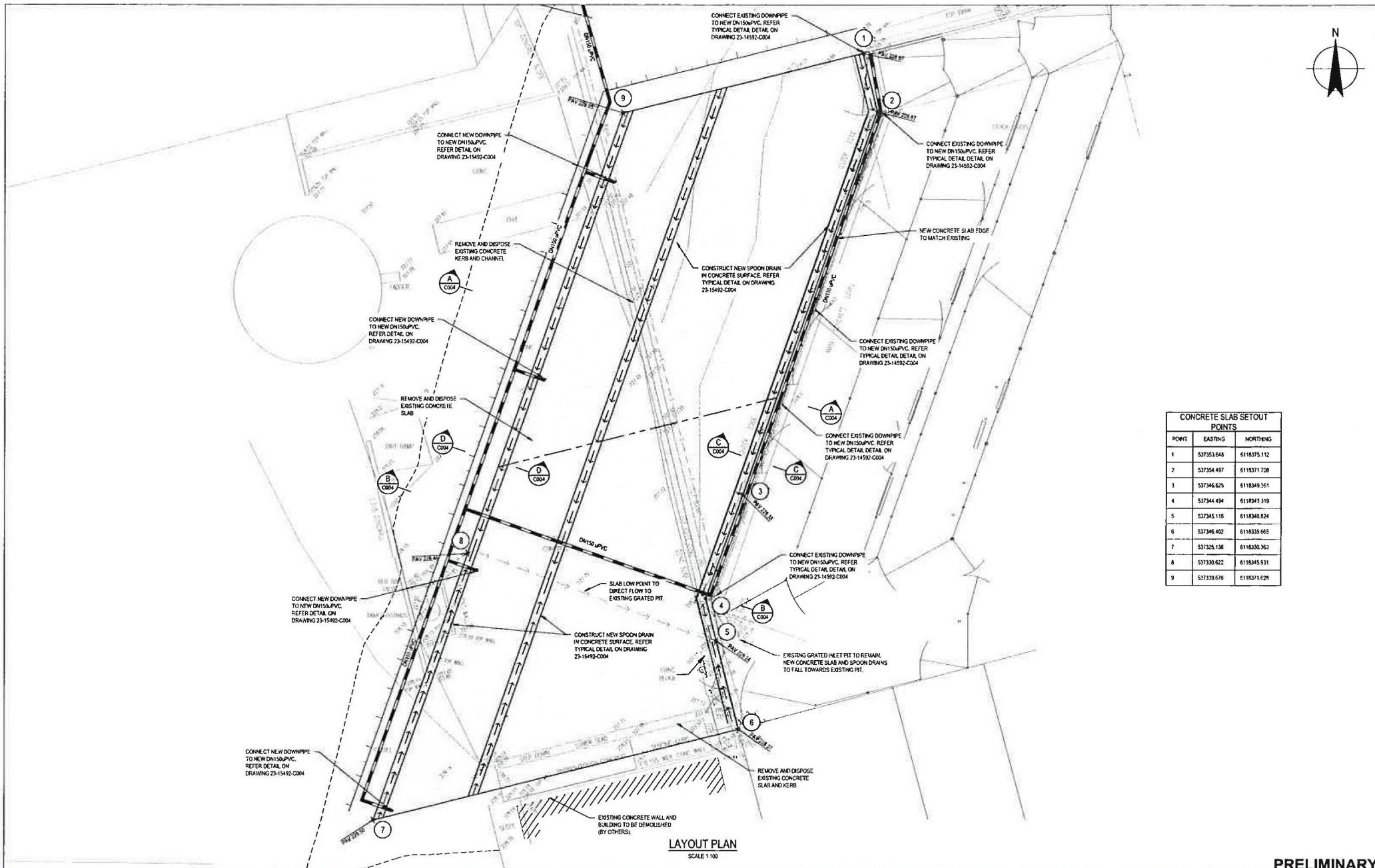
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Drafting Check	S RASMUSSEN	Design Check	S DONDERS
Approved (Project Director)	S FARRELL	Date	25/06/2015
Scale	AS SHOWN	<small>This Drawing must not be used for construction unless signed off Approved.</small>	

Client **TEYS AUSTRALIA WAGGA WAGGA BOMEN NSW PLANT**
 Project **NEW CATTLE YARDS**
 Title **GENERAL ARRANGEMENT LAYOUT PLAN**

Original Size **A1** Drawing No: **23-15492-C002**

Rev: A



CONCRETE SLAB SETOUT POINTS		
POINT	EASTING	NORTHING
1	537353.648	6118375.112
2	537354.487	6118371.708
3	537346.625	6118349.361
4	537344.494	6118343.319
5	537345.116	6118340.824
6	537346.402	6118336.665
7	537325.136	6118330.363
8	537330.622	6118345.931
9	537338.676	6118371.628

No	Revision	Note	PC	CJ*	SF*	Date
A		PRELIMINARY ISSUE				25.06.15
No	Revision	Note	Drawn	206	Project Director	Date



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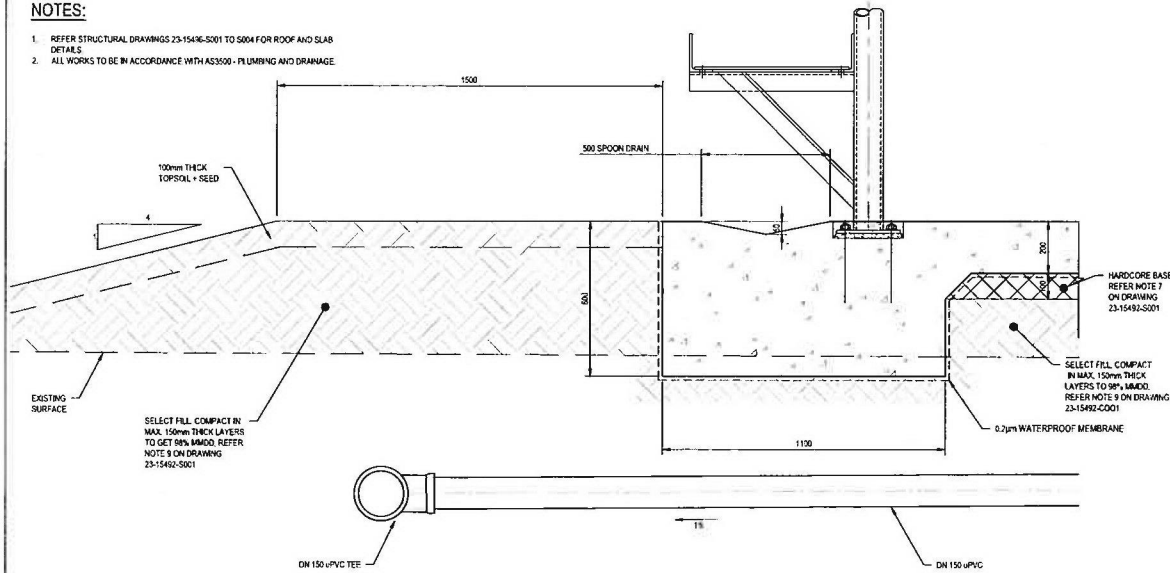
Drawn	P CHILDS	Designer	S RASMUSSEN
Drafting Check	S RASMUSSEN	Design Check	S DONNERS
Approved (Project Director)	S FARRELL	Date	25.06.15
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Client	TEYS AUSTRALIA WAGGA WAGGA
Project	BOMEN NSW PLANT
Title	NEW CATTLE YARDS
	NEW SLAB AND STORMWATER DRAINAGE LAYOUT
Original Size	A1
Drawing No:	23-15492-C003
Rev:	A

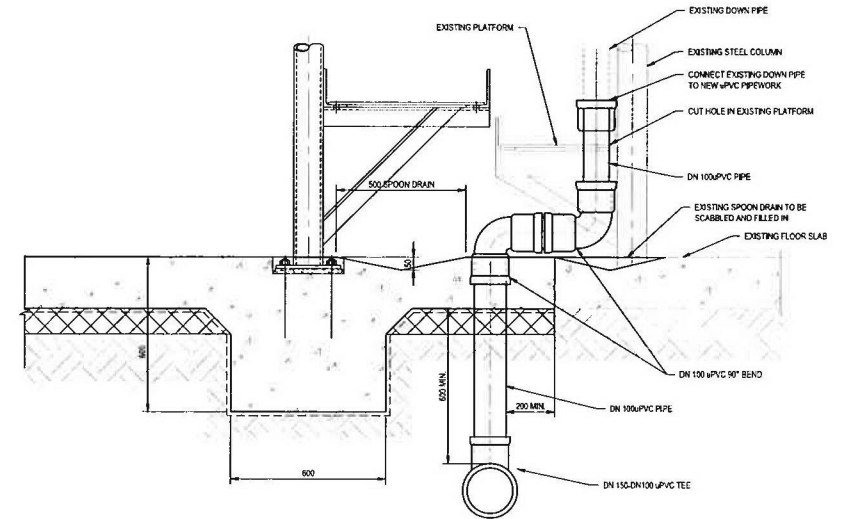
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NOTES:

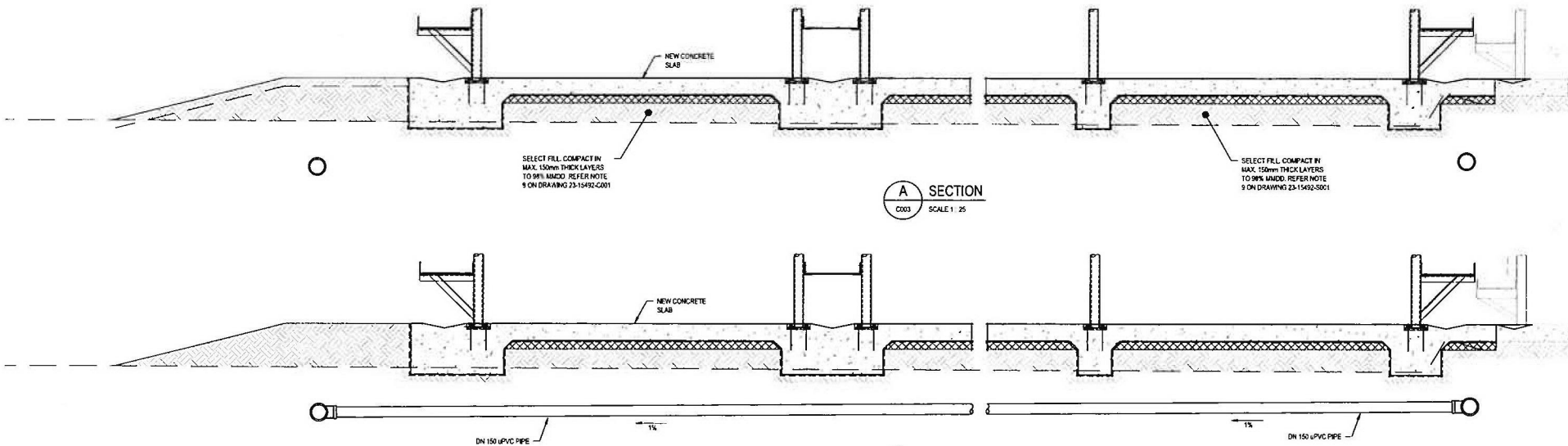
1. REFER STRUCTURAL DRAWINGS 23-15492-C001 TO 5004 FOR ROOF AND SLAB DETAILS
2. ALL WORKS TO BE IN ACCORDANCE WITH AS3500 - PLUMBING AND DRAINAGE



D SECTION
C003 SCALE 1: 10



C SECTION
C003 SCALE 1: 10

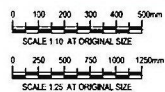


A SECTION
C003 SCALE 1: 25

B SECTION
C003 SCALE 1: 25

PRELIMINARY

No	Revision	Note	Drawn	Job Manager	Project Director	Date
A	PRELIMINARY ISSUE		PC	CJ*	SF*	25.06.15



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Drafting Check	S RASMUSSEN	Design Check	S DONDERS
Approved (Project Director)	S FARRELL	Date	25.06.15
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client	TEYS AUSTRALIA WAGGA WAGGA
Project	BOMEN NSW PLANT
Title	NEW CATTLE YARDS
	TYPICAL SECTIONS AND DETAILS
Original Size	A1
Drawing No:	23-15492-C004

Rev: A

GENERAL

- ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT S.A.A. CODES AND WITH THE BYLAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.
- SETTING-OUT DIMENSIONS AND SIZES OF STRUCTURAL MEMBERS NOT TO BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS. ANY SETTING-OUT DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS TO BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION COMMENCES. REFER ANY DISCREPANCY TO THE DESIGNER BEFORE PROCEEDING WITH THE WORK.
- DURING CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STRUCTURE IS MAINTAINED IN A SAFE AND STABLE CONDITION AND NO PART IS OVERSTRESSED. TEMPORARY BRACING TO BE PROVIDED BY THE CONTRACTOR AS REQUIRED TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
- THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT S.A.A. CODES AND BUILDING CODE OF AUSTRALIA FOR THE FOLLOWING LOADINGS:-

ELEMENT	LIVE LOAD (kPa)
CONCRETE FLOOR SLAB	5.0
NON TRAFFICABLE ROOF	0.25
WALKWAYS	2.5

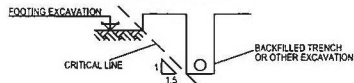
WIND LOADING HAS BEEN DETERMINED IN ACCORDANCE WITH AS 1170.2 BASED UPON A BASIC WIND VELOCITY OF 45m/s (VR) AND TERRAIN CATEGORY 3.

EARTHQUAKE LOADING HAS BEEN DETERMINED IN ACCORDANCE WITH AS 1170.4

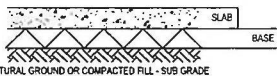
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT CODES OF PRACTICE EXCEPT WHERE VARYED BY THE SPECIFICATION AND/OR DRAWINGS.
- AS 3600 CONCRETE STRUCTURES CODE
- AS 4871 STEEL REINFORCING MATERIALS
- AS 4100 STEEL STRUCTURES CODE
- AS 1163 STRUCTURAL STEEL HOLLOW SECTIONS
- AS 1554 (PART 1) WELDING OF STEEL STRUCTURES
- AS 1720.1 TIMBER ENGINEERING CODE
- AS 1289 METHODS OF TESTING SOILS FOR ENGINEERING PURPOSES
- AS 3700 MASONRY CODE
- AS 3798 GUIDELINES FOR EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
- AS 3610 FORMWORK FOR CONCRETE

FOUNDATIONS

- FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING INTENSITY OF 100 kPa. FOUNDATION MATERIAL TO BE APPROVED FOR THIS PRESSURE BY THE CONTRACTOR'S INDEPENDENT GEOTECHNICAL ENGINEER BEFORE REINFORCEMENT AND/OR CONCRETE ARE PLACED.
- FOOTINGS TO BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS U.N.O.
- RETAINING WALLS (OTHER THAN CANTILEVER WALLS) NOT TO BE BACKFILLED UNTIL FLOOR CONSTRUCTION AT TOP AND BOTTOM IS COMPLETED. ENSURE FREE DRAINING BACKFILL IS USED, AND DRAINAGE IS IN PLACE. CANTILEVER WALLS TO BE BACKFILLED ONLY AFTER MINIMUM CONCRETE STRENGTH IS ACHIEVED.
- BUILDING CONCRETE TO BE PLACED ON THE SAME DAY AS THE FINAL EXCAVATION TO THE FOUNDATION DESIGN LEVEL.
- FOOTING LEVELS, WHERE SHOWN, ARE ESTIMATES ONLY AND WILL BE ESTABLISHED DURING SITE INSPECTION.
- UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT ENGINEER THE LIMITATIONS OF EXCAVATIONS NEAR FOOTINGS SHALL BE AS FOLLOWS:-



- SUB GRADE AND SUB BASE FOR SLABS ON GROUND SHALL COMPLY WITH THE FOLLOWING:-



SUB GRADE
UNLESS OTHERWISE SPECIFIED THE SUB GRADE BELOW BASE COURSES FOR SLABS SHALL BE SUITABLE MATERIAL, COMPACTED TO 95% OF MAXIMUM DRY DENSITY DETERMINED BY TEST AS 1298-2.1 OR 95% MINIMUM DENSITY INDEX FOR COHESIONLESS SOILS.

- BASE SHALL BE APPROVED WELL GRADED NATURAL GRAVEL OR CRUSHED ROCK (MAX. SIZE 40mm) SPREAD AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY DETERMINED BY TEST AS 1298-2.1 OR 95% MINIMUM DENSITY INDEX FOR COHESIONLESS SOILS.
- ALL FREE DRAINING GRANULAR FILL MATERIAL BEHIND RETAINING WALLS SHALL BE OF STRONG DURABLE PARTICLES CONFORMING TO THE FOLLOWING GRADINGS:-

AS SIEVE SIZE	% PASSING
53mm	100
8.5mm	45-100
2.5mm	20-75
600µm	10-20
75µm	<15

- WHERE SELECTED FILL IS SHOWN ON THE DRAWINGS, FILL SHALL COMPLY WITH THE FOLLOWING:-

- REINFORCE TOPSOIL, IF ANY AND EXISTING FILL
- COMPACT SURFACE TO 95% MDD
- PLACE FILL IN MAX. 150 THICK LAYERS, EACH LAYER COMPACTED TO 90% MDD
- FILL TO COMPLY WITH:-
 - MAX. PARTICLE SIZE 75mm
 - PERCENTAGE PASSING 0.075mm SIEVE 25% MAX.
 - PLASTICITY INDEX NOT GREATER THAN 15% AND NOT LESS THAN 2%
 - MINIMUM SOAKED CBR TO BE 15%

CONCRETE

- ALL WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH A.S.3600 AND THE CONCRETE SPECIFICATION.
- CONCRETE QUALITY:-

ELEMENT	SLUMP	MAX. SIZE AGGREGATE	CEMENT TYPE	CONCRETE GRADE
FLOOR SLAB & BEAMS	80	20	GP	32 MPa
MASS CONCRETE	80	20	GP	15 MPa

MIN. CEMENT CONTENT = 270kg/m³ MAX. W/C RATIO = 0.5

- PROJECT CONTROL TESTING TO BE CARRIED OUT IN ACCORDANCE WITH A.S.3600.
- NO ADMIXTURES TO BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
- CONCRETE DIMENSIONS SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.
- DEPTH OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS U.N.O.
- ALL EXPOSED EDGES AND CORNERS TO BE PROVIDED WITH 25mm FILLETS OR CHAMFERS. MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS UNLESS OTHERWISE INDICATED.
- NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS TO BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE AUTHORISED PERSON.
- CONSTRUCTION JOINTS WHERE NOT SHOWN TO BE LOCATED TO THE APPROVAL OF THE AUTHORISED PERSON. DETAILS OF CONSTRUCTION JOINTS TO BE SUBMITTED TO THE AUTHORISED PERSON FOR APPROVAL.
- THE FINISHED CONCRETE TO BE A DENSE HOMOGENEOUS MASS. COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS TO BE COMPACTED WITH MECHANICAL VIBRATORS.
- CURING OF ALL CONCRETE TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED OR CURING COMPOUNDS MAY BE USED WHERE COMPATIBLE WITH FLOOR FINISHES. POLYETHYLENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
- CONSTRUCTION SUPPORT PROPPING TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING.
- CONDUITS, PIPES ETC. ONLY TO BE LOCATED AS SHOWN IN THE DRAWINGS OR AS APPROVED BY THE AUTHORISED PERSON.
- ALL FORMWORK AND PROPPING UNDER SUSPENDED CONCRETE WORKS SHALL BE REMOVED BEFORE ANY MASONRY WORK IS BUILT ABOVE.
- CAMBERS UNLESS NOTED OTHERWISE ON THE DRAWINGS AND EXCEPT FOR PRESTRESSED WORK SHALL BE PROVIDED IN BEAMS AND SLABS AS FOLLOWS:-
 - SPANS - 0.002 x SPAN
 - CANTILEVERS - 0.004 x CANTILEVER LENGTH
- CAMBERS SHALL BE CHECKED BEFORE AND AFTER DEPROPPING TO DETERMINE THE DEFLECTION OF THE MEMBERS UNDER THEIR SELF WEIGHT. PROVISION SHALL BE MADE IN THE FORMWORK SYSTEM FOR THE STRUCTURAL ENGINEER TO VARY THE SPECIFIED CAMBERS ON THE BASIS OF THIS INFORMATION. THE TOP SURFACE OF A CAMBERED MEMBER SHALL BE FINISHED TO MAINTAIN THE SPECIFIED DEPTH OF THE MEMBER.
- SHRINKAGE
MAXIMUM DRYING SHRINKAGE STRAIN MEASURED IN ACCORDANCE WITH AS 1012 PART 13 SHALL NOT EXCEED 650 x 10⁻⁶ AT 8 WEEKS. UNDER-TAKE TESTING (IE SHRINKAGE BARS) TO DEMONSTRATE COMPLIANCE WITH THIS REQUIREMENT FOR ALL SUSPENDED CONCRETE ELEMENTS.
- BACKPROPPING FOR FORMWORK TO BE DESIGNED IN ACCORDANCE WITH AS 3610 AND CERTIFIED BY ENGINEER ENGAGED BY THE SUBCONTRACTOR.
- THE STRUCTURAL DESIGN FOR SUSPENDED STRUCTURES ASSUMES:-
 - A MAXIMUM COMBINED VERTICAL DEFLECTION OF FORMWORK AND PROPS OF 2mm UNDER THE WEIGHT OF CONCRETE, REINFORCEMENT AND CONSTRUCTION LIVE LOAD.
 - REMOVAL OF FORMWORK AND PROPS SHALL COMPLY WITH CLAUSE 19.6.2 OF AS3600

FORMWORK

- THE DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND FALSEWORK IS THE RESPONSIBILITY OF THE SUBCONTRACTOR. DESIGN AND CONSTRUCTION OF FORMWORK TO BE IN ACCORDANCE WITH A.S.3610 UNLESS OTHERWISE APPROVED IN WRITING BY THE DESIGNER.

REINFORCEMENT

- CLEAR CONCRETE COVER TO ALL REINFORCEMENT TO BE AS FOLLOWS, UNLESS SHOWN OTHERWISE:

ELEMENT	COVER(mm) NOT EXPOSED TO WEATHER	COVER(mm) EXPOSED TO WEATHER
FLOOR SLAB	30	30
FOOTING BEAMS	50	50

- ALL REINFORCEMENT TO BE FIRMLY SUPPORTED NOT GREATER THAN 1m CENTRES BOTH WAYS. UNLESS NOTED OTHERWISE, BARS TO BE TIED AT ALTERNATE INTERSECTIONS.

REINFORCEMENT SYMBOLS

- N - DENOTES GRADE 500 DEFORMED BARS TO A.S.4671
- Y - DENOTES GRADE 400 Y BARS TO A.S.1302 GRADE Y (TEMPCORE)
- R - DENOTES GRADE 250 R HOT ROLLED PLAIN BARS TO A.S.1302
- SL - DENOTES FABRIC TO AS 4671 (GRADE 500)
- F - DENOTES GRADE 450 F HARD-DRAWN WIRE REINFORCING FABRIC TO A.S.1304
- W - DENOTES GRADE 450 W HARD-DRAWN PLAIN WIRE TO A.S.1303.

17/20-250 means:-

- 17 - (NUMBER OF BARS IN GROUP)
- N - (BAR GRADE AND TYPE)
- 20 - (NOMINAL BAR SIZE IN mm)
- 250 - (SPACING IN mm)

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO A.S.1304.

- REINFORCEMENT BARS TO BE LAID IN LAYERS TAGGED ON PLANS AS FOLLOWS:-

- DENOTES BARS LAID IN BOTTOM LAYER FIRST.
- DENOTES BARS LAID IN BOTTOM LAYER SECOND.
- DENOTES BARS LAID IN TOP LAYER FIRST.
- DENOTES BARS LAID IN TOP LAYER LAST.

- REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

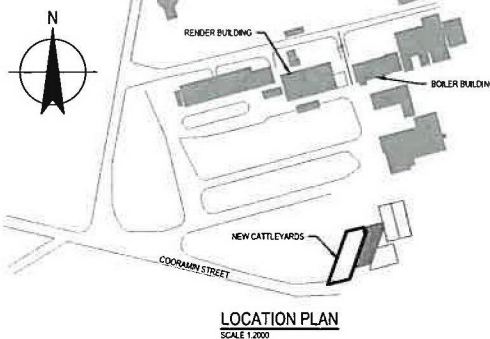
- SPACES IN REINFORCEMENT TO BE MADE ONLY IN POSITION SHOWN, OR OTHERWISE APPROVED IN WRITING BY THE SUPERINTENDENT DESIGNER, HOOKS, LAPS, SPLICES AND BENDS TO BE IN ACCORDANCE WITH AS 3600.

BAR SIZE (mm)	SPLICE LENGTH (mm)
N12	475
N16	625
N20	800
N24	950
N28	1250
N32	1575

- WELDING OF REINFORCEMENT NOT TO BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE DESIGNER.
- JOGGLES TO BARS TO BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS U.N.O.
- FABRIC TO BE LAPPED 2 TRANSVERSE WIRES PLUS 50mm. BUNDLED BARS TO BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.
- AT PENETRATIONS IN SLABS UNLESS OTHERWISE DETAILED REINFORCEMENT, NOT TO BE CUT BUT TO BE GATHERED EQUALLY TO EACH SIDE OF PENETRATION AND EXTRA REINFORCEMENT PROVIDED BETWEEN THE PENETRATIONS AS DIRECTED BY THE SUPERINTENDENT.
- DISTRIBUTION BARS TO MAIN REINFORCEMENT IN SLABS SHALL BE N12 AT 300mm U.N.O.
- UNLESS NOTED OTHERWISE
- NOTIFY AND PROVIDE ACCESS TO THE ELECTRICAL SUBCONTRACTOR TO CONNECT EARTHING

STRUCTURAL STEEL

- ALL WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH A.S.4100 AND A.S.1554.
- UNLESS OTHERWISE NOTED, ALL STEEL TO BE GRADE 300 TO AS3678 (HOLLOW SECTIONS TO BE GRADE C350 TO AS1163), (GRADE C450 TO AS1397 FOR PURLINS & GRITS), (GRADE 250 TO AS3678 FOR PLATES).
- ALL CONNECTION AND STIFFENER PLATES TO BE 10mm THICK U.N.O.
- ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS U.N.O.
- ALL WELDING TO BE SP U.N.O. FROM ENX/ELECTRODES/WS90X(WIRE)
- ALL BUTT WELDS TO BE FULL IS COMPLETED PENETRATION
- ALL FILLET WELDS TO BE CONTINUOUS ALL ROUND BOTH SIDES U.N.O.
- ALL BOLTS TO BE M20 AND NO CONNECTION TO HAVE LESS THAN 4 BOLTS U.N.O.
- ALL BOLTS TO BE HOT DIP GALVANISED GRADE 8.8S U.N.O.
- PURLIN CONNECTIONS TO BE AS PER MANUFACTURERS SPECIFICATION U.N.O.
- ALL HOLDING DOWN BOLTS TO BE HOT DIP GALVANISED GRADE 8.8S U.N.O.
- U.N.O. IN THE SPECIFICATION. STRUCTURAL STEEL WHICH IS PROTECTED FROM WEATHER TO BE ABRASIVE BLAST CLEANED TO CLASS 2.5 TO AS 1027.4. TO BE PRIMERED BY INTERSPEC 7 OR APPROVED EQUIVALENT TO 75µm DFT. ALL OTHER STRUCTURAL STEEL ITEMS TO BE FULLY GALVANISED TO AS 4680 U.N.O. ON THE DRAWINGS, REFER TO ARCHITECTURAL DETAILS FOR TOP COATS.
- SHOP DRAWINGS TO BE SUBMITTED IN TRIPlicate TO THE DESIGNER FOR APPROVAL. FABRICATION NOT TO COMMENCE UNTIL APPROVAL HAS BEEN GIVEN.
- EXAMINATION OF WELDS TO BE (INSPECTION AND TEST RECORDS TO BE SUBMITTED TO THE DESIGNER):-
 - VISUAL SCANNING TO AS1554 SECTION 7 ON 100% OF WELDS;
 - VISUAL EXAMINATION TO A.S.1554 SECTION 7 ON 10% OF GP WELDS AND 20% OF SP WELDS
 - MAGNETIC PARTICLE EXAMINATION TO BE PERFORMED ON 1% OF GP WELDS AND 5% OF SP WELDS AND AS NOTED ON THE DRAWINGS.
 - ULTRASONIC TESTING TO BE PERFORMED ON 2.5% FILLET WELDS AND 10% OF BUTT WELDS AND AS NOTED ON THE DRAWINGS. IF EXAMINATION REVEALS SUBSTANDARD WELDS AND AS NOTED ON THE DRAWINGS, IF EXAMINATION REVEALS SUBSTANDARD WELDS FURTHER EXAMINATION AND/OR REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK TO BE SUPERVISED BY A PERSON EXPERIENCED IN SUCH SUPERVISION TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET. CERTIFICATE OF COMPLIANCE TO BE PROVIDED TO THE AUTHORISED PERSON.
- THE SUBCONTRACTOR TO PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL ELEMENTS WHETHER OR NOT DETAILLED ON THE DRAWINGS.
- SUITABLE EQUIPMENT TO BE USED DURING LOADING, TRANSPORT AND ERECTION OF STEELWORK TO AVOID DAMAGE TO THE STEELWORK FINISHES. STEELWORK STORED ON SITE TO BE PROTECTED AGAINST CORROSION OR DETERIORATION OF PAINTED SURFACES.
- AFTER TIGHTENING EXPOSED FACES OF BOLTS, NUTS AND WASHERS SHALL BE PREPARED AND COATED AS SPECIFIED OR AS FOR ADJACENT STEELWORK.
- THE ENDS OF ALL HOLLOW SECTIONS SHALL BE SEALED.
- ALL COLD FORMED SECTIONS TO CONFORM TO AS 1163 AND SHALL BE ROLL-FORMED FROM ZINC COATED HIGH STRENGTH STEEL STRIP. ZINC-HIGH TENS MINIMUM YIELD STRESS 450 MPa, 350 g/m² MINIMUM COATING MASS UNLESS OTHERWISE NOTED ON DRAWINGS.
- ALL PURLINS, GRITS AND BRIDGING TO BE LYSAGHT OR APPROVED EQUIVALENT.
- ALL CASES OF DAMAGE TO THE PROTECTIVE COATING OF STEELWORK SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER, WITH THE DESIGNER'S APPROVAL. MINOR DAMAGE MAY BE REPAIRED AS FOLLOWS:-
 - MECHANICALLY GRIND SURFACE TO ACHIEVE SMOOTH AND BRIGHT METAL COMPARABLE TO CLASS 2.5; APPLY ZINC RICH PRIMER TO A DRY FILM THICKNESS AS PER SPECIFICATION REQUIREMENTS.
- ABBREVIATIONS
CFW - CONTINUOUS FILLET WELD
DFT - DRY FILM THICKNESS
FSW - FULL PENETRATION BUTT WELD
GP - GENERAL PURPOSE WELD
MDD - MAXIMUM DRY DENSITY
PPBW - PARTIAL PENETRATION BUTT WELD
SP - STRUCTURAL PURPOSE WELD
U.N.O. - UNLESS NOTED OTHERWISE
- THE LOCATION OF ALL EXISTING ELEMENTS SHALL BE SITE MEASURED PRIOR TO THE PREPARATION OF SHOP DRAWINGS.
- ALL REACTIONS SHOWN ARE IN MN U.N.O.
- THE SUBCONTRACTOR SHALL HAVE SAMPLE BOLTS TESTED TO DESTRUCTION IN ACCORDANCE WITH THE SPECIFICATION.



No	Revision	Date	By	Check	Appr.	Desc.
0	ISSUED FOR TENDER	27.04.15	DJW	C.P.	S.F.	

Plot Date: 27 April 2015 - 11:36 AM

Plotted by: Doug Wilkinson

Calc File No: N:\AU Wagga Wagga Projects\23-15492-CADD\Drawings\23-15492-S001.dwg



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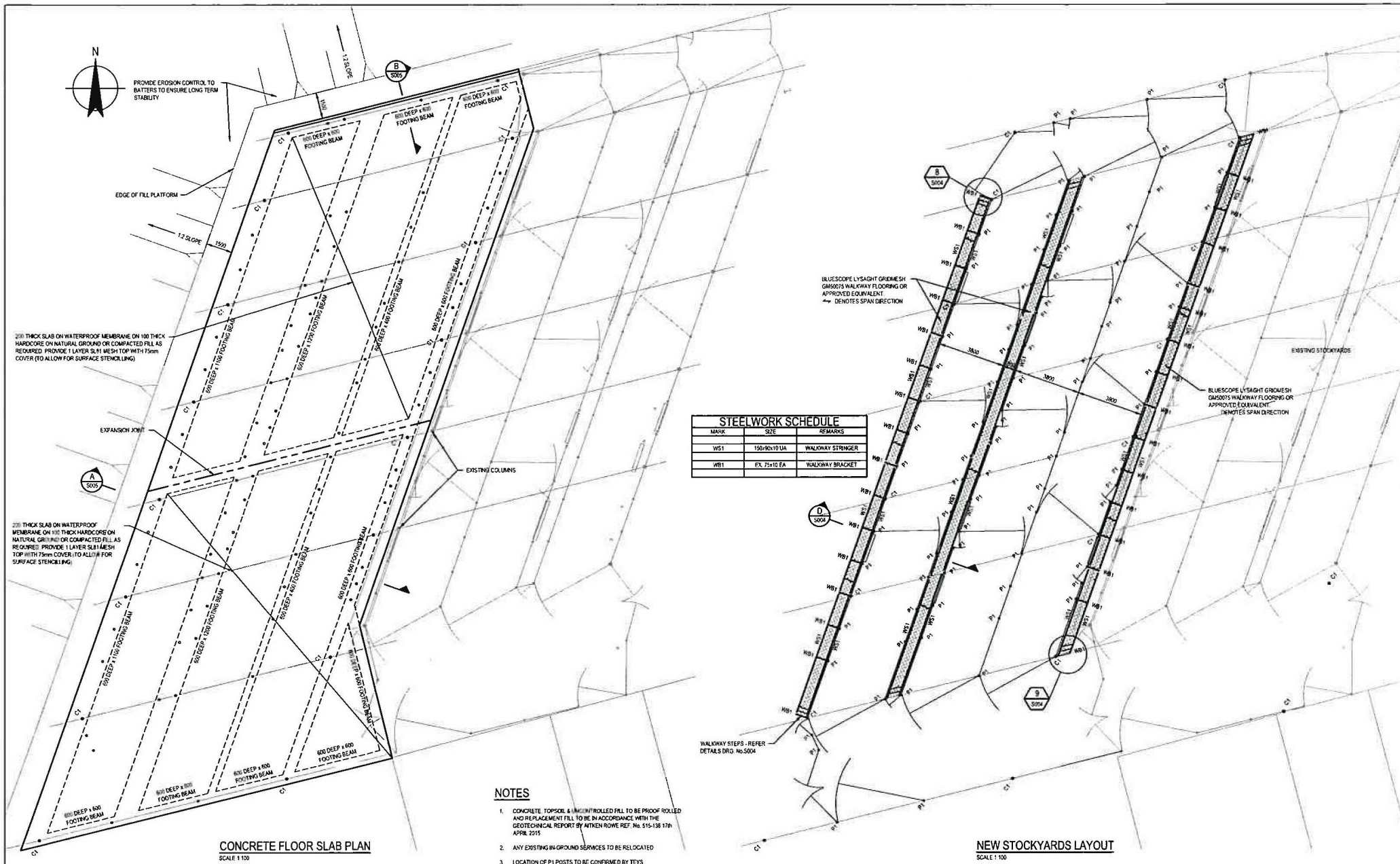
Drawn	D. WILKINSON	Designer	B. REMEDIOS
Drafting	C. REMEDIOS	Design	R. THOMPSON
Check		Check	
Approved	S. FARRELL		
(Project Director)			
Date	22.04.2015		
Scale	N.T.S.		

The Drawing must not be
used for construction unless
signed as Approved

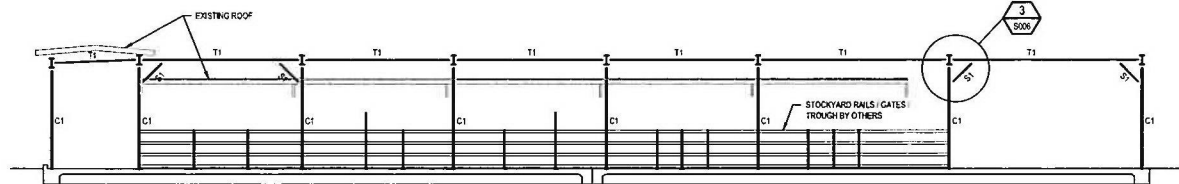
Client
Project
Title
TEYS AUSTRALIA WAGGA WAGGA
BOWEN NSW PLANT
NEW CATTLE YARDS
GENERAL NOTES

Drawing No: 23-15492-S001

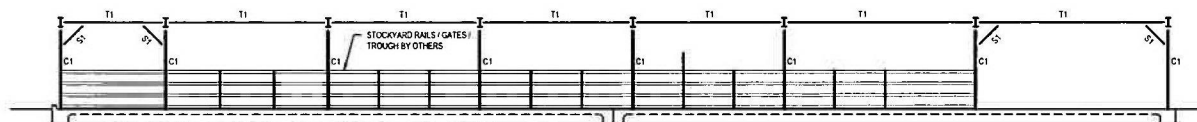
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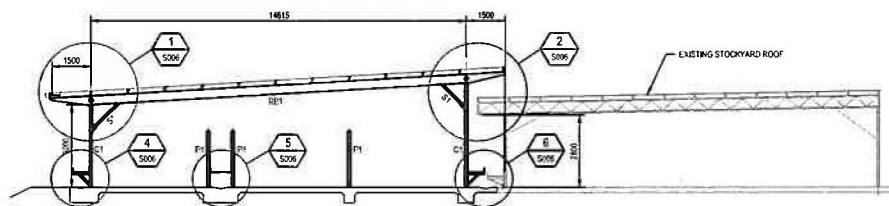
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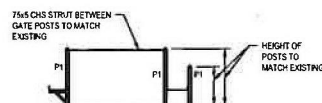
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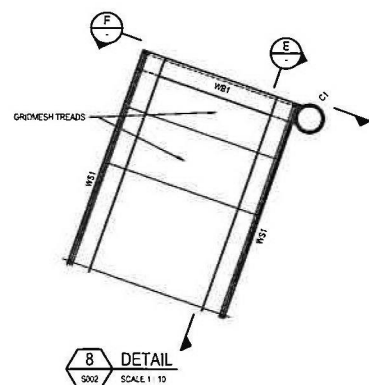
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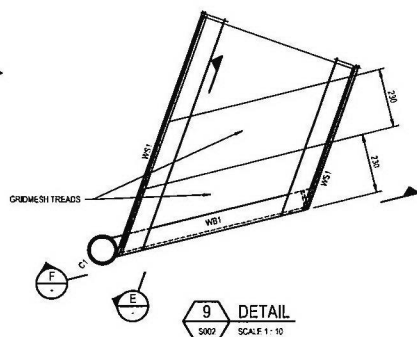
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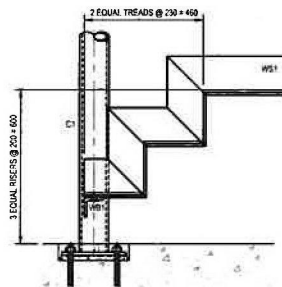
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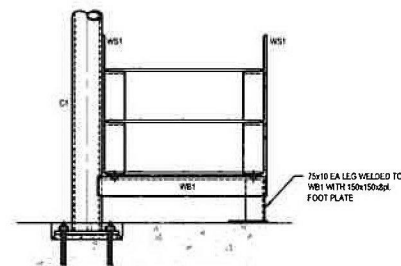
8 DETAIL
S002 SCALE 1:10



9 DETAIL
S002 SCALE 1:10



E SECTION
S002 SCALE 1:10



F SECTION
S002 SCALE 1:10

NOTES:

1. ALL DIMENSIONS TO BE CONFIRMED ON SITE
2. FOR STEELWORK MEMBER SCHEDULE REFER DRG No. S003

No.	Revision	Date	By	Check	Appr.
0	ISSUED FOR TENDER	27.04.15	DJW	CJ*	SP*



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Drawn: D WILKINSON	Designer: B REMEDIOS
Drafting Check: B REMEDIOS*	Design Check: R THOMPSON*
Approved (Project Director): S FARRELL*	Date: 22.04.2015
Scale: 1:100 AT A1	This Drawing must not be used for Construction unless signed as Approved

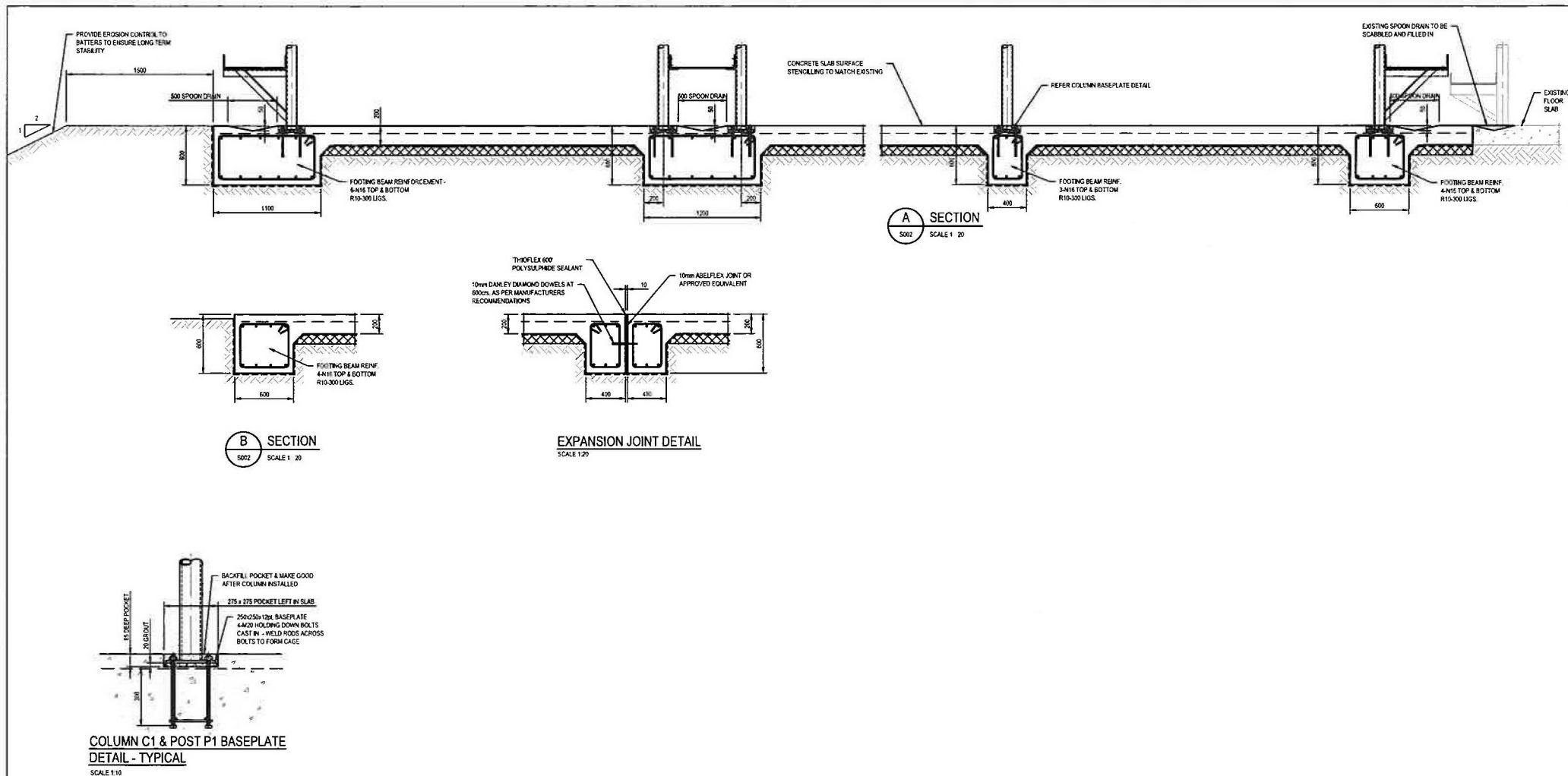
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Project: **NEW CATTLE YARDS STEELWORK ELEVATIONS**

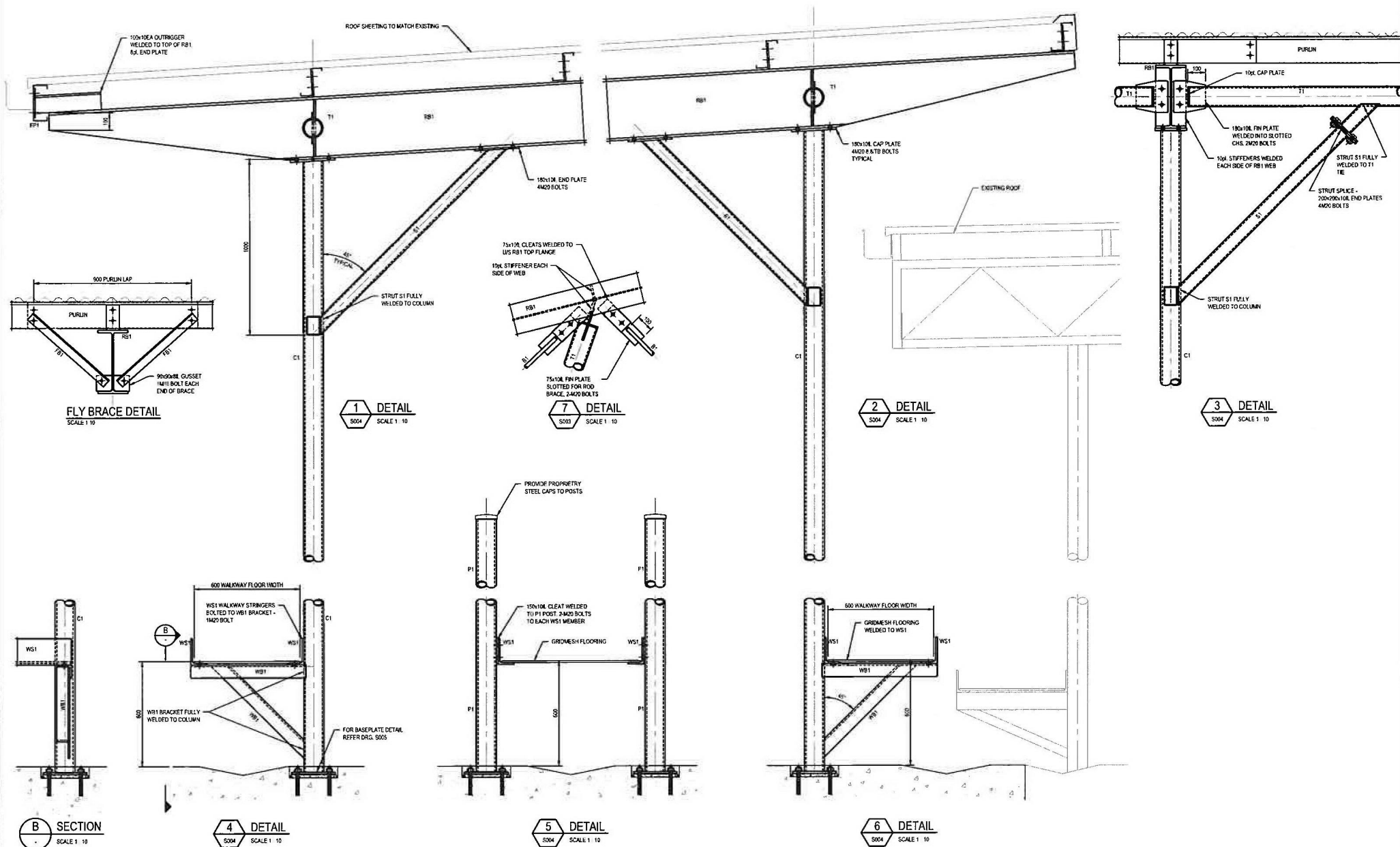
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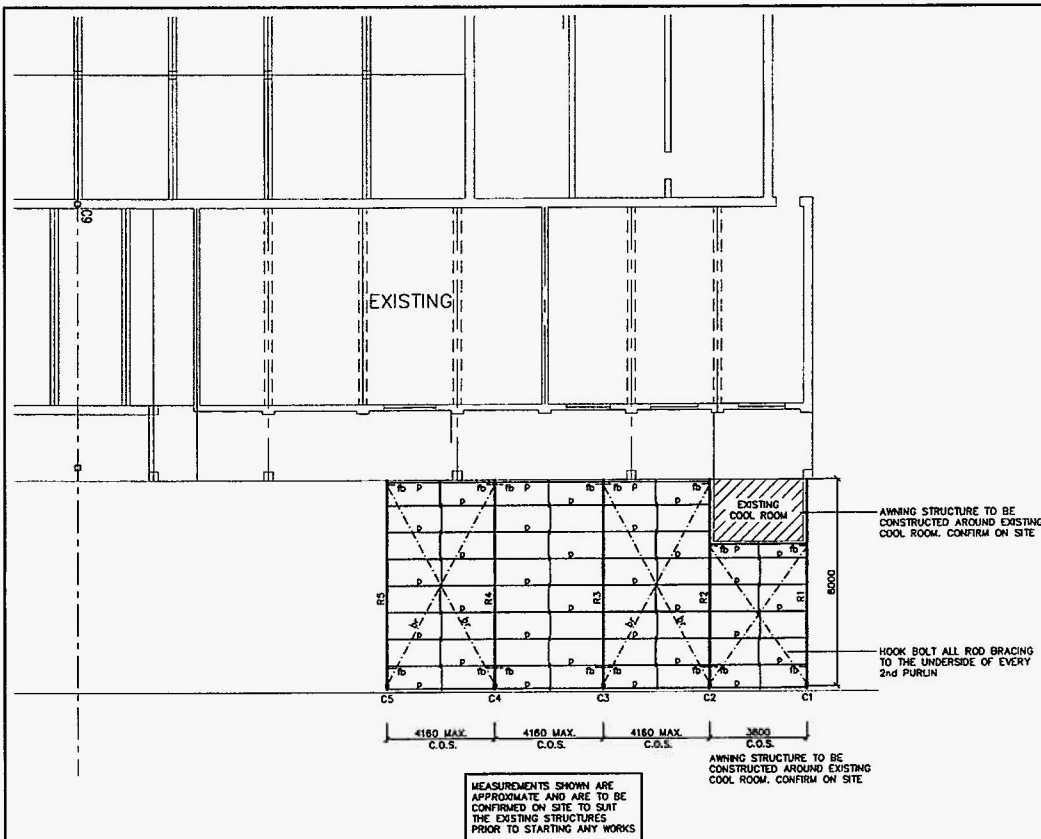
Rev: 0



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0 ISSUED FOR TENDER										D/W		C/P		S/P		27.04.15													
No. Revision Note * indicates signature on or great issue of drawing or last revision of drawing										Drawn		Job Manager		Project Director		Date													
File Date: 27.04.2015, 11:39 AM										Plotted for: Diana Wilkinson		Cust Order: 15415492		Drawing Name: D:\Projects\23\15492\GHD\Drawings\23-15492-S005.dwg															



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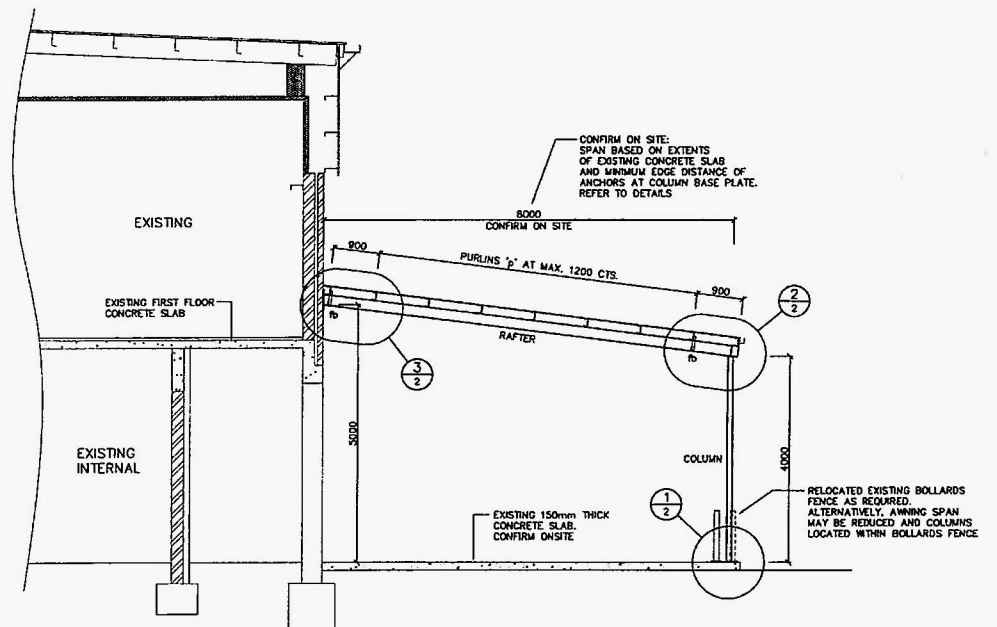


STEEL MARKING PLAN

STEELWORK MEMBER SCHEDULE			
MEMBER	MARK	SIZE	REMARKS
COLUMN	C1 to C5	100 x 100 x 5.0 SHS	-
RAFTER	R1 to R5	200 UB 25	AT 1200 MAX. CTS. (1 ROW BRIDGING)
PURLIN	p	C15012	
BRACING	br	#12mm ROD	
FLY BRACING	fb	50 x 50 x 5 ANGLE	

STEELWORK NOTES:

- STEELWORK TO BE IN ACCORDANCE WITH AS 4100. FABRICATION TO BE CARRIED OUT IN ACCORDANCE WITH SECTION 14 OF AS 4100. ERECTION TO BE CARRIED OUT IN ACCORDANCE WITH SECTION 15 OF AS 4100.
- UNLESS NOTED OTHERWISE, STEEL IS TO BE OF THE FOLLOWING GRADE:
 UB'S, UC'S, PFC'S & LARGE ANGLES TO AS/NZS 3678.1 GRADE 300
 WELDED SECTIONS TO AS/NZS 3678.2 GRADE 300
 HOT ROLLED PLATES, FLOOR PLATES AND SLABS TO AS/NZS 3678 GRADE 250
 HOLLOW SECTIONS TO AS 1163 GRADE C350
 COLD FORMED PURLINS AND GUTS TO AS 1397 GRADE 0450 Z350
- DIMENSIONS AND SETOUTS TO BE OBTAINED FROM ARCHITECTURAL DRAWINGS WHERE NOT INDICATED ON STRUCTURAL DRAWINGS.
- THE FABRICATOR SHALL PROVIDE CLEATS AND DRILL HOLES NECESSARY FOR FIXING OTHER ELEMENTS TO THE STEEL WHETHER OR NOT DETAILED ON THE STRUCTURAL DRAWINGS.
- THE FABRICATION AND ERECTION OF STRUCTURAL STEELWORK IS TO BE SUPERVISED BY A PERSON QUALIFIED IN SUCH SUPERVISION, IN ORDER TO ENSURE ALL DESIGN REQUIREMENTS ARE MET.
- BEAMS AND RAFTERS TO BE INSTALLED WITH NATURAL CAMBER UP.
- MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS. SPLICES ARE PERMITTED ONLY WHERE SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.
- STEELWORK SHALL BE TEMPORARILY BRACED TO STABILISE THE STRUCTURE DURING ERECTION.
- UNLESS NOTED OTHERWISE:
 - BOLTS TO BE M20 8.8/5
 - CONNECTIONS SHALL HAVE A MINIMUM OF 2 BOLTS
 - BOLTS AND WASHERS SHALL BE GALVANISED
 - HOLES SHALL BE 2mm LARGER THAN THE BOLT DIAMETER
 - BOLTS TO BE IN ACCORDANCE WITH AS 1252
- WELDING TO BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1 UNLESS NOTED OTHERWISE:
 - FILLET WELDS SHALL BE 6mm C.F.W. SP TO AS 1554.1
 - BUTT WELDS SHALL BE COMPLETE PENETRATION SP TO AS 1554.1
 RADIOGRAPHIC OR ULTRASONIC EXAMINATION TO BE IN ACCORDANCE WITH AS1554.1, AS2177.1 AND AS2207 AS APPROPRIATE.
- STEELWORK NOT TO BE ENCASED BY CONCRETE SHALL BE PROTECTED FROM CORROSION IN THE FOLLOWING MANNER:
 THE STEELWORK IS TO BE CLEANED TO AN AS 1627 CLASS POWER BRUSH PREPARATION AND GIVEN 1 COAT 'Z15 RUST FIGHTER' TO GIVE A DRY FILM THICKNESS OF 40 MICRONS BEFORE DISPATCH TO SITE.
- STEELWORK TO BE ENCASED IN CONCRETE SHALL BE UNPAINTED. ENCASEMENT CONCRETE SHALL BE GRADE M25 PROVIDING ADEQUATE COVER TO SUIT FIRE RATING OR EXPOSURE CONDITIONS. CONCRETE ENCASEMENT SHALL BE REINFORCED WITH 5mm WIRE TO AS 4617 OR 6mm STRUCTURAL GRADE BARS TO AS 4617 AT 150mm PITCH WHERE NOT INDICATED ON STRUCTURAL DRAWINGS.



TYPICAL AWNING SECTION

A	21/03/16	ISSUE FOR CONSTRUCTION	A.B.
P1	18/03/16	PRELIMINARY FOR REVIEW & DISCUSSION	A.B.
No.	DATE	DETAILS	BY
Project: PROPOSED AWNING & NEW LINTEL TO ALDI EXTENSION DAMPIER STREET, BOMEN			
Sheet Title: STEEL MARKING PLAN & SECTION			
Client: TEYS AUSTRALIA			
Scale: 1:100, 1:50(A1)		Design: S.Chowdhury	
XEROS PICCOLO CONSULTING ENGINEERS		Drawn: A.Barrow	
8 BYE STREET WAGGA WAGGA, NSW, 2650		Date: MARCH 2016	
TELEPHONE (02) 6925 5855		Chk'd: <i>[Signature]</i>	
FAX (02) 6925 5855		160116-1 A	
EMAIL: WAGGA@XEROSPICCOLO.COM.AU		2	