福存洋灰与柱有限公司
FJ CONCRETE & PILES SDN. BHD.

Company No: 971205-D

Manufacturer & Supplier of quality ~ ***Precast Reinforced Concrete Square Piles***
~ ***Ready Mixed Concrete***

Registered Addr:
Lot 3632 Block 26, Kemena Land District, Kidurong Industrial Estate, Jalan Tanjung Kidurong, P.O.Box 2202, 97011 Bintulu, Sarawak, Malaysia.
Tel: 086-253 227 Fax: 086-253 236 Email: fjconcretepiles@gmail.com

Casting Yard:
Lot 1318 Block 20, Market Garden, Jalan Bintulu-Miri Coastal Highway, 97011 Bintulu, Sarawak, Malaysia.

Batching Plant:
Lot 1300 Block 20, Market Garden, Jalan Bintulu-Miri Coastal Highway, 97011 Bintulu, Sarawak, Malaysia.

PRODUCT GUIDE

MS SIRIM Certified to: MS1314: Part 3: 2004 Certification No. PC002535

MS SIRIM Certified to: MS1314: Part 6: 2004 Certification No. PC002928

CIDB MALAYSIA PERAKUAN PEMATUHAN NO. PENDAFTARAN: 1170201SR0164

JAS-ANZ ACS IAF CERTIFIED TO ISO 9001:2008 CERTIFICATION NO.: ACSMA0239-01

SURUHANJAYA SYARIKAT MALAYSIA
COMPANIES COMMISSION OF MALAYSIA

BORANG 13

AKTA SYARIKAT 1965 [Seksyen 23(2)]

No. Syarikat – MyCoID

971205	D

PERAKUAN PEMERBADANAN ATAS PERTUKARAN NAMA SYARIKAT

Dengan ini diperakui bahawa

FOJOHN RC PILES SDN. BHD.

yang telah diperbadankan di bawah Akta Syarikat 1965, pada 09 haribulan Disember 2011, sebagai sebuah syarikat persendirian, pada 26 haribulan September 2013 telah menukar namanya kepada

FJ CONCRETE & PILES SDN. BHD.

dan bahawa syarikat ini adalah sebuah syarikat persendirian dan adalah sebuah syarikat berhad menurut syer.

Diberi di bawah tandatangan dan meterai saya di Kuching pada 26 haribulan September 2013.

MOHD NAIM DARUWISH
PENDAFTAR SYARIKAT
MALAYSIA

UserID : abrazak Date : 26/09/2013 04:21:32 PM

NO. SIRI: SSM 5402188

FJ CONCRETE & PILES SDN BHD (971205-D)

PROJECT REFERENCES

Project:
Projek Jalan Akses Awam dari Sangan ke Kapit Melalui Kawasan Perlombongan Arang Batu Nanga Merit, Bahagian Kapit, Sarawak.
(Pakej A – Dari Sangan ke Sungai Anap)
Section 1A: From KM0 to KM18.2

Contractor: Trans Resources Corporation Sdn Bhd

Project:
Proposed Petrol Filling Station on Sublot 4, Part of Lot 3144, Block 26, Kemena Land District at Phase 2 (KINDA II) Kidurong Industrial Area At Tanjung Kidurong, Bintulu.

Contractor: Tenaplex Sdn. Bhd / JR Engineering

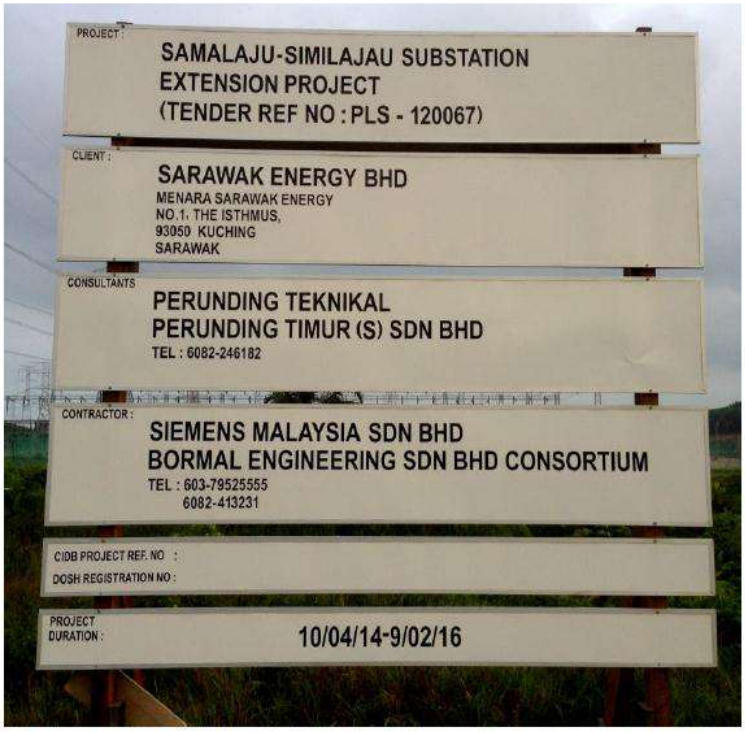
FJ CONCRETE & PILES SDN BHD (971205-D)

PROJECT REFERENCES

Project :
Sakura Ferroalloys Smelting Plant

Contractor :
Metix Malaysia Sdn. Bhd.

C & S Subcontractor:
Sinohydro Corporation (M) Sdn. Bhd.



Project :
Samalaju-Similajau Substation Extension Project.

Contractor :
Bormal Engineering Sdn. Bhd.

PROJECT REFERENCES

KONSORTIUM MALAYSIA
Perunding Kejuruteraan Awam Dan Struktur

PERUNDING ANGGUN TEGA SDN. BHD.
(Company No. 561924-V)
Perunding Kejuruteraan Awam, Struktur, Mekanikal Dan Elektrikal

25, Kenyalang Park Shopping Centre, P.O.Box 952, 93720 Kuching, Sarawak, Malaysia
Tel: 082-333622 Fax: 082-483886 Email: konmal1971@yahoo.com.my

(JOINT VENTURE C&S CONSULTANTS FOR PROJECT NO. 5358)

SANGAN

Project/No SANGAN 0153
Serial No:

Bil Kami: KM/0810 CR (213)

SCANNED 14/8/13

Tarikh: 31 July 2013

The contents hereof was faxed on 31 JUL 2013

Trans Resources Corporation Sdn Bhd
Lot 3626, Block 16,
KCLD Taman Timberland,
Lorong Rock 2, 93200 Kuching, Sarawak.
Fax: 082-243898/421998
Attn: Mr. Alan Hsu

Dear Sir,

MASTER COPY

CONTRACT NO. PWD/HO/B001/2013
PROJEK BARU DI BAWAH SARAWAK CORRIDOR OF RENEWABLE ENERGY (SCORE) DEVELOPMENT - PROJEK JALAN AKSES AWAM DARI SANGAN KE KAPIT MELALUI KAWASAN PERLOMBONGAN ARANG BATU NANGA MERIT, BAHAGIAN KAPIT, SARAWAK (PACKAGE A: DARI SANGAN KE SUNGAI ANAP) - Section 1A: From KM 0 to KM 18.2
- Proposed Precast Reinforced Concrete Square Piles - Pile Shoes

We refer to your letters ref. TRC(K)/SANGAN/2013/080 & 081 dated 23 July 2013.

We have no objection to your proposed details for the x-pointed pile shoe for the RC piles from M/s CMS Concrete Products Sdn Bhd and M/s Fojohn RC Piles Sdn Bhd.

Thank you.

RECEIVED
04 SEP 2013
TRANS RESOURCES CORPORATION SDN. BHD.

Yours faithfully,
KONSORTIUM MALAYSIA

(Ir. Hj. Alhadi Ibrahim)

c.c. Director of Public Works Sarawak
Public Works Department Sarawak (Fax: 082-411313)
Attn: Assistant Director (Road)

The Regional Manager
JKR Northern Regional Office (Fax: 085-442229)
Attn: En. Hj. Talib B. Bujang Masli/
Mr. Woon Tai Kuan

Perunding Anggun Tega Sdn Bhd (Fax: 082-484108)
Attn: Ir. Mohd. Marzuki Bin Bujang

Resident Engineer, Site Office
Attn: En. Kelang Jongga

MASTER COPY
FAX/MAIL: 13/3026

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INTRODUCTION

FJ Concrete Piles are high strength precast reinforced concrete segmental piles of square sections designed to meet the foundation needs of building and engineering structures.

DESIGN

FJ Concrete Piles are designed to resist all stresses arising from lifting , handling, transporting and driving and to support the required loading after installation.

MANUFACTURING

Casting

FJ Concrete Piles are casted in specially designed steel moulds to ensure proper alignment. Each end of the mould is provided with special device to ensure the pile joints are square to the longitudinal axis of the pile.

Piles are cast in a continuous operation with compaction of concrete achieved using vibrator.

Piles are lifted from the mould after the concrete has reached the required strength. With the use of high early strength concrete ,piles can be lifted within 24 hours.

Curing

All piles are properly cured either by membrane curing compound or by covering with plastic sheets.

Stacking

Piles are properly stacked with supports located at the lifting points to avoid overstressing.

INSTALLATION

FJ Concrete Piles can be driven by drop hammer or diesel hammer. The choice of hammer weight and its drop , however, depends on the pile type, its length, the required working load and the actual soil conditions.

NOMINAL SIZES AND LENGTHS

The nominal sizes and lengths that available are as in following tables.

Table 1. Sizes and lengths available for MS1314 : Part 6 : 2004 Standard

Size (mm)	Pile Length (m)	
	Class RCS-1	
	3m	6m
150 x 150	✓	✓
175 x 175	✓	✓

Table 2. Sizes and lengths available for MS1314 : Part 3 : 2004 Standard

Size (mm)	Pile Length (m)											
	Class S				Class J				Class M			
	3m	6m	9m	12m	3m	6m	9m	12m	3m	6m	9m	12m
200 x 200	✓	✓			✓	✓			✓	✓		
250 x 250	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
300 x 300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

SPECIFICATIONS

1. Malaysian Standards (MS 1314)

FJ Concrete Piles are designed and manufactured in accordance with **MS 1314 : Part 3: 2004 Standard Class S, J and M** and **MS 1314 : Part 6 : 2004 Standard** for small piles class RCS-1.

2. Piles Reinforcement

High Yield main reinforcement bars conforms to MS 146 : 2006 or equivalent.
Hard drawn spiral links conform to BS 4482 or equivalent.

3. Concrete

The characteristic strength at 28 days to be 45 N/mm2.
Cement conforms to MS 522 : 1989 (Ordinary Portland Cement).
Aggregate conforms to BS 882 : 1983.

4. Piles Joint

The joint comprising of end plates, anchorage bars, skirting and a centering device is designed to be as strong as the pile shaft in compression, tension and bending.
Jointing is by welding the two end plates all round.
The base plate conforms to BS EN10025 (GRADE S275) or equivalent.

5. Lifting Points

To facilitate lifting, two lifting points are provided at a distance of 0.20 times the pile length from the ends of the piles.

6. Axial Working Load

Maximum Structural Working loads represent the structural strength of the piles and the Maximum Axial Woking Load recommended should not be exceeded in accordance with BS 8004. The actual installed load capacities of piles depend on soil condition for determining the safe working load.

SPECIFICATIONS

M.S. 1314: PART 6: 2004 STANDARD FOR CLASS RCS-1

PILE REINFORCEMENT DETAILS								
REINFORCEMENT SCHEDULE			SPIRAL STIRRUPS (HARD DRAWN WIRE)					
CLASS RCS	Pile Size (mm x mm)	Main Reinforcement (nos/Dia.)	Lateral Reinforcment					
			Wire Size (mm)	X (mm)	Y (mm)	P1 (mm)	P2 (mm)	P3 (mm)
1	150 x 150	4T10	4.5	450	450	44	44-75	75
1	175 x 175	4T10	4.5	525	525	41	41-87	87

STRUCTURAL DETAILS AND CAPACITY (FOR CLASS RCS-1)								
Pile Size (mm x mm)	Dimension			Concrete Grade (N/mm^2)	Cover (mm)	*Recommended Axial Working t	Nominal Weight (t/m)	Recommended Hammer Weight t
	Height (mm)	Top (mm)	Bottom (mm)					
150 x 150	150	155	145	45	30-40	25	0.054	0.8 - 1.0
175 x 175	175	180	170	45	30-40	35	0.074	1.0 - 1.5

* These recommended axial working loads are only the structural capacity of piles.
The actual working capacities are dependent on soil conditions and other considerations but shall not exceed the recommended axial working load.

PILE JOINT DETAILS (FOR CLASS RCS-1)										
PILE SIZE (mm x mm)	COVER (mm)	Base Plate		Anchorage Bar	Centering Bar (mm)			MS Tube	Skirting	Plain Shoe
		Thickness (mm)	Width (mm)	Dia. x Length x Position (mm)	Dia.	Length		Dia. X Length (mm)	Thickness X Height (mm)	Thickness (mm)
						External	Internal			
150 x 150	30-40	6	145	4T10 x 350 x 50	12	75	75	16 x 95	1.5 x 50	3
175 x 175	30-40	6	170	4T10 x 350 x 50	12	75	75	16 x 95	1.5 x 50	3

NOTE:

1. The above specification may change without prior notice due to our continuing products development.
2. Piles of other sizes and specification are also available upon customers' request.
3. Please refer to Appendix 1 - 150mm x 150mm ;
   Appendix 2 - 175mm x 175mm

SPECIFICATIONS

M.S. 1314: PART 3: 2004 STANDARD CLASS S

PILE REINFORCEMENT DETAILS							
REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS (HARD DRAWN WIRE)					
Pile Size (mm x mm)	Main Reinforcement (nos/Dia.)	Lateral Reinforcment					
		Wire Size (mm)	X (mm)	Y (mm)	P1 (mm)	P2 (mm)	P3 (mm)
200 x 200	4T12	4.5	600	600	2X76	76 - 100	100
250 X 250	8T10	6.0	750	750	53	53 - 125	125
300 X 300	4T16	6.0	900	900	47	47 - 142	142

STRUCTURAL DETAILS AND CAPACITY								
Pile Size (mm x mm)	Dimension			Concrete Grade (N/mm^2)	Cover (mm)	*Recommended Axial Working t	Nominal Weight (t/m)	Recommended Hammer Weight t
	Height (mm)	Top (mm)	Bottom (mm)					
200 x 200	200	205	194	45	30-40	45	0.096	1.0 - 1.8
250 x 250	250	255	244	45	40-50	70	0.150	1.2 - 2.0
300 X 300	300	305	294	45	40-50	100	0.216	2.0 - 2.5

* These recommended axial working loads are only the structural capacity of piles.
The actual working capacities are dependent on soil conditions and other considerations but shall not exceed the recommended axial working load.

PILE JOINT DETAILS										
PILE SIZE (mm x mm)	COVER (mm)	Base Plate		Anchorage Bar	Centering Bar (mm)			MS Tube	Skirting	Plain Shoe
		Thickness (mm)	Width (mm)	Dia. x Length x Position (mm)	Dia.	Length		Dia. x Length (mm)	Thickness x Height (mm)	Thickness (mm)
						External	Internal			
200 X 200	30-40	9	194	4T12 x 384 x 55	16	75	75	20 x 95	1.5 x 50	4
250 X 250	40-50	9	244	4T16 x 512 x 65	16	75	75	20 x 95	1.5 x 50	4
300 X 300	40-50	9	294	4T16 X 512 X 75	20	75	75	25 x 95	1.5 x 50	4

NOTE:

1. The above specification may change without prior notice due to our continuing products development.
2. Piles of other sizes and specification are also available upon customers' request.
3. Please refer to Appendix 3 - 200mm x 200mm Class S ;
   Appendix 4 - 250mm x 250mm Class S;
   Appendix 5 - 300mm x 300mm Class S

SPECIFICATIONS

M.S. 1314: PART 3: 2004 STANDARD CLASS J

PILE REINFORCEMENT DETAILS							
REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS (HARD DRAWN WIRE)					
Pile Size (mm x mm)	Main Reinforcement (nos/Dia.)	Lateral Reinforcment					
		Wire Size (mm)	X (mm)	Y (mm)	P1 (mm)	P2 (mm)	P3 (mm)
200 x 200	4T12	6.0	600	600	2X70	70 - 100	100
250 X 250	8T10	6.0	750	750	2x63	63 - 80	80
300 X 300	8T12	6.0	900	900	2x56	56 - 71	71

STRUCTURAL DETAILS AND CAPACITY								
Pile Size (mm x mm)	Dimension			Concrete Grade (N/mm^2)	Cover (mm)	*Recommended Axial Working t	Nominal Weight (t/m)	Recommended Hammer Weight t
	Height (mm)	Top (mm)	Bottom (mm)					
200 x 200	200	205	194	45	30-40	45	0.096	1.0 - 1.8
250 x 250	250	255	244	45	40-50	70	0.150	1.2 - 2.0
300 X 300	300	305	294	45	40-50	105	0.216	2.0 - 2.5

* These recommended axial working loads are only the structural capacity of piles.
The actual working capacities are dependent on soil conditions and other considerations but shall not exceed the recommended axial working load.

PILE JOINT DETAILS										
PILE SIZE (mm x mm)	COVER (mm)	Base Plate		Anchorage Bar	Centering Bar (mm)			MS Tube	Skirting	Plain Shoe
		Thickness (mm)	Width (mm)	Dia. x Length x Position (mm)	Dia.	Length		Dia. x Length (mm)	Thickness x Height (mm)	Thickness (mm)
						External	Internal			
200 X 200	30-40	12	194	4T12 x 384 x 55	16	100	200	20 x 120	1.5 x 50	4
250 X 250	40-50	12	244	4T16 x 512 x 65	16	100	200	20 x 120	1.5 x 50	4
300 X 300	40-50	15	294	4T20 X 640 X 75	20	100	200	25 x 120	1.5 x 50	4

NOTE:

1. The above specification may change without prior notice due to our continuing products development.
2. Piles of other sizes and specification are also available upon customers' request.
3. Please refer to Appendix 6 - 200mm x 200mm Class J ;
   Appendix 7 - 250mm x 250mm Class J ;
   Appendix 8 - 300mm x 300mm Class J

SPECIFICATIONS

M.S. 1314: PART 3: 2004 STANDARD CLASS M

PILE REINFORCEMENT DETAILS							
REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS (HARD DRAWN WIRE)					
Pile Size (mm x mm)	Main Reinforcement (nos/Dia.)	Lateral Reinforcment					
		Wire Size (mm)	X (mm)	Y (mm)	P1 (mm)	P2 (mm)	P3 (mm)
200 x 200	8T10	4.5	600	600	2X45	45 - 58	58
250 X 250	4T16	6.0	750	750	2x63	63 - 80	80
300 X 300	4T20	6.0	900	900	2x56	56 - 71	71

STRUCTURAL DETAILS AND CAPACITY								
Pile Size (mm x mm)	Dimension			Concrete Grade (N/mm^2)	Cover (mm)	*Recommended Axial Working t	Nominal Weight (t/m)	Recommended Hammer Weight t
	Height (mm)	Top (mm)	Bottom (mm)					
200 x 200	200	205	194	45	30-40	45	0.096	1.0 - 1.8
250 x 250	250	255	244	45	40-50	75	0.150	1.2 - 2.0
300 X 300	300	305	294	45	40-50	105	0.216	2.0 - 2.5

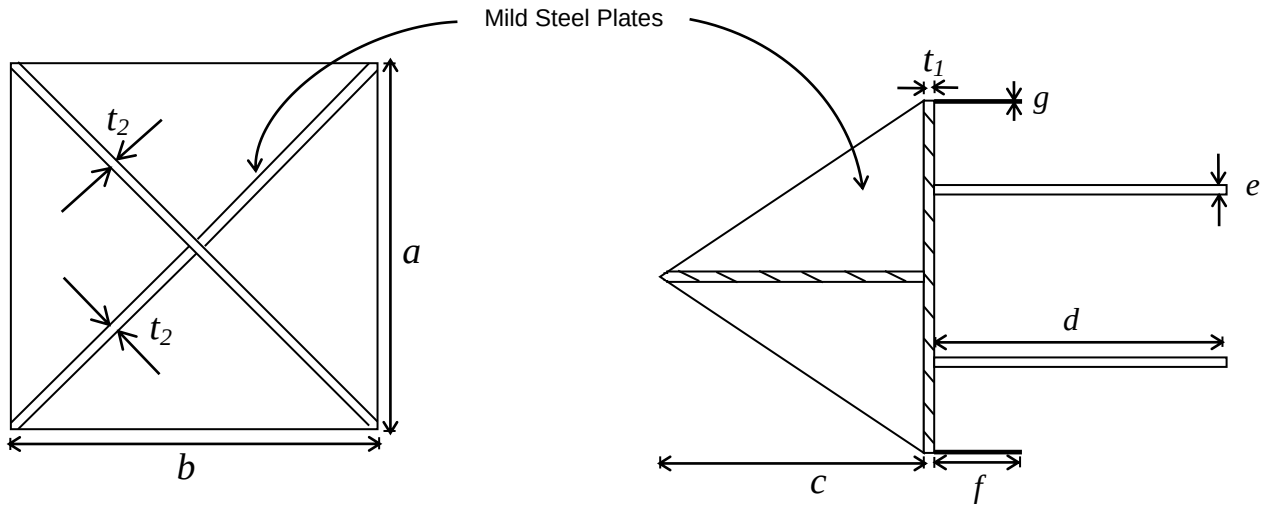
* These recommended axial working loads are only the structural capacity of piles.
The actual working capacities are dependent on soil conditions and other considerations but shall not exceed the recommended axial working load.

PILE JOINT DETAILS										
PILE SIZE (mm x mm)	COVER (mm)	Base Plate		Anchorage Bar	Centering Bar (mm)			MS Tube	Skirting	Plain Shoe
		Thickness (mm)	Width (mm)	Dia. x Length x Position (mm)	Dia.	Length		Dia. x Length (mm)	Thickness x Height (mm)	Thickness (mm)
						External	Internal			
200 X 200	30-40	12	194	4T16 x 320 x 55	16	100	200	20 x 120	1.5 x 50	4
250 X 250	40-50	12	244	4T16 x 512 x 65	16	100	200	20 x 120	1.5 x 50	4
300 X 300	40-50	15	294	4T20 x 640 x 75	20	100	200	25 x 120	1.5 x 50	4

NOTE:

1. The above specification may change without prior notice due to our continuing products development.
2. Piles of other sizes and specification are also available upon customers' request.
3. Please refer to Appendix 9 - 200mm x 300mm Class M ;
   Appendix 10 - 250mm x 250mm Class M ;
   Appendix 11 - 300mm x 300mm Class M

PILE SHOE SPECIFICATIONS



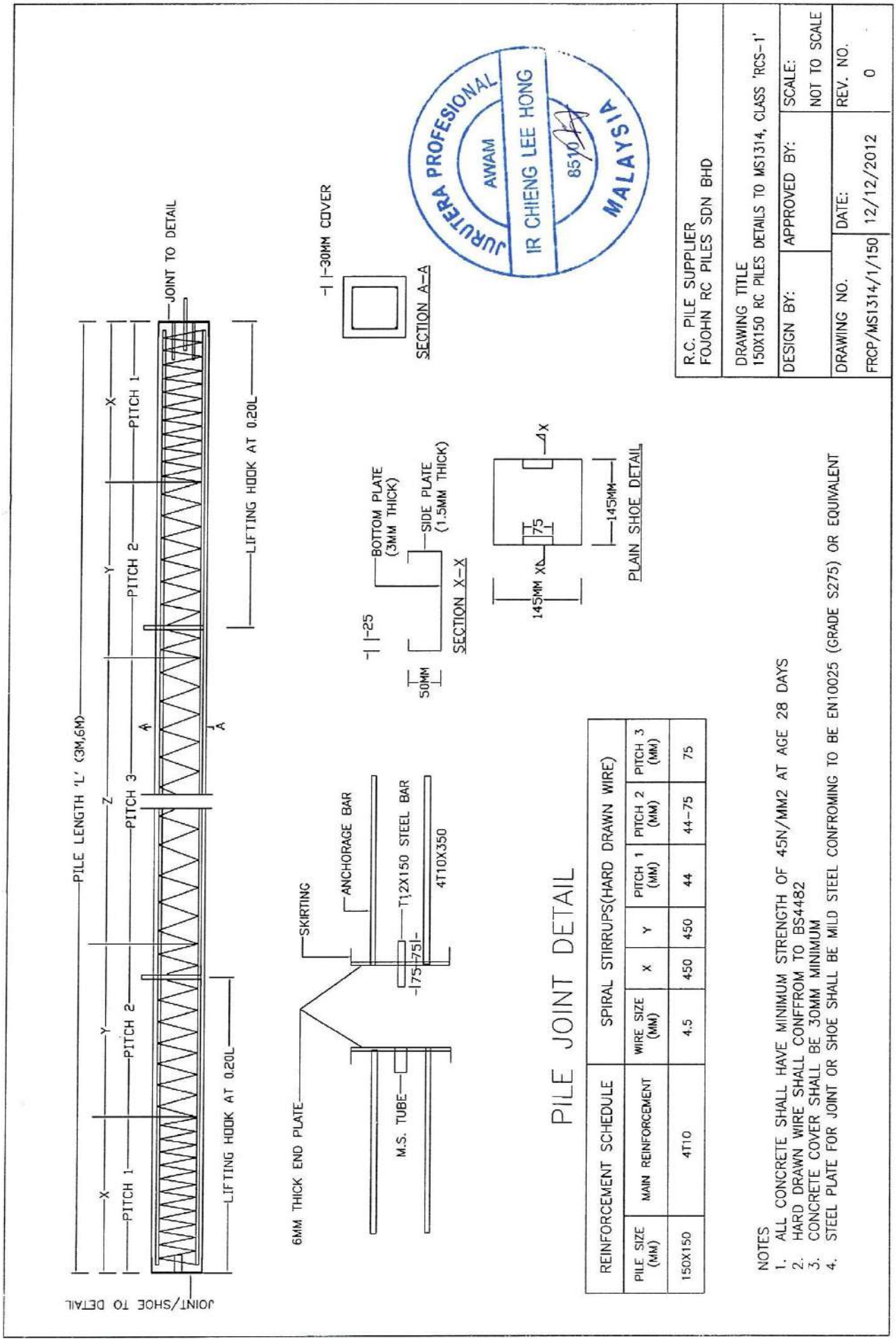
Standard X-Shoe

STANDARD MS1314	PILE SIZE (mm)	BASE PLATE			X-SHOE		ANCHORAGE BAR		SKIRTING	
		a (mm)	b (mm)	t_1 (mm)	c (mm)	t_2 (mm)	d (mm)	e (mm)	f (mm)	g (mm)
RCS-1	150 x 150	145	145	6	75	6	350	T10	50	1.5
	175 x 175	170	170	6	88	6	350	T10	50	1.5
CLASS S	200 x 200	194	194	9	100	9	384	T12	50	1.5
	250 x 250	244	244	9	125	9	512	T16	50	1.5
	300 x 300	294	294	9	150	9	512	T16	50	1.5
CLASS J	200 x 200	194	194	12	100	12	384	T12	50	1.5
	250 x 250	244	244	12	125	12	512	T16	50	1.5
	300 x 300	294	294	12	150	12	640	T20	50	1.5
CLASS M	200 x 200	194	194	12	100	12	320	T16	50	1.5
	250 x 250	244	244	12	125	12	512	T16	50	1.5
	300 x 300	294	294	15	150	15	640	T20	50	1.5

Notes:

* The base plate and x-shoe conforms to BS EN10025 (GRADE S275) or equivalent.
* c = ½ of pile depth (a)

APPENDIX 1 :



PILE JOINT DETAIL

REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
150X150	4T10	4.5	450	450	44	44-75	75

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 30MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT

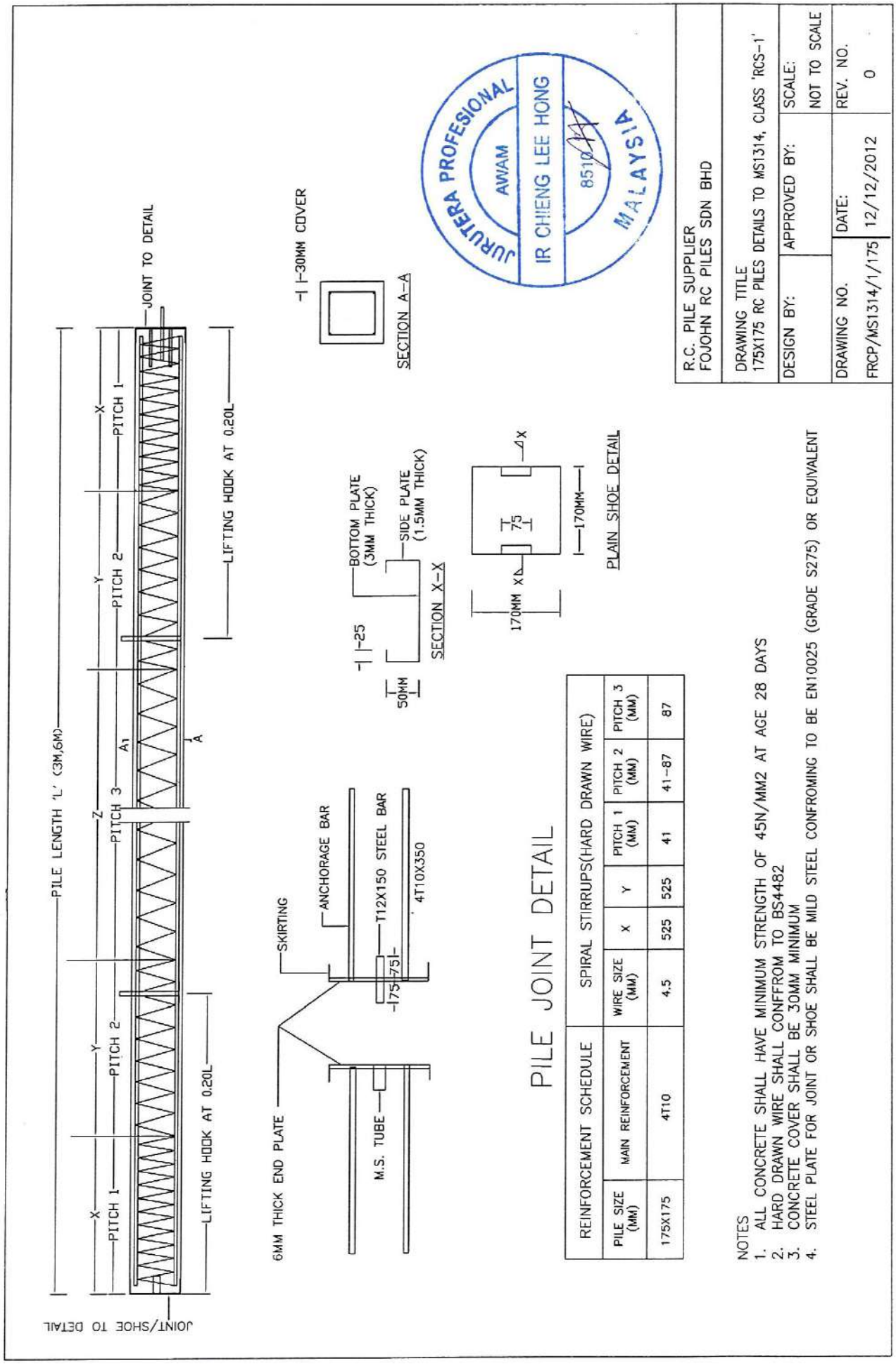
JURUTERA PROFESIONAL AWAM IR CHIENG LEE HONG 8510 MALAYSIA

R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD

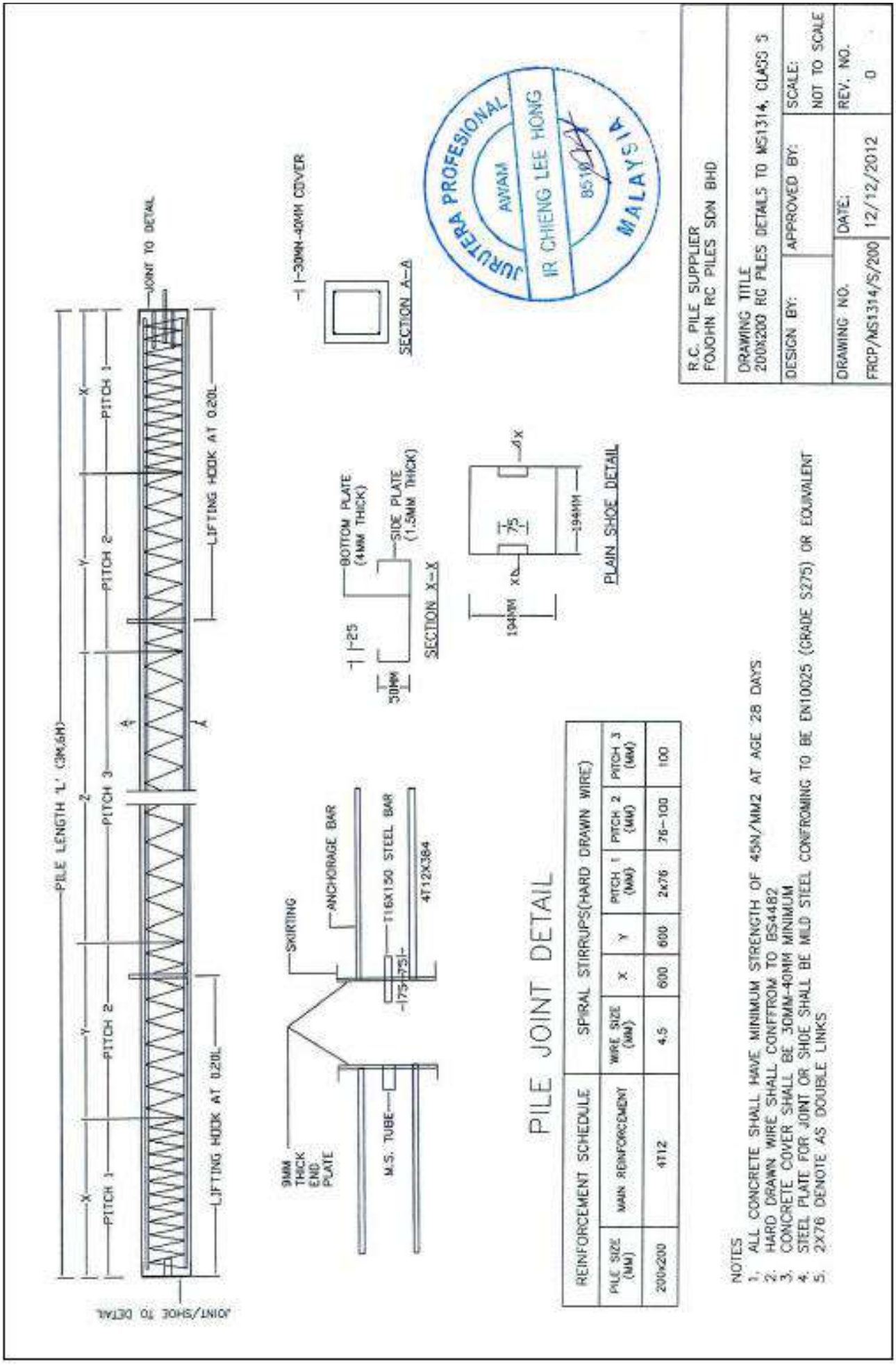
DRAWING TITLE
150X150 RC PILES DETAILS TO MS1314, CLASS 'RCS-1'

DESIGN BY:	APPROVED BY:	SCALE: NOT TO SCALE
DRAWING NO. FRCP/MS1314/1/150	DATE: 12/12/2012	REV. NO. 0

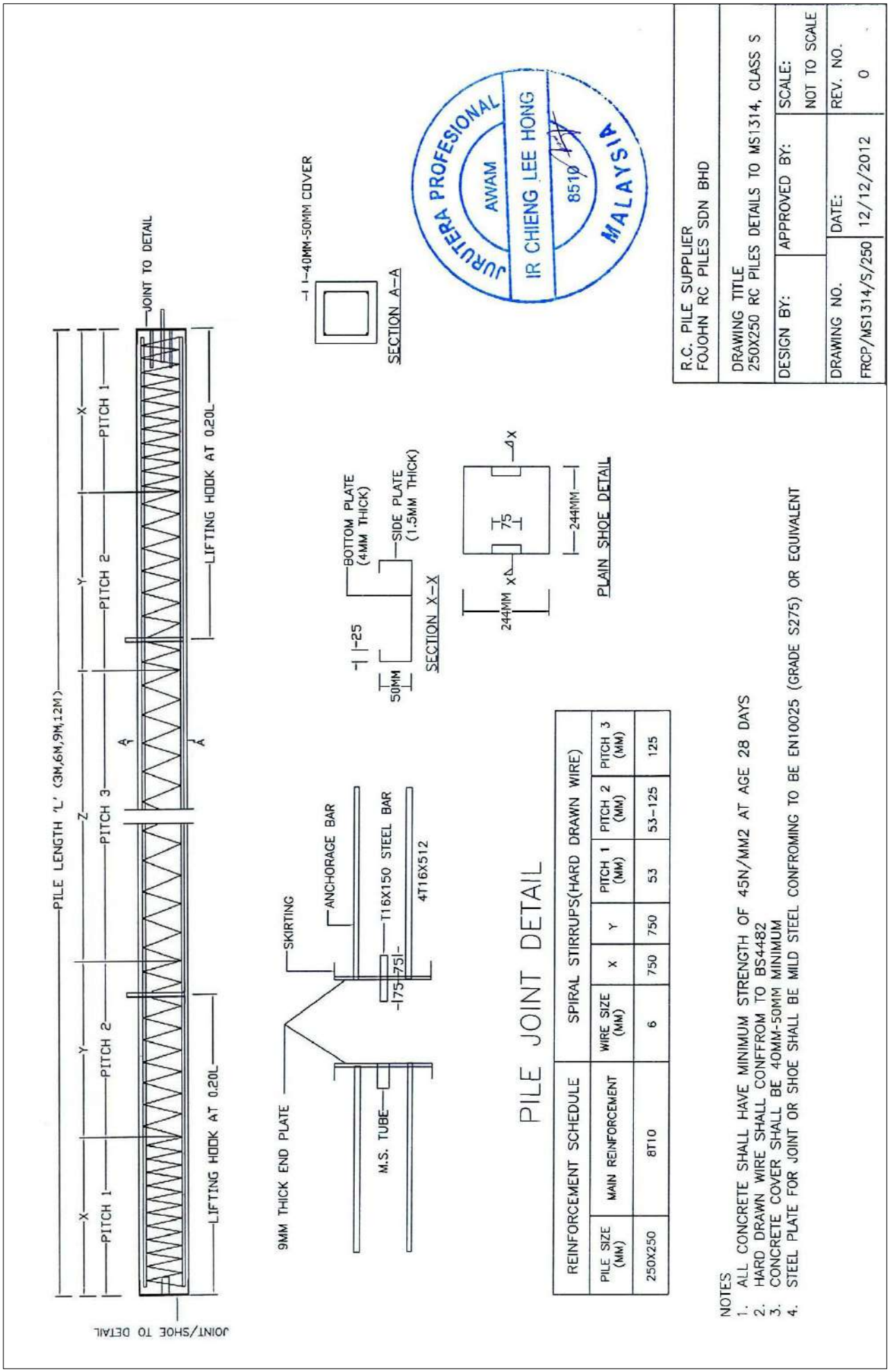
APPENDIX 2 :


JOINT/SHOE TO DETAIL
PILE LENGTH 'L' (3M,6M)
LIFTING HOOK AT 0.20L
PITCH 1
PITCH 2
PITCH 3
JOINT TO DETAIL
LIFTING HOOK AT 0.20L
6MM THICK END PLATE
M.S. TUBE
SKIRTING
ANCHORAGE BAR
T12X150 STEEL BAR
4T10X350
175
75
50MM
25
BOTTOM PLATE (3MM THICK)
SIDE PLATE (1.5MM THICK)
SECTION X-X
30MM COVER
SECTION A-A
170MM
4X
75
PLAIN SHOE DETAIL
PILE JOINT DETAIL
REINFORCEMENT SCHEDULE
SPIRAL STIRRUPS(HARD DRAWN WIRE)
PILE SIZE (MM)
MAIN REINFORCEMENT
WIRE SIZE (MM)
X
Y
PITCH 1 (MM)
PITCH 2 (MM)
PITCH 3 (MM)
175X175
4T10
4.5
525
525
41
41-87
87
NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 30MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
JURUTERA PROFESIONAL
AWAM
IR CHIENG LEE HONG
8510
MALAYSIA
R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD
DRAWING TITLE
175X175 RC PILES DETAILS TO MS1314, CLASS 'RCS-1'
DESIGN BY:
APPROVED BY:
SCALE:
NOT TO SCALE
DRAWING NO.
FRCP/MS1314/1/175
DATE:
12/12/2012
REV. NO.
0

APPENDIX 3 :


PILE LENGTH 'L' (3M,6M)
JOINT TO DETAIL
PITCH 1
PITCH 2
PITCH 3
LIFTING HOOK AT 0.20L
JOINT/SHOE TO DETAIL
SECTION A-A
SECTION X-X
PLAIN SHOE DETAIL
SKIRTING
ANCHORAGE BAR
T16X150 STEEL BAR
4T12X384
9MM THICK END PLATE
M.S. TUBE
BOTTOM PLATE (4MM THICK)
SIDE PLATE (1.5MM THICK)
30MM
194MM
75
PILE JOINT DETAIL
REINFORCEMENT SCHEDULE
SPIRAL STIRRUPS(HARD DRAWN WIRE)
PILE SIZE (MM)
MAIN REINFORCEMENT
WIRE SIZE (MM)
X
Y
PITCH 1 (MM)
PITCH 2 (MM)
PITCH 3 (MM)
200X200
4T12
4.5
600
600
2X76
76-100
100
NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 30MM-40MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X76 DENOTE AS DOUBLE LINKS
JURUTERA PROFESIONAL
IR CHIENG LEE HONG
AWAM
MALAYSIA
R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD
DRAWING TITLE
200X200 RC PILES DETAILS TO MS1314, CLASS 3
DESIGN BY:
APPROVED BY:
SCALE:
NOT TO SCALE
DRAWING NO.
FRCP/MS1314/S/200
DATE:
12/12/2012
REV. NO.
0

APPENDIX 4 :



REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
250X250	8T10	6	750	750	53	53-125	125

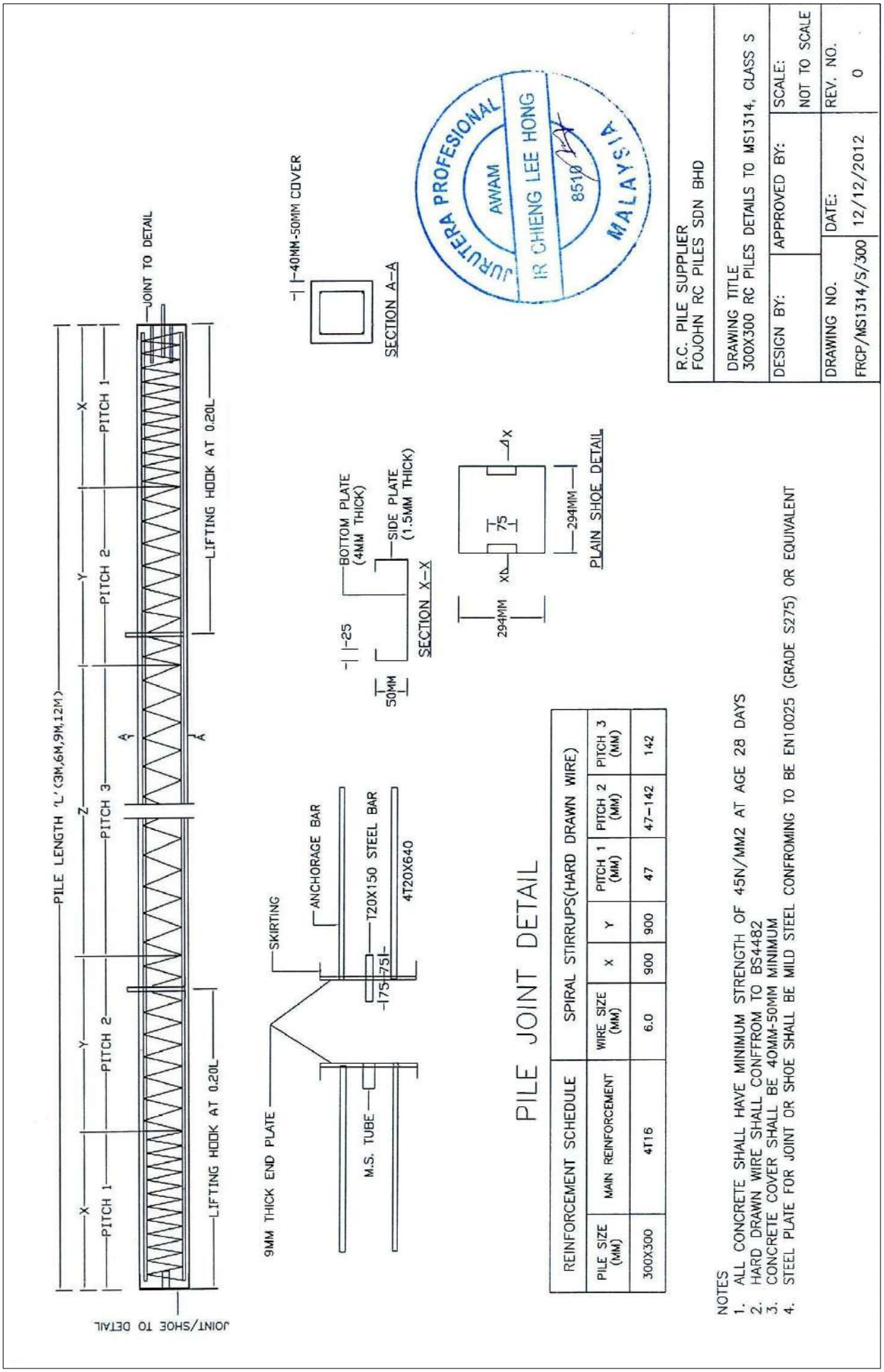
NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM-50MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT

R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD

DRAWING TITLE
250X250 RC PILES DETAILS TO MS1314, CLASS S

DESIGN BY:	APPROVED BY:	SCALE: NOT TO SCALE
DRAWING NO.	DATE:	REV. NO.
FRCP/MS1314/S/250	12/12/2012	0

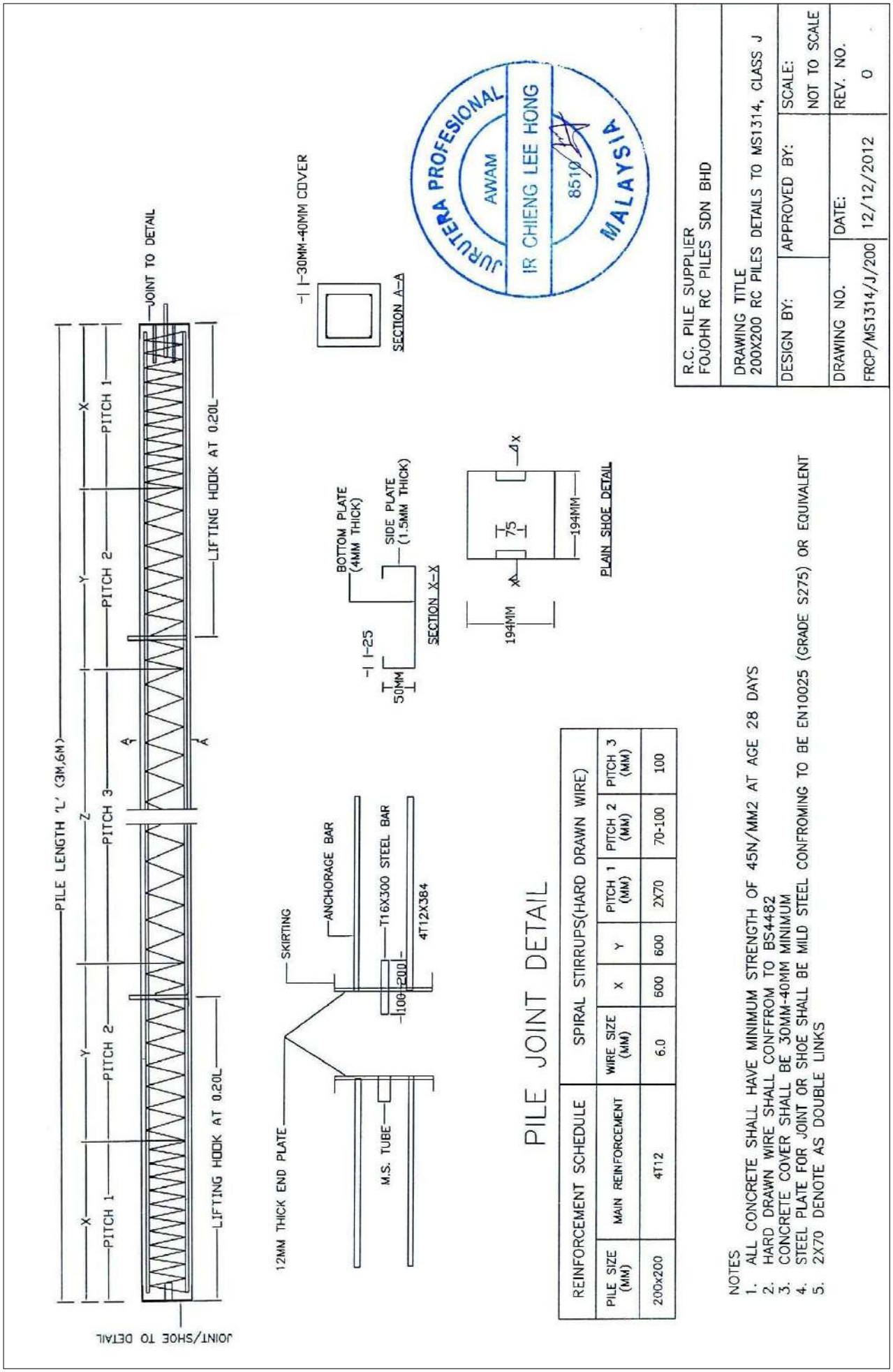
APPENDIX 5 :



REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
300X300	4T16	6.0	900	900	47	47-142	142

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM-50MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT

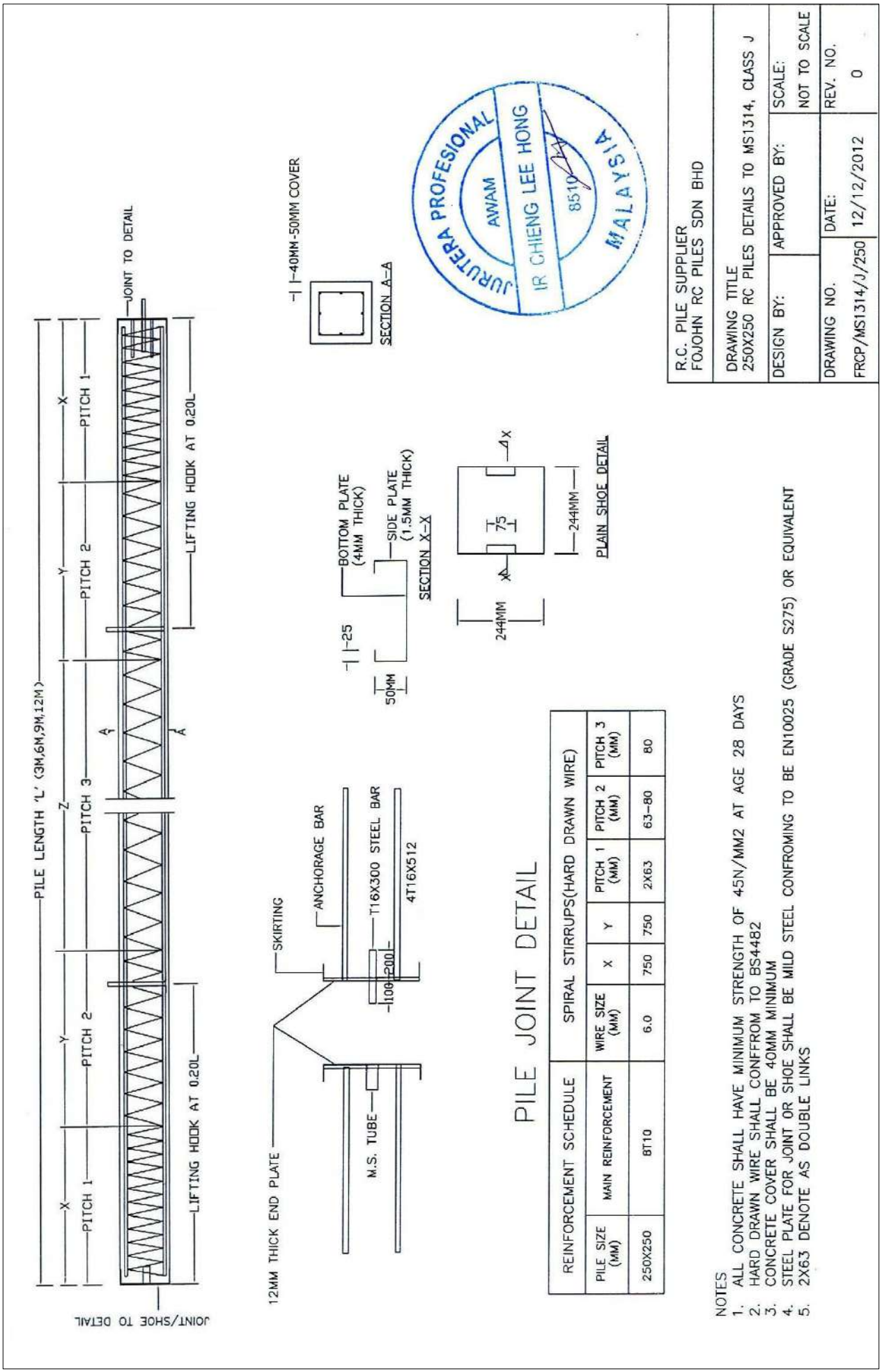
APPENDIX 6 :



REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)						
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
200x200	4T12	6.0	600	600	2X70	70-100	100

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 30MM-40MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X70 DENOTE AS DOUBLE LINKS

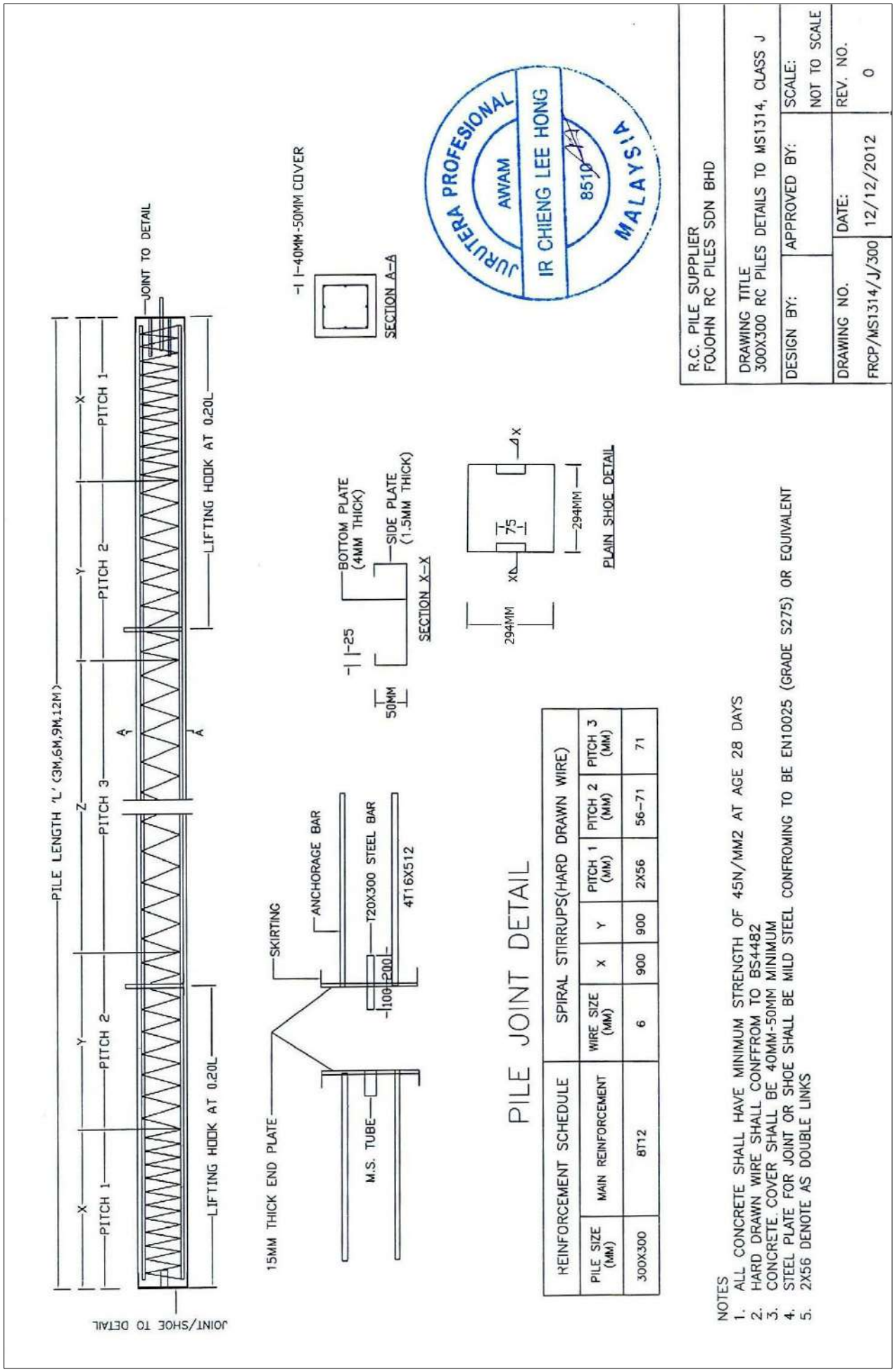
APPENDIX 7 :



REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
250X250	8T10	6.0	750	750	2X63	63-80	80

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X63 DENOTE AS DOUBLE LINKS

APPENDIX 8 :



PILE JOINT DETAIL

REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
300X300	8T12	6	900	900	2X56	56-71	71

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM-50MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X56 DENOTE AS DOUBLE LINKS

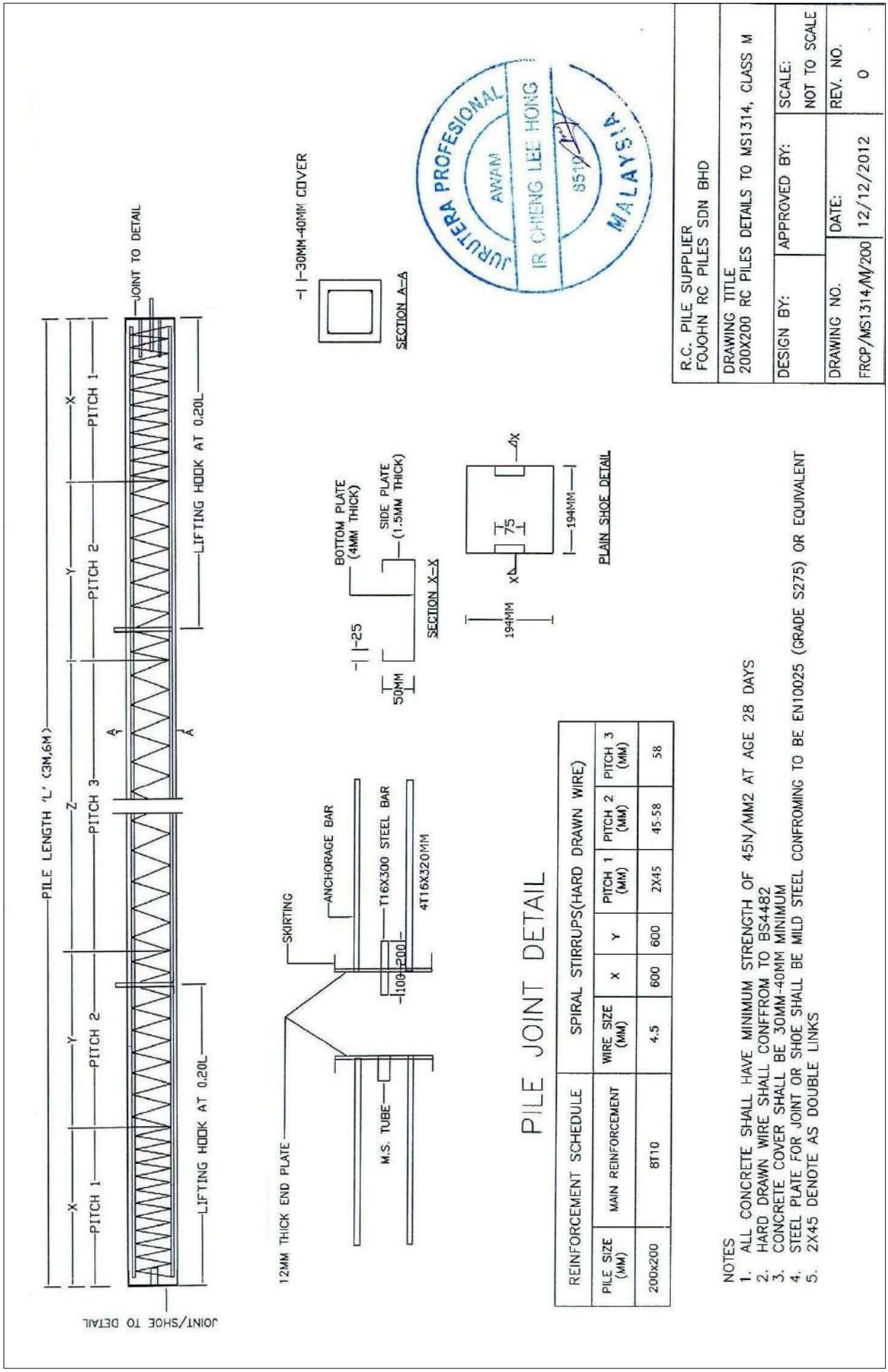
JURUTERA PROFESIONAL
AWAM
IR CHIENG LEE HONG
8510
MALAYSIA

R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD

DRAWING TITLE
300X300 RC PILES DETAILS TO MS1314, CLASS J

DESIGN BY:	APPROVED BY:	SCALE: NOT TO SCALE
DRAWING NO. FRCP/MS1314/J/300	DATE: 12/12/2012	REV. NO. 0

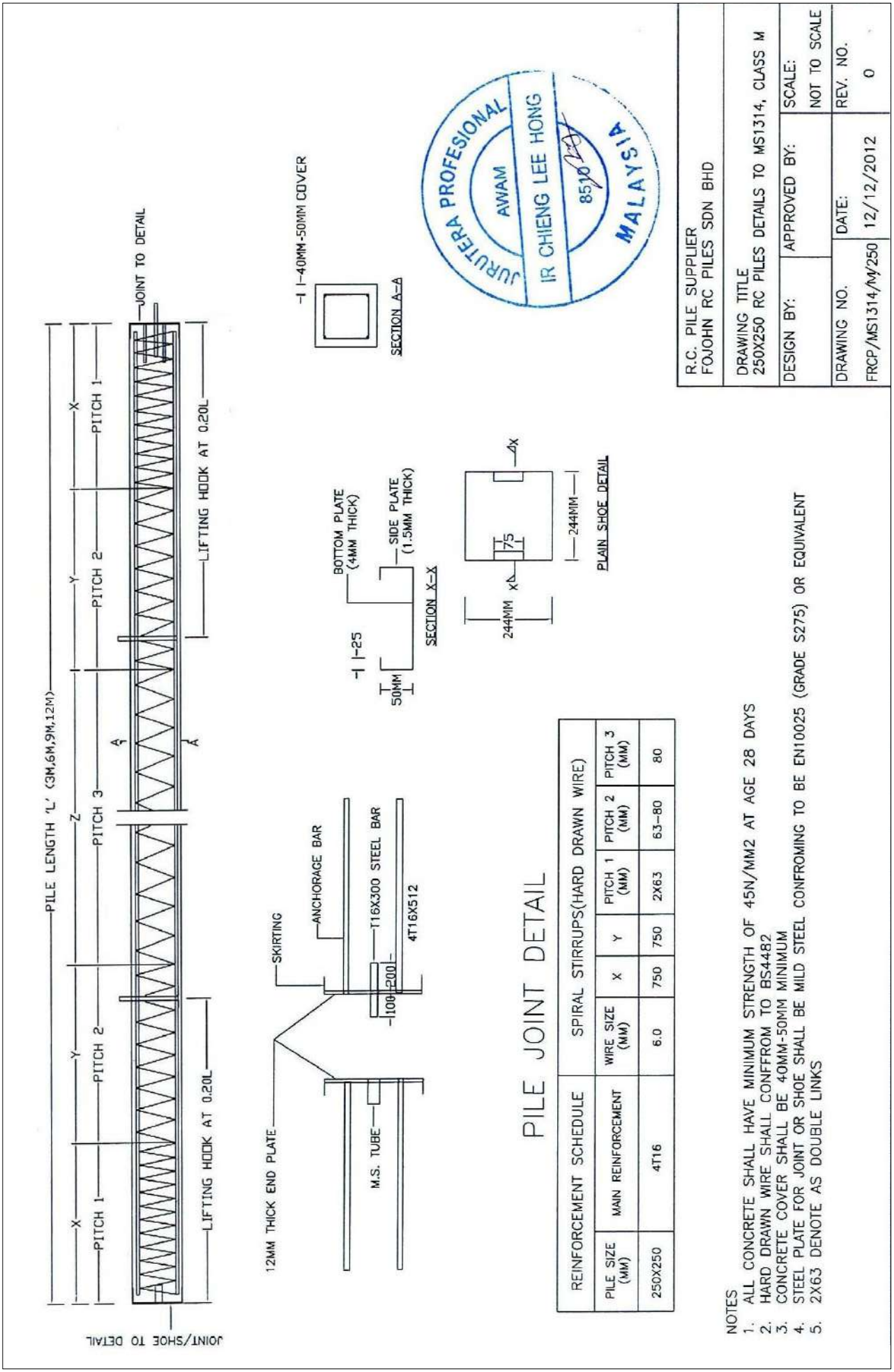
APPENDIX 9 :



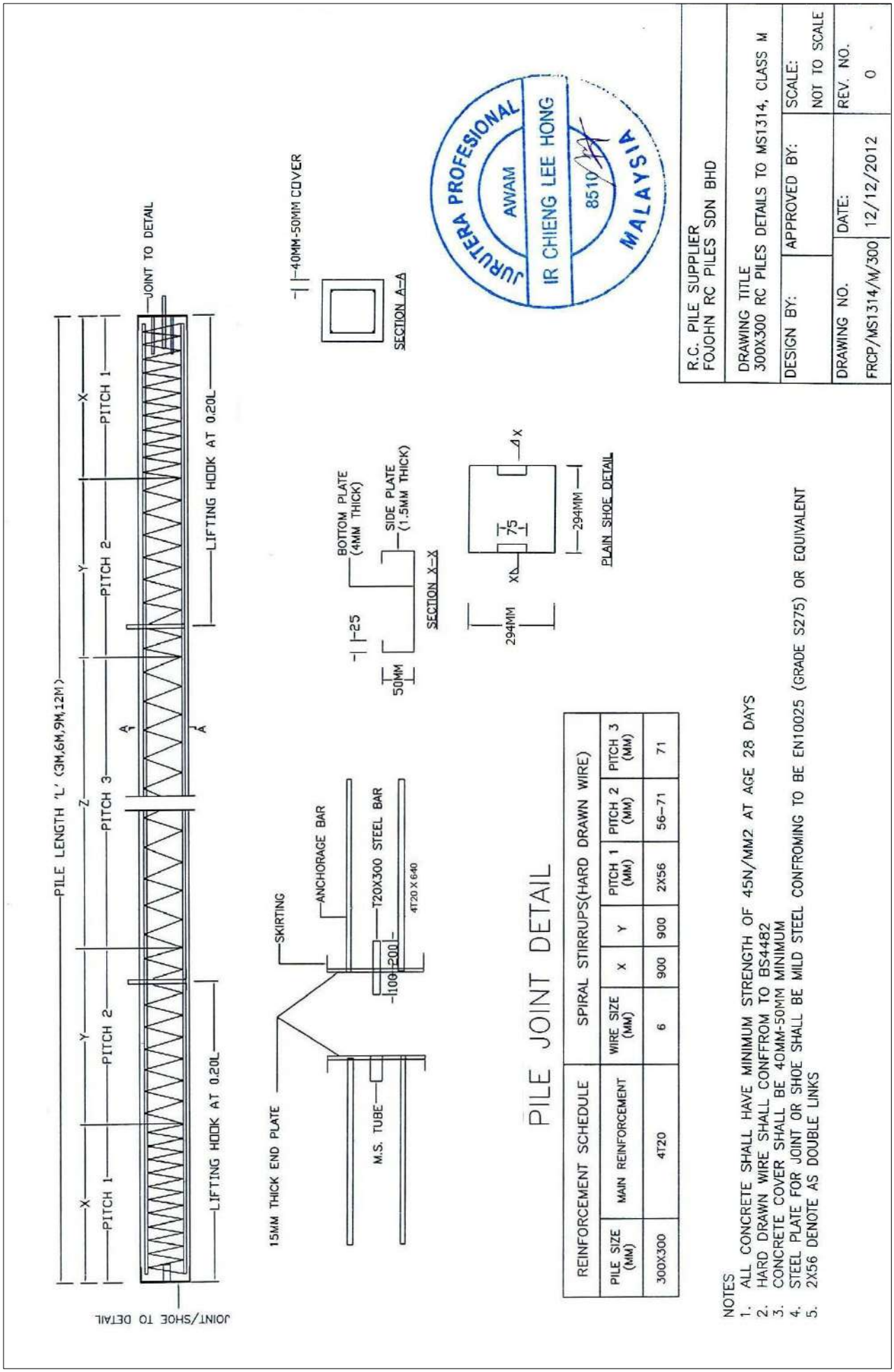
REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
200x200	8T10	4.5	600	600	2X45	45-58	58

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 30MM-40MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X45 DENOTE AS DOUBLE LINKS

APPENDIX 10 :


PILE LENGTH 'L' (3M,6M,9M,12M)
JOINT TO DETAIL
PITCH 1
PITCH 2
PITCH 3
LIFTING HOOK AT 0.20L
JOINT/SHOE TO DETAIL
12MM THICK END PLATE
SKIRTING
ANCHORAGE BAR
T16X300 STEEL BAR
4T16X512
M.S. TUBE
100-200
SECTION A-A
I-40MM-50MM COVER
BOTTOM PLATE (4MM THICK)
SIDE PLATE (1.5MM THICK)
SECTION X-X
I-25
50MM
244MM
75
4X
PLAIN SHOE DETAIL
PILE JOINT DETAIL
REINFORCEMENT SCHEDULE
SPIRAL STIRRUPS(HARD DRAWN WIRE)
PILE SIZE (MM)
MAIN REINFORCEMENT
WIRE SIZE (MM)
X
Y
PITCH 1 (MM)
PITCH 2 (MM)
PITCH 3 (MM)
250X250
4T16
6.0
750
750
2X63
63-80
80
NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM-50MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X63 DENOTE AS DOUBLE LINKS
JURUTERA PROFESIONAL
AWAM
IR CHIENG LEE HONG
8510
MALAYSIA
R.C. PILE SUPPLIER
FOJOHN RC PILES SDN BHD
DRAWING TITLE
250X250 RC PILES DETAILS TO MS1314, CLASS M
DESIGN BY:
APPROVED BY:
SCALE:
NOT TO SCALE
DRAWING NO.
FRCP/MS1314/M/250
DATE:
12/12/2012
REV. NO.
0

APPENDIX 11 :



REINFORCEMENT SCHEDULE		SPIRAL STIRRUPS(HARD DRAWN WIRE)					
PILE SIZE (MM)	MAIN REINFORCEMENT	WIRE SIZE (MM)	X	Y	PITCH 1 (MM)	PITCH 2 (MM)	PITCH 3 (MM)
300X300	4T20	6	900	900	2X56	56-71	71

NOTES
1. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 45N/MM2 AT AGE 28 DAYS
2. HARD DRAWN WIRE SHALL CONFFROM TO BS4482
3. CONCRETE COVER SHALL BE 40MM-50MM MINIMUM
4. STEEL PLATE FOR JOINT OR SHOE SHALL BE MILD STEEL CONFROMING TO BE EN10025 (GRADE S275) OR EQUIVALENT
5. 2X56 DENOTE AS DOUBLE LINKS

Certificate of Registration

This is to certify that the Quality Management System of

FJ CONCRETE & PILES SDN. BHD.

Site/s Registered:

Lot 1300, Block 20, Market Garden, Jalan Tanjung Kidurong,
97000 Bintulu, Sarawak, Malaysia.

has been assessed and registered by ACS certification
as being compliant with the requirements of

ISO 9001 : 2015

Non-Applicability (Requirements):

[Excluding Clause 8.3 (Design and Development of Products and Services)]
[Excluding Clause 8.5.1 (f) (Validation or Periodic Revalidation of Processes)]

Scope of Registration:

Manufacture and Production of Reinforced Concrete Square Piles.
Manufacture and Production of Ready-Mixed Concrete.

Initial Registration Date: 4 September 2018
Effective Date: 4 September 2018
Due Date (Surveillance #2): 3 September 2020
[subject to monitoring of the system by ACS]

Lye Siew Pyng (Director)
ACS Certification (M) Sdn. Bhd.

Certificate No: ACSMA0239-01

Recertification Due Date : 1 September 2021

ACS is accredited by the Joint Accreditation System of Australia and New Zealand. No: S3580606MK www.jas-anz.org / register
JAS-ANZ is an IAF member & signatory to IAF multi-lateral recognition agreement (www.iaf.nu).
This certificate remains the property of ACS Certification (M) Sdn. Bhd.
ACS Certification (M) Sdn. Bhd. Suite 33-01, 33rd Floor Menara Keck Seng, 203 Jalan Bukit Bintang, 55100 Kuala Lumpur, Malaysia.

SIRIM CERTIFICATION LICENCE NO. PC002635 - MS1314 : PART 3 : 2004

No Lesen : **PC002635**
Licence No :

LESEN PENSIJILAN BARANGAN
Product Certification Licence

SIRIM

SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada
SIRIM QAS International Sdn. Bhd. hereby grants to

FJ CONCRETE & PILES SDN. BHD.
LOT 1300, BLOCK 20, KEMENA LAND DISTRICT
MARKET GARDEN, JALAN SAMALAJU
COASTAL HIGHWAY P.O. BOX 2202
97011 BINTULU
SARAWAK, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan
a licence to use the Certification Mark on
PRECAST REINFORCED CONCRETE SQUARE PILES

Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan
as complying with
MS 1314 : PART 3 : 2004

Mohd Azanuddin bin Salleh
Ketua Pegawai Eksekutif
Chief Executive Officer
SIRIM QAS International Sdn. Bhd.

SIRIM QAS International Sdn. Bhd.
(No. Syarikat 410334-X)
1, Persiaran Dato' Menteri
Seksyen 2, Peti Surat 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA.

Tel : 60-3-55446400
Faks : 60-3-55446466

http://www.sirim.my
http://www.malaysiancertified.com.my

Tarikh Mula Pensijilan : **18 November 2016**
Certified Since
Sah Sehingga : **18 November 2020**
Valid Until

Tarikh Dikeluarkan : **27 November 2019**
Issue Date
No Siri : 050995
Serial No

Lesen ini dianugerahkan tertakluk kepada syarat-syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

No Lesen : **PC002635**
Licence No :

SCHEDULE

FJ CONCRETE & PILES SDN. BHD.

SIRIM

Trade Mark : COMPANY ID = FJ CONCRETE & PILES
Model : CLASS M
Type : TYPE OF DRIVING: HAMMER DRIVEN
Size : NOMINAL SIZE : 200 mm x 200 m x 3 m, 200 mm x 200 mm x 6 m, 250 mm x 250 mm x 3 m, 250 mm x 250 mm x 6 m, 250 mm x 250 mm X 9 m, 250 mm x 250 mm x 12 m, 300 mm x 300 mm x 6 m, 300 mm x 300 mm x 9 m, 300 mm x 300 mm x 12 m

Trade Mark : COMPANY ID = FJ CONCRETE & PILES
Model : CLASS S
Type : TYPE OF DRIVING: HAMMER DRIVEN
Size : NOMINAL SIZE : 200 mm x 200 m x 3 m, 200 mm x 200 mm x 6 m, 250 mm x 250 mm x 3 m, 250 mm x 250 mm x 6 m, 250 mm x 250 mm X 9 m

Trade Mark : COMPANY ID = FJ CONCRETE & PILES
Model : CLASS J
Type : TYPE OF DRIVING: HAMMER DRIVEN
Size : NOMINAL SIZE : 200 mm x 200 mm x 3 m, 200 mm x 200 mm x 6 m, 250 mm x 250 mm x 6 m, 250 mm x 250 mm x 9 m, 250 mm x 250 mm x 12 m

End of page

SIRIM QAS International Sdn. Bhd.
(No. Syarikat 410334-X)
1, Persiaran Dato' Menteri
Seksyen 2, Peti Surat 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA.

Tel : 60-3-55446400
Faks : 60-3-55446466

http://www.sirim.my
http://www.malaysiancertified.com.my

Tarikh Mula Pensijilan : **18 November 2016**
Certified Since
Sah Sehingga : **18 November 2020**
Valid Until

Tarikh Dikeluarkan : **27 November 2019**
Issue Date
No Siri : 050995
Serial No

Lesen ini dianugerahkan tertakluk kepada syarat-syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

SIRIM CERTIFICATION LICENCE NO. PC002928 - MS1314 : PART 6 : 2004

No Lesen : **PC002928**
Licence No :

LESEN PENSIJILAN BARANGAN
Product Certification Licence

SIRIM

SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada
SIRIM QAS International Sdn. Bhd. hereby grants to

FJ CONCRETE & PILES SDN. BHD.
LOT 1300, BLOCK 20, KEMENA LAND DISTRICT
MARKET GARDEN, JALAN SAMALAJU
COASTAL HIGHWAY P.O. BOX 2202
97011 BINTULU
SARAWAK, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan
a licence to use the Certification Mark on
SMALL PRECAST REINFORCED CONCRETE SQUARE PILES

Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan
as complying with
MS 1314 : PART 6 : 2004

Mohd Azanuddin bin Salleh
Pengarah Urusan
Managing Director
SIRIM QAS International Sdn. Bhd.

SIRIM QAS International Sdn. Bhd.
(No. Syarikat 410334-X)
1, Persiaran Dato' Menteri
Sekeyen 2, Peti Surat 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA.

Tel : 60-3-55446400
Faks : 60-3-55446466

http://www.sirim.my
http://www.malaysian-certified.my

Tarikh Mula Pensijilan : **28 April 2017**
Certified Since
Sah Sehingga : **28 April 2020**
Valid Until

Tarikh Dikeluarkan : **26 February 2019**
Issue Date
No Siri : 044568
Serial No

Lesen ini dianugerahkan tertakluk kepada syarat-syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

No Lesen : **PC002928**
Licence No :

SCHEDULE

SIRIM

FJ CONCRETE & PILES SDN. BHD.

Trade Mark : COMPANY ID = FJ CONCRETE & PILES SDN. BHD.
Model : CLASS RCS-1
Type : TYPE OF DRIVING: NORMAL DRIVING
Size : NOMINAL SIZE: 150 mm x 150 mm x 3 m, 150 mm x 150 mm x 6 m, 175 mm x 175 mm x 3 m, 175 mm x 175 mm x 6 m

End of page

SIRIM QAS International Sdn. Bhd.
(No. Syarikat 410334-X)
1, Persiaran Dato' Menteri
Sekeyen 2, Peti Surat 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA.

Tel : 60-3-55446400
Faks : 60-3-55446466

http://www.sirim.my
http://www.malaysian-certified.my

Tarikh Mula Pensijilan : **28 April 2017**
Certified Since
Sah Sehingga : **28 April 2020**
Valid Until

Tarikh Dikeluarkan : **26 February 2019**
Issue Date
No Siri : 044568
Serial No

Lesen ini dianugerahkan tertakluk kepada syarat-syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

No. Perakuan : **A 001743**

PERAKUAN PEMATUHAN STANDARD (BAHAN BINAAN)

Adalah dengan ini Pengilang/Pengeluar yang dinyatakan di bawah ini telah mengeluarkan bahan binaan yang diperakui oleh Lembaga mengikut Bahagian VIIA Akta Lembaga Pembangunan Industri Pembinaan Malaysia (Pindaan 2011). Perakuan ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan. Perakuan ini mengesahkan bahawa bahan atau produk binaan yang dinyatakan di bawah telah diperakukan

No. Pendaftaran	: 1170201SR0164
Nama Pengilang / Pengeluar	: FJ CONCRETE & PILES SDN. BHD.
Alamat Kilang Berdaftar	: LOT 1300, BLOCK 20, KEMENA LAND DISTRICT, MARKET GARDEN, MARKET GARDEN, JALAN SAMALAJU COASTAL HIGHWAY 97011 BINTULU SARAWAK (CAWANGAN BINTULU)

Kategori dan Jenis produk bahan binaan :
(Rujuk Lampiran A untuk butiran terperinci)

PRECAST CONCRETE PILES

- Precast Reinforced Concrete Square Piles
- Small Precast Reinforced Concrete Square Piles

Tarikh Mula Berkuatkuasa	: 25-02-2019
Tarikh Tamat Tempoh Perakuan	: 24-02-2020

Perakuan ini hendaklah diperbaharui selewat-lewatnya 30 hari sebelum tarikh tamat tempoh perakuan

Nota: Perakuan dikeluarkan setelah Lembaga menjalankan pemeriksaan dan pengesahan ke atas kilang dan produk-produk yang terkandung di dalam Pensijilan Produk (Product Certification) yang dikeluarkan oleh Badan Pensijilan yang diiktiraf. Pihak pengeluar/pengilang adalah bertanggungjawab untuk memastikan Pensijilan Produk (Product Certificate) sentiasa dalam tempoh sahlaku.

WAN HABIB BIN WAN HAMDAN
PENGURUS
CIDB NEGERI SARAWAK (CWGN. BINTULU)
b.p Ketua Eksekutif

FOJOHN GROUP OF COMPANIES

Fojohn Hardware Sdn. Bhd.

(Company No. 408571-K)
Lot 3632, Block 26, Kemena Land District,
Kidurong Light Industrial Estate, Tanjung Kidurong,
P.O. Box 2202, 97011 Bintulu, Sarawak.
Tel: 086-252388, 254688, 253389 Fax: 086-252488
Email Address: fojohnb@hotmail.com

Fojohn Hardware (Miri) Sdn. Bhd.

(Company No. 878320-M)
Lot 1967 Block 5,
Kuala Baram, 98000 Miri, Sarawak.
Tel: 085-668960 Fax: 085-668970
Email Address: fojohnmiri@hotmail.com

Fojohn Development Sdn. Bhd.

(Company No. 694639-M)
Lot 3632, Block 26, Kemena Land District,
Kidurong Light Industrial Estate, Tanjung Kidurong,
P.O. Box 2202, 97011 Bintulu, Sarawak.
Tel: 086-253227 Fax: 086-253236

Fojohn Enterprise (SIBU) Sdn. Bhd.

(Company No. 472111-K)
Lot 2349, Block 19, Seduan Land District 11,
Lorong Then Kung Suk 3A,
P.O. Box 1196, 96000 Sibu, Sarawak.
Tel: 084-217017, 217589 Fax: 084-217016

Fojohn Enterprise Sdn. Bhd.

(Company No. 182628-K)
No. 4A, Jalan Merdeka, 96100 Sarikei, Sarawak.
P.O .Box 312, 96108 Sarikei, Sarawak.
Tel: 084-654243, 652361 Fax: 084-651788