REBAR DETAILING SAMPLES

UNION GREEN APARTMENTS

BEAM GRID LINE 27

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	1	R	HD25	0	6	2	700	7050	0	0	0	0	0	0	0	0	HORIZONTAL
500E	2	R	HD25	0	2	S	0	4605	S	0	0	0	0	0	0	0	HORIZONTAL
500E	3	R	HD25	0	6	2	700	5820	0	0	0	700	0	0	0	0	HORIZONTAL
500E	4	R	HD25	0	2	S	0	4350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	5	R	HD25	0	6	2	775	9415	0	0	0	720	0	0	0	0	HORIZONTAL
500E	6	R	HD25	0	2	2	600	1565	0	0	0	0	0	0	0	0	HORIZONTAL
500E	7	R	HD25	0	2	S	0	3800	0	0	0	0	0	0	0	0	HORIZONTAL
500E	8	R	HD25	0	2	2	700	3455	0	0	0	0	0	0	0	0	HORIZONTAL
500E	9	R	HD25	0	6	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	10	R	HD25	200	12	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
500E	11	R	HD25	200	7	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
500E	12	R	HD25	200	5	18	235	1900	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
	13 OMITTED																
500E	14	P	HR12	150	28	T1	95	920	720	920	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	15	P	HR12	150	48	T1	95	400	720	400	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	16	P	HR12	150	21	T1	95	920	975	920	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	17	P	HR12	150	42	T1	95	400	975	400	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	18	P	HR12	300	6	T1	95	920	720	920	720	95	0	0	0	0	STIRRUPS @ 300 CTRS
500E	19	P	HR12	300	12	T1	95	400	720	400	720	95	0	0	0	0	STIRRUPS @ 300 CTRS

BEAM GRID LINE 29

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	20	R	HD25	0	6	2	700	7010	0	0	0	0	0	0	0	0	HORIZONTAL
500E	21	R	HD25	0	2	S	0	4605	S	0	0	0	0	0	0	0	HORIZONTAL
500E	22	R	HD25	0	6	2	700	5820	0	0	0	700	0	0	0	0	HORIZONTAL
500E	23	R	HD25	0	2	S	0	4350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	24	R	HD25	0	6	2	700	9415	0	0	0	700	0	0	0	0	HORIZONTAL
500E	25	R	HD25	0	2	2	500	2350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	26	R	HD25	0	2	S	0	3800	0	0	0	0	0	0	0	0	HORIZONTAL
500E	27	R	HD25	0	6	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	28	R	HD25	0	2	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	29	R	HD20	250	12	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 250 CTRS
500E	30	R	HD20	250	12	18	235	1925	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 250 CTRS
500E	31	P	HR12	150	18	T1	95	720	720	720	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	32	P	HR12	150	36	T1	95	320	720	320	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	33	P	HR12	150	21	T1	95	720	975	720	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	34	P	HR12	150	42	T1	95	320	975	320	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	35	P	HR12	150	10	T1	95	720	720	720	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	36	P	HR12	150	20	T1	95	320	720	320	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	37	P	HR12	300	6	T1	95	720	975	720	975	95	0	0	0	0	STIRRUPS @ 300 CTRS
500E	38	P	HR12	300	12	T1	95	320	975	320	975	95	0	0	0	0	STIRRUPS @ 300 CTRS

DATE	REV	AMENDMENT
17.10.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 17.10.2017

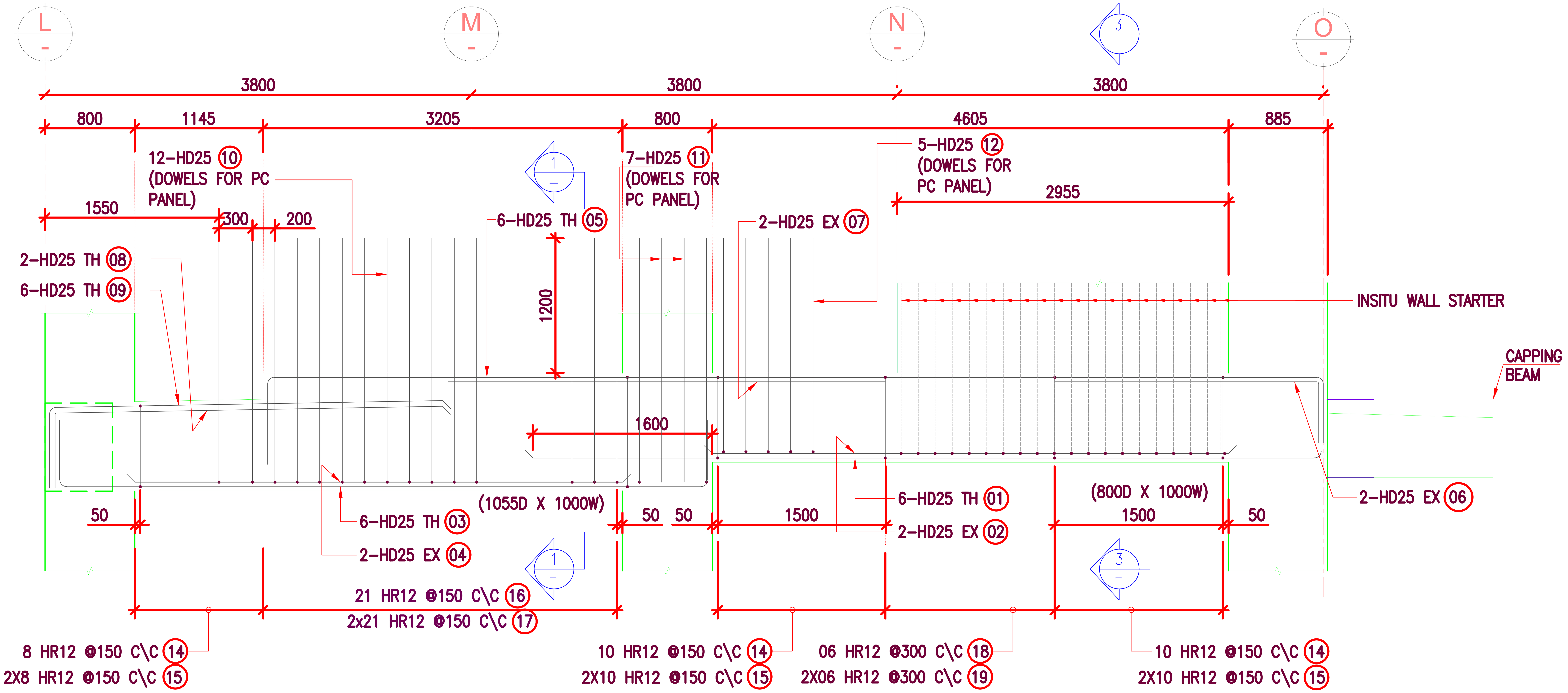
BAR BENDING SCHEDULE OF GROUND FLOOR BEAM ON GRID LINE 27, 29_BLOCK-D

DATE:	17.10.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF.	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-552

REVISION 0



Beam Elevation Grid Line 27 (Ground Floor)

(SCALE-1:20)

KEY LEGEND :-

00 - 00 - 00- 00 - 00

BAR MEMBER
BAR MARK
SPACING OF BARS
DIA OF BARS
NO OF BARS

17.10.2017	0	FOR APPROVAL
DATE	REV	AMENDMENT

CONSULTANT:

PROJECT:

DRAWING TITLE:

GROUND FLOOR BEAM REINFORCEMENT DETAILS
ON GRID LINE 27, 29, 31_BLOCK-D

17.10.2017

DATE:	17.10.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @A1 @A3

JOB NUMBER: 11970

DWG No: S-551

REVISION: 0

BEAM GRID LINE 27

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	1	R	HD25	0	6	2	700	7050	0	0	0	0	0	0	0	0	HORIZONTAL
500E	2	R	HD25	0	2	S	0	4605	S	0	0	0	0	0	0	0	HORIZONTAL
500E	3	R	HD25	0	6	2	700	5820	0	0	0	700	0	0	0	0	HORIZONTAL
500E	4	R	HD25	0	2	S	0	4350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	5	R	HD25	0	6	2	775	9415	0	0	0	720	0	0	0	0	HORIZONTAL
500E	6	R	HD25	0	2	2	600	1565	0	0	0	0	0	0	0	0	HORIZONTAL
500E	7	R	HD25	0	2	S	0	3800	0	0	0	0	0	0	0	0	HORIZONTAL
500E	8	R	HD25	0	2	2	700	3455	0	0	0	0	0	0	0	0	HORIZONTAL
500E	9	R	HD25	0	6	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	10	R	HD25	200	12	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
500E	11	R	HD25	200	7	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
500E	12	R	HD25	200	5	18	235	1900	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 200 CTRS
	13 OMITTED																
500E	14	P	HR12	150	28	T1	95	920	720	920	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	15	P	HR12	150	48	T1	95	400	720	400	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	16	P	HR12	150	21	T1	95	920	975	920	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	17	P	HR12	150	42	T1	95	400	975	400	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	18	P	HR12	300	6	T1	95	920	720	920	720	95	0	0	0	0	STIRRUPS @ 300 CTRS
500E	19	P	HR12	300	12	T1	95	400	720	400	720	95	0	0	0	0	STIRRUPS @ 300 CTRS

BEAM GRID LINE 29

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	20	R	HD25	0	6	2	700	7010	0	0	0	0	0	0	0	0	HORIZONTAL
500E	21	R	HD25	0	2	S	0	4605	S	0	0	0	0	0	0	0	HORIZONTAL
500E	22	R	HD25	0	6	2	700	5820	0	0	0	700	0	0	0	0	HORIZONTAL
500E	23	R	HD25	0	2	S	0	4350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	24	R	HD25	0	6	2	700	9415	0	0	0	700	0	0	0	0	HORIZONTAL
500E	25	R	HD25	0	2	2	500	2350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	26	R	HD25	0	2	S	0	3800	0	0	0	0	0	0	0	0	HORIZONTAL
500E	27	R	HD25	0	6	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	28	R	HD25	0	2	2	700	3500	0	0	0	0	0	0	0	0	HORIZONTAL
500E	29	R	HD20	250	12	18	235	2175	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 250 CTRS
500E	30	R	HD20	250	12	18	235	1925	0	0	0	0	0	150	0	0	PC PANEL DOWEL BAR @ 250 CTRS
500E	31	P	HR12	150	18	T1	95	720	720	720	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	32	P	HR12	150	36	T1	95	320	720	320	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	33	P	HR12	150	21	T1	95	720	975	720	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	34	P	HR12	150	42	T1	95	320	975	320	975	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	35	P	HR12	150	10	T1	95	720	720	720	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	36	P	HR12	150	20	T1	95	320	720	320	720	95	0	0	0	0	STIRRUPS @ 150 CTRS
500E	37	P	HR12	300	6	T1	95	720	975	720	975	95	0	0	0	0	STIRRUPS @ 300 CTRS
500E	38	P	HR12	300	12	T1	95	320	975	320	975	95	0	0	0	0	STIRRUPS @ 300 CTRS

BEAM GRID LINE 31

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	39	R	HD25	0	6	2	720	6930	0	0	0	0	0	0	0	0	HORIZONTAL
500E	40	R	HD25	0	2	S	0	1600	0	0	0	0	0	0	0	0	HORIZONTAL
500E	41	R	HD25	0	4	2	450	7510	0	0	0	0	0	0	0	0	HORIZONTAL
500E	42	R	HD25	0	6	2	450	5110	0	0	0	0	0	0	0	0	HORIZONTAL
500E	43	R	HD25	0	2	S	0	4350	0	0	0	0	0	0	0	0	HORIZONTAL
500E	44	R	HD25	0	4	6	0	1600	304	5450	0	740	50	0	300	0	HORIZONTAL

KEY LEGEND :-

00 - 00 - 00- 00 - 00

BAR MEMBER
BAR MARK
SPACING OF BARS
DIA OF BARS
NO OF BARS

DATE	REV	AMENDMENT
04.11.2017	2	CLOUDED BAR MARK REVISED
31.10.2017	1	REVISED AS PER RFI-17 RESPONSE
17.10.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE:

04.11.2017

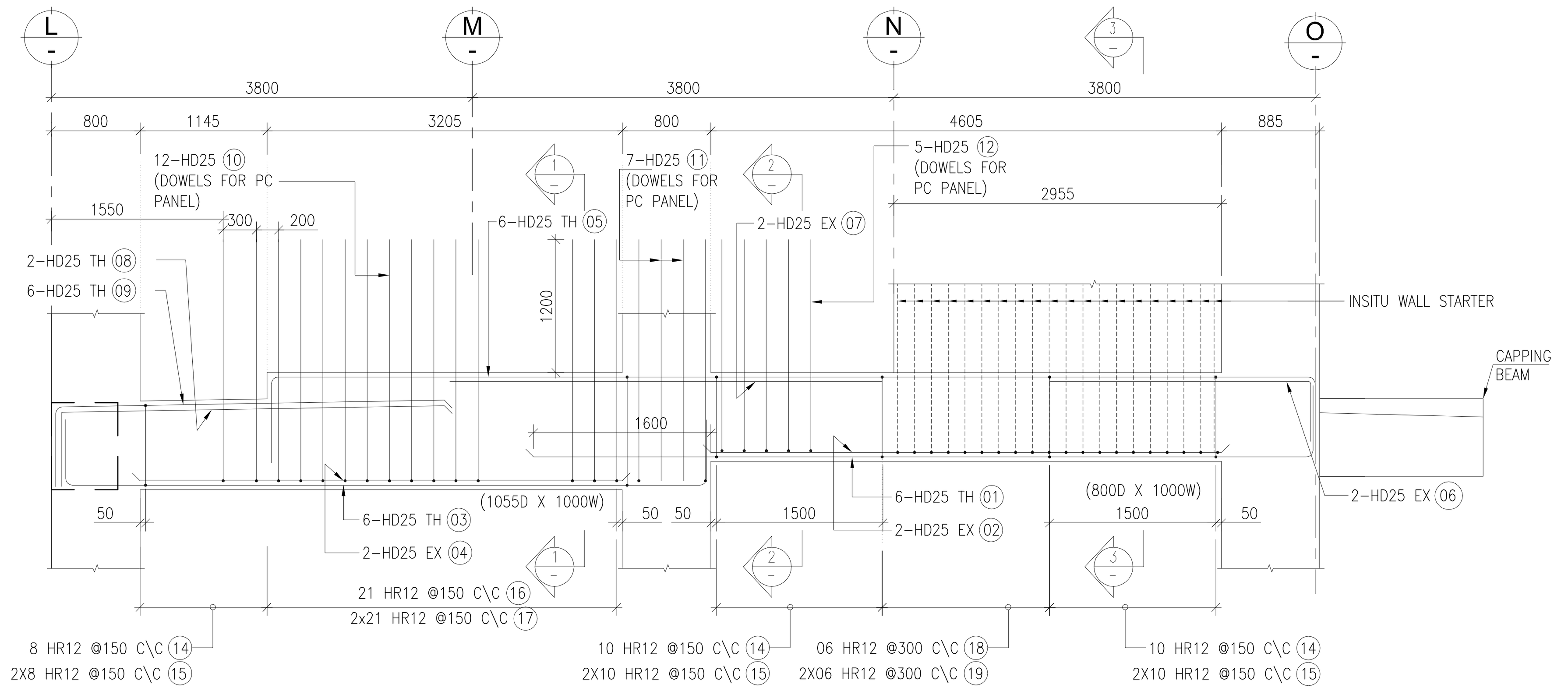
BAR BENDING SCHEDULE OF GROUND FLOOR BEAM ON GRID LINE 27, 29_BLOCK-D

DATE:	17.10.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF.	
SCALE:	As indicated @ A1 @ A3

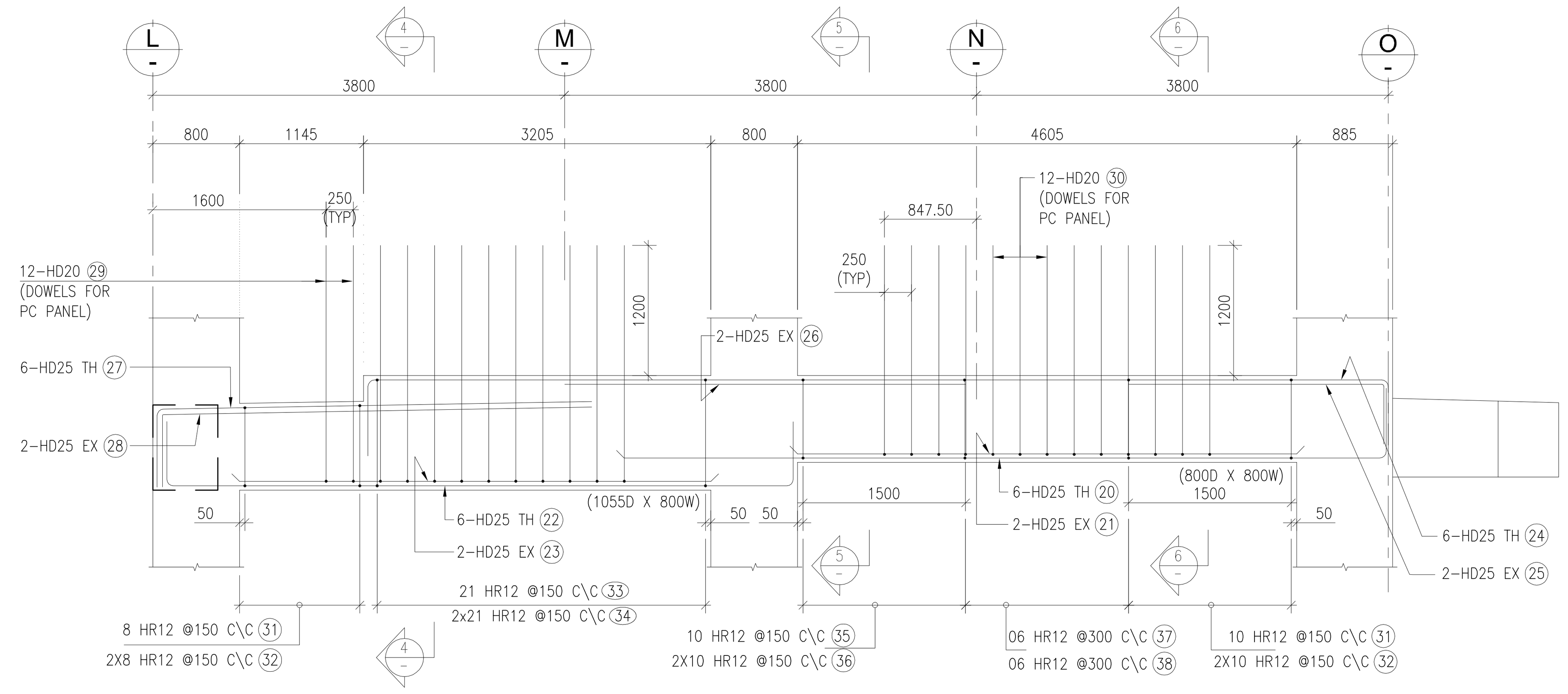
JOB NUMBER: 11970

DWG No. S-552

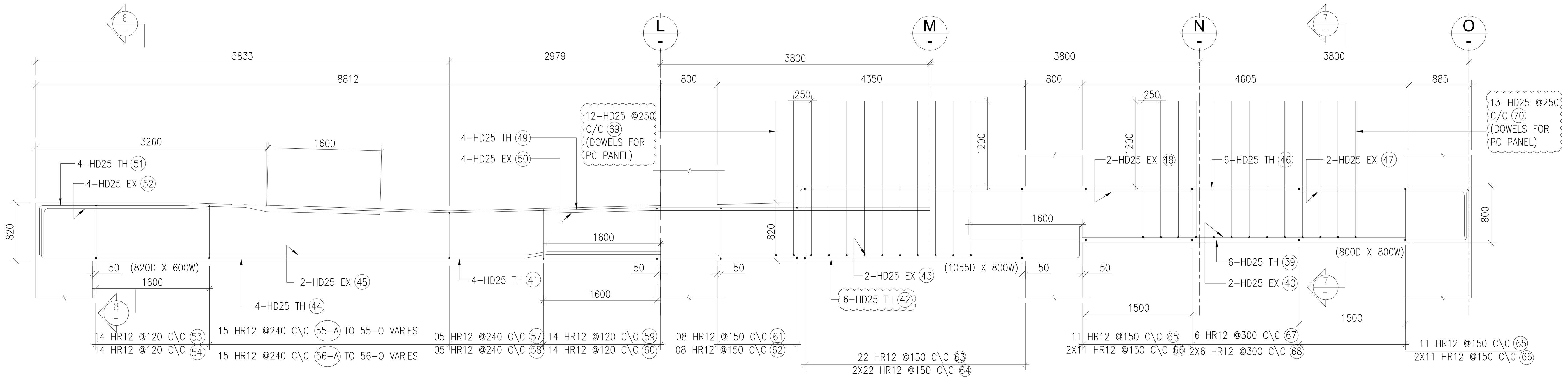
REVISION 2



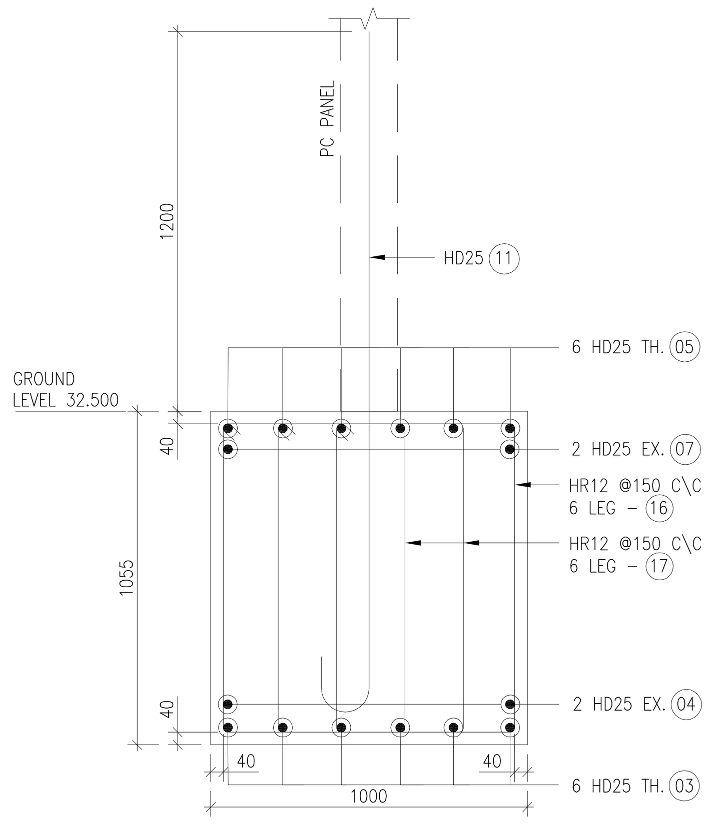
Beam Elevation Grid Line 27 (Ground Floor)
(SCALE-1:50)



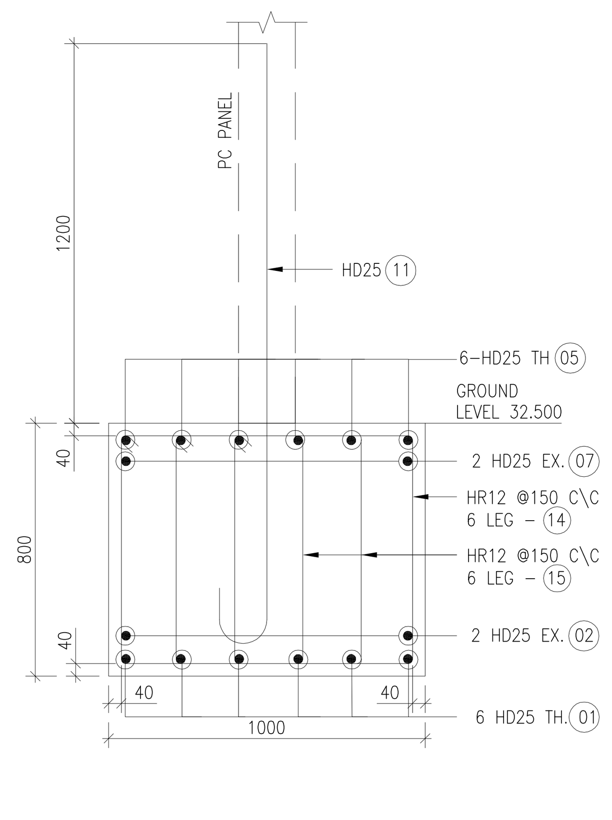
Beam Elevation Grid Line 29 (Ground Floor)
(SCALE-1:50)



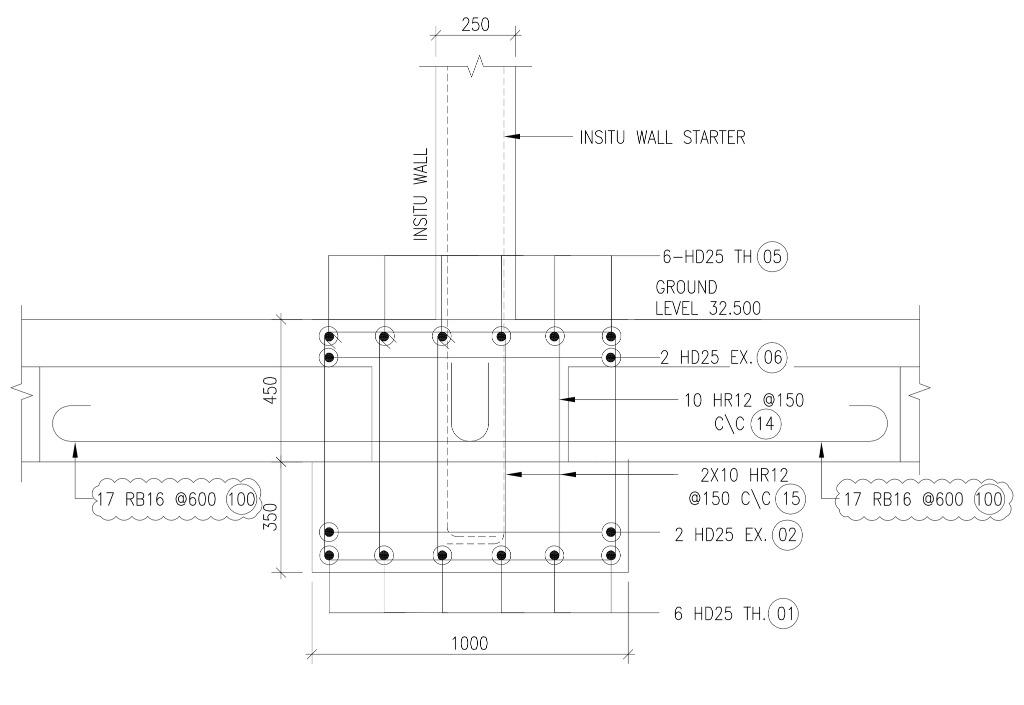
Beam Elevation Grid Line 31 (Ground Floor)
(SCALE-1:50)



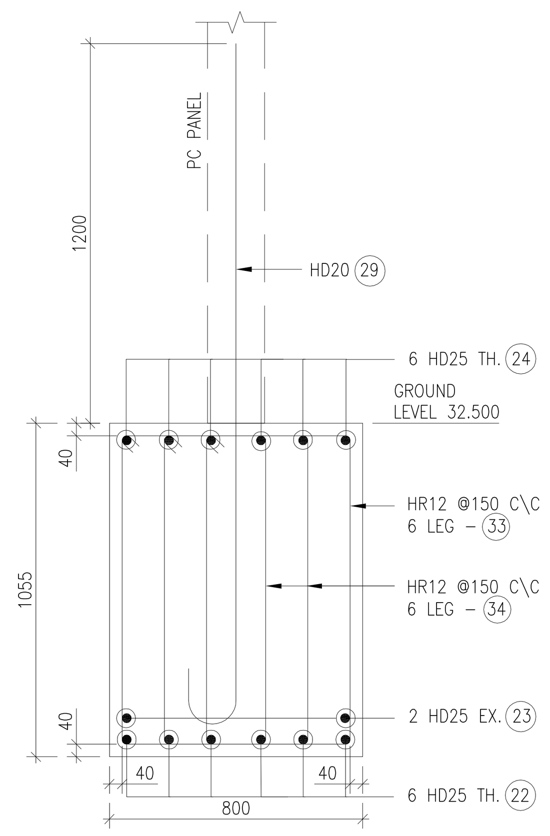
1 SECTION (SCALE-1:20)



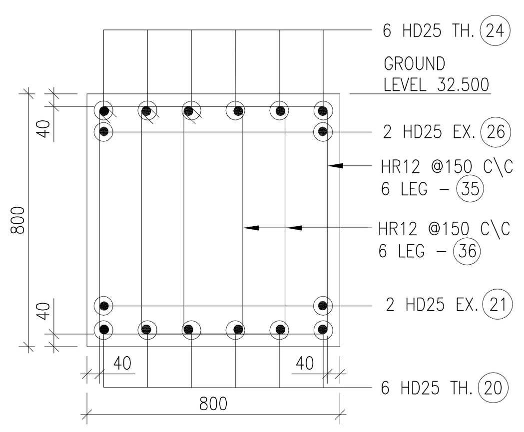
2 SECTION (SCALE-1:20)



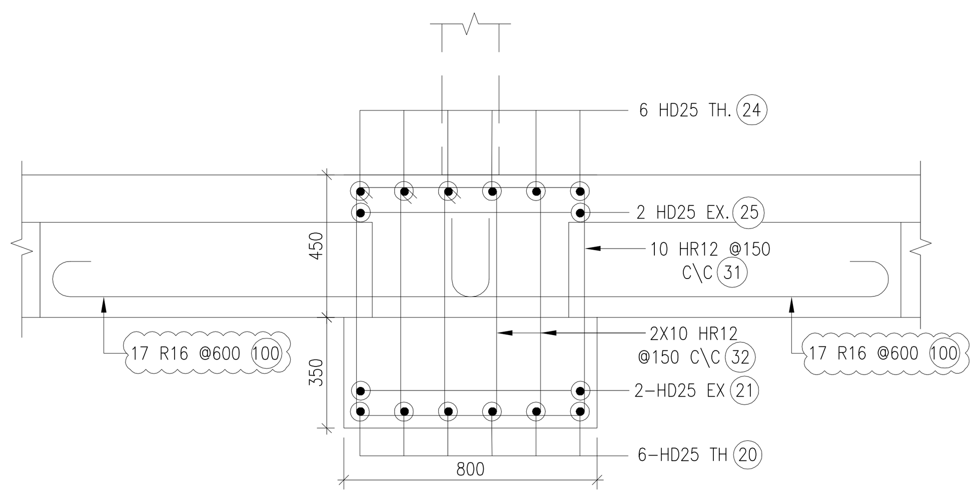
3 SECTION (SCALE-1:20)



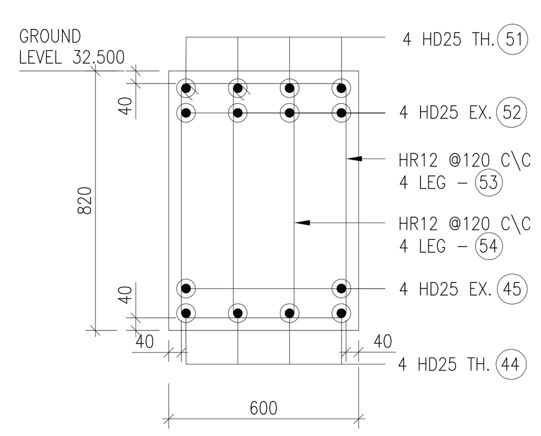
4 SECTION (SCALE-1:20)



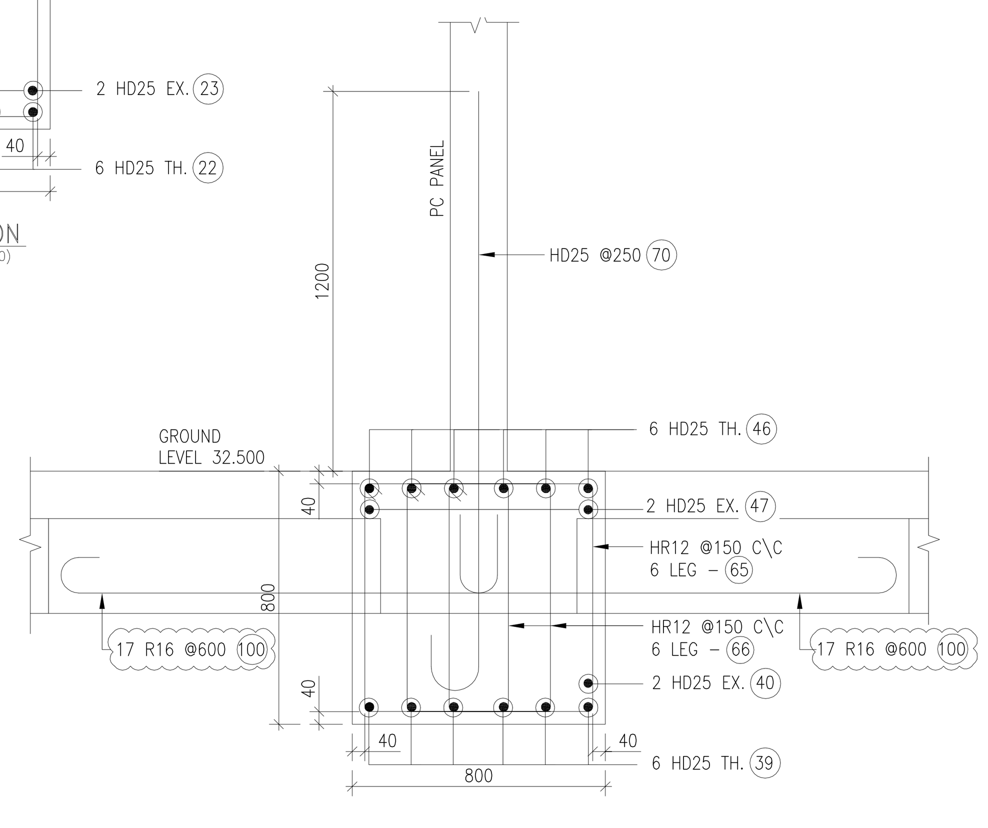
5 SECTION (SCALE-1:20)



6 SECTION (SCALE-1:20)



8 SECTION (SCALE-1:20)



7 SECTION (SCALE-1:20)

KEY LEGEND :-

00 - 00 - 00- 00 - 00

- BAR MEMBER
- BAR MARK
- SPACING OF BARS
- DIA OF BARS
- NO OF BARS

DATE	REV	AMENDMENT
04.11.2017	2	CLOUDED BAR MARK REVISED
31.10.2017	1	REVISED AS PER RFI-17 RESPONSE
17.10.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE:

04.11.2017

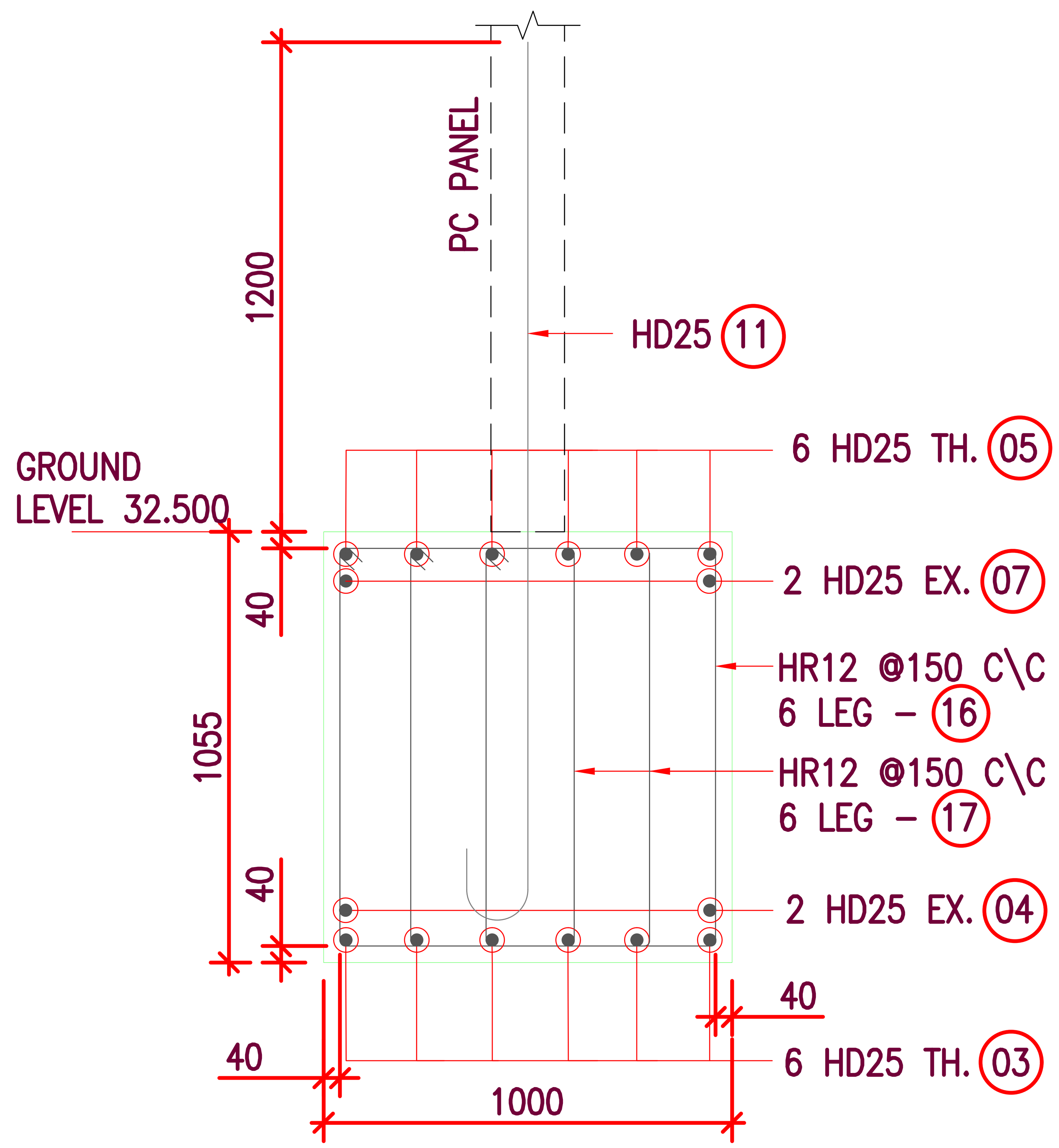
GROUND FLOOR BEAM REINFORCEMENT DETAILS
ON GRID LINE 27, 29, 31_BLOCK-D

DATE:	17.10.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF.	
SCALE:	As indicated @ A1 @ A3

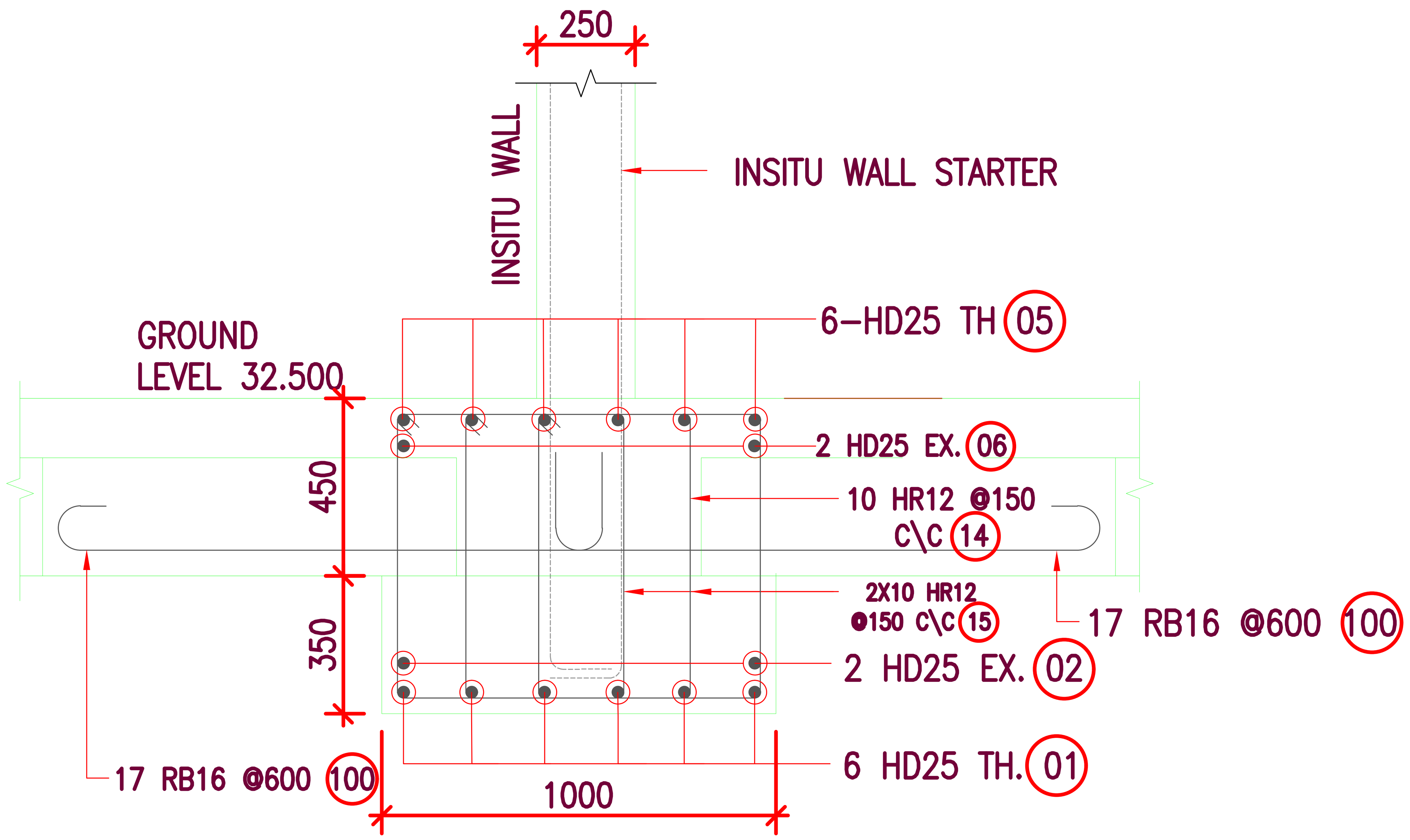
JOB NUMBER: 11970

DWG No. S-551

REVISION 2



1 SECTION
(SCALE-1:10)



3 SECTION
(SCALE-1:10)

KEY LEGEND :-

00 - 00 - 00- 00 - 00

BAR MEMBER
BAR MARK
SPACING OF BARS
DIA OF BARS
NO OF BARS

17.10.2017	0	FOR APPROVAL
DATE	REV	AMENDMENT

CONSULTANT:

PROJECT:

DRAWING TITLE: 17.10.2017

GROUND FLOOR BEAM REINFORCEMENT DETAILS
ON GRID LINE 27_BLOCK-D

DATE:	17.10.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-551

REVISION 0

COLUMN GRID 27/O

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	65	R	HD32	0	14	31	0	5616	389	2000	0	0	64	0	384		VERTICAL
500E	66	R	HD16	0	3	31	0	5809	192	1000	0	0	32	0	192		VERTICAL
500E	67	P	HR12	75	78	T1	95	685	370	685	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	68	P	HR12	75	156	T1	95	185	370	185	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	69	P	HR12	75	78	1	94	680	0	0	0	94	0	36	0		STIRRUPS @ 75 CTRS
500E	70	R	HD12	300	20	17	0	800	370	800	0	0	0	0	0		U BAR @ 300 CTRS
500E	71	R	RB25	250	24	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 250 CTRS
500E	71A	R	HD16	200	30	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	72	R	HD16	200	6	S	0	7000	0	0	0	0	0	0	0		VERTICAL
	NP25RB	M	NP25RB	250	24												FOOTPLATE
	TI25RB	M	TI25RB	250	24												TI INSERTS
	NP16RB	M	NP16RB	200	30												FOOTPLATE
	TI16RB	M	TI16RB	200	30												TI INSERTS

DATE	REV	AMENDMENT
29.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 29.09.2017

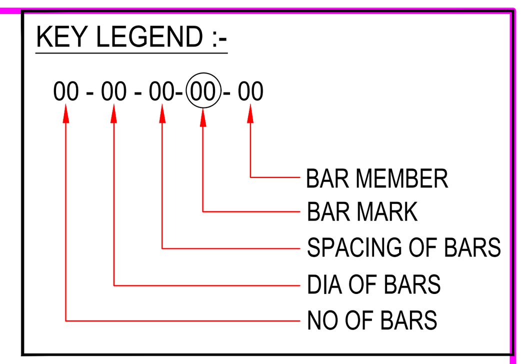
BAR BENDING SCHEDULE OF COLUMN REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-2.
GRID LINE 27/O_BLOCK D

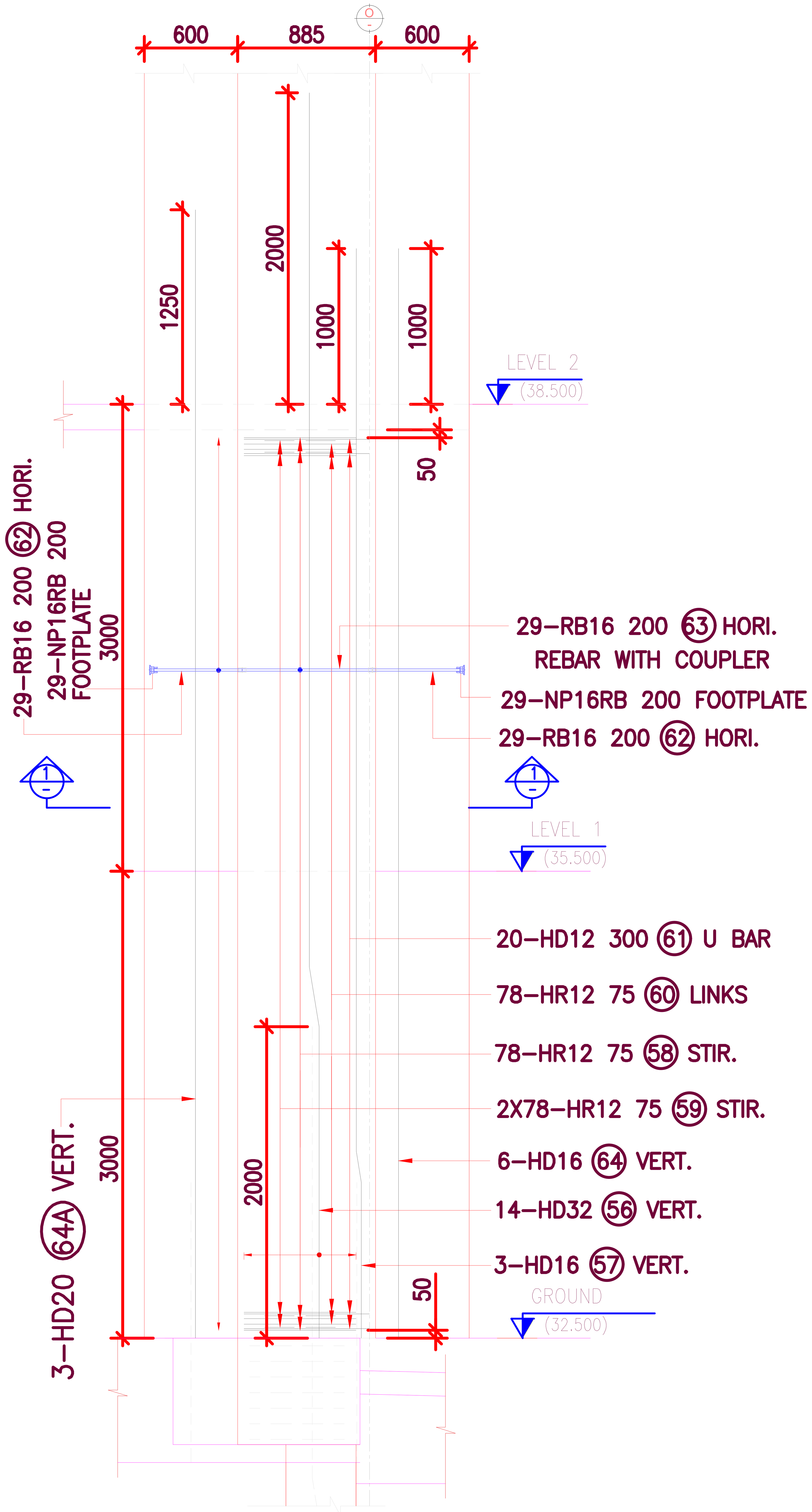
DATE: 29.09.2017
DESIGNED:
DRAWN: DP
CHECKED: HP
CAD REF.
SCALE: As indicated @ A1 @ A3

JOB NUMBER: 11970

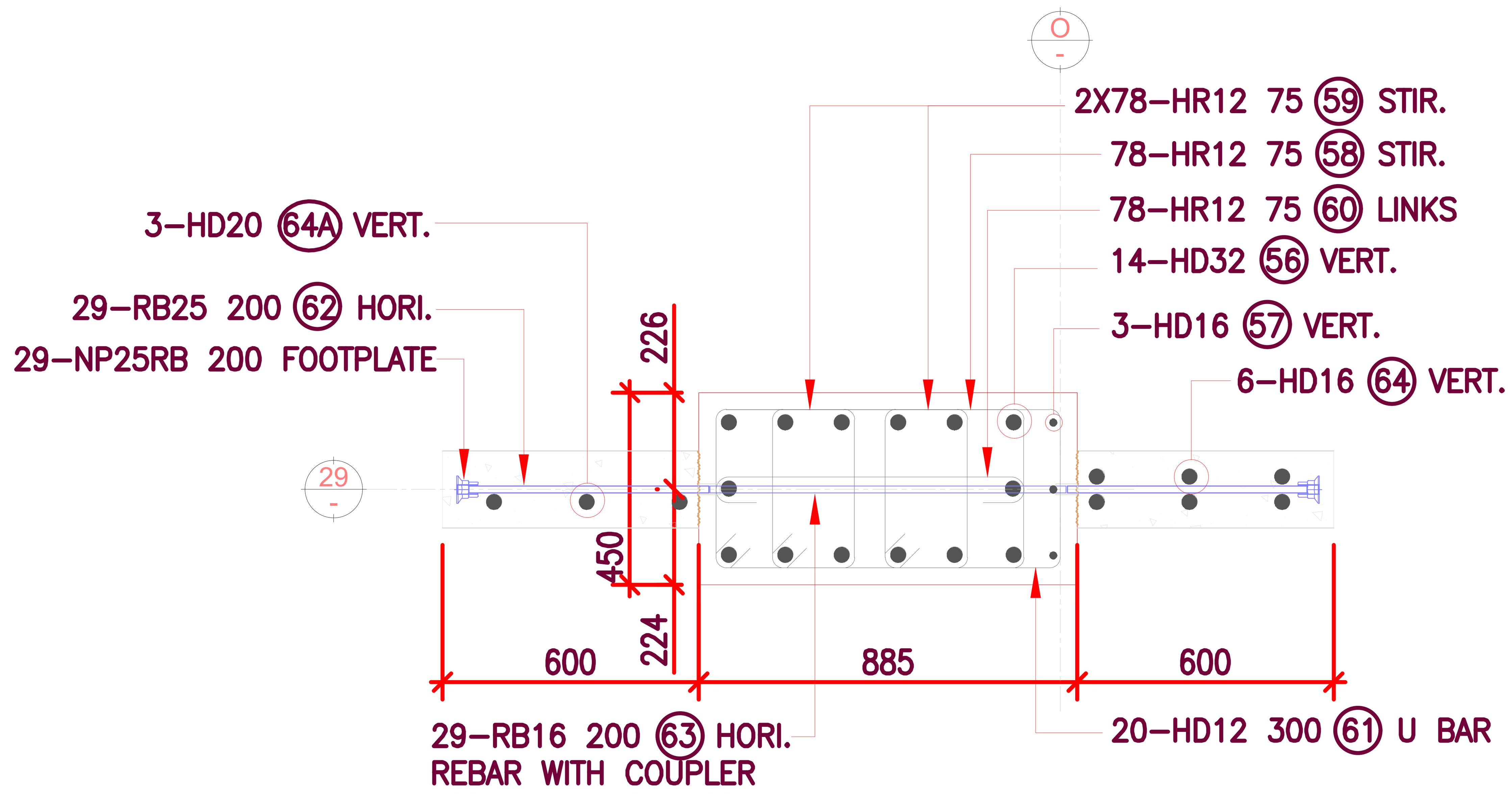
DWG No. S-60

REVISION 0





COLUMN SECTION GRID LINE 29/O
(SCALE-1:20) (1 NO.)



COLUMN PLAN GRID LINE 29/O
(SCALE-1:10)

29.09.2017	0	FOR APPROVAL
DATE	REV	AMENDMENT

CONSULTANT:

PROJECT:

DRAWING TITLE: 29.09.2017

PLAN AND SECTION OF COLUMN REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-2.
GRID LINE 29/O_BLOCK D

DATE:	29.09.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-59

REVISION 0

COLUMN GRID 29/O

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	56	R	HD32	0	14	31	0	5616	389	2000	0	0	64	0	384		VERTICAL
500E	57	R	HD16	0	3	31	0	5808	195	2000	0	0	32	0	192		VERTICAL
500E	58	P	HR12	75	78	T1	95	685	370	685	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	59	P	HR12	75	156	T1	95	185	370	185	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	60	P	HR12	75	78	1	94	680	0	0	0	94	0	36	0		STIRRUPS @ 75 CTRS
500E	61	R	HD12	300	20	17	0	800	370	800	0	0	0	0	0		U BAR @ 300CTRS
500E	62	R	RB25	200	58	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	63	R	RB16	200	29	S	0	830	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	64	R	HD16	0	6	S	0	7000	0	0	0	0	0	0	0		VERTICAL
500E	64A	R	HD20	0	3	S	0	7250	0	0	0	0	0	0	0		VERTICAL
	NP25RB	M	NP25RB	200	58												FOOTPLATE

DATE	REV	AMENDMENT
29.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 29.09.2017

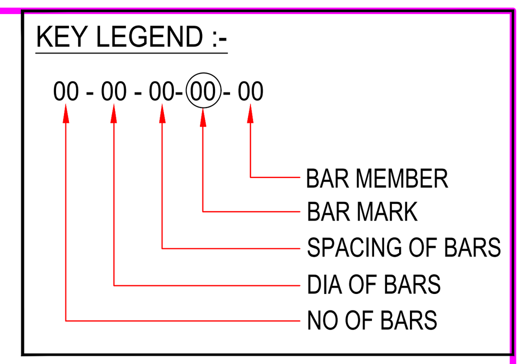
BAR BENDING SCHEDULE OF COLUMN REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-2.
GRID LINE 29/O_BLOCK D

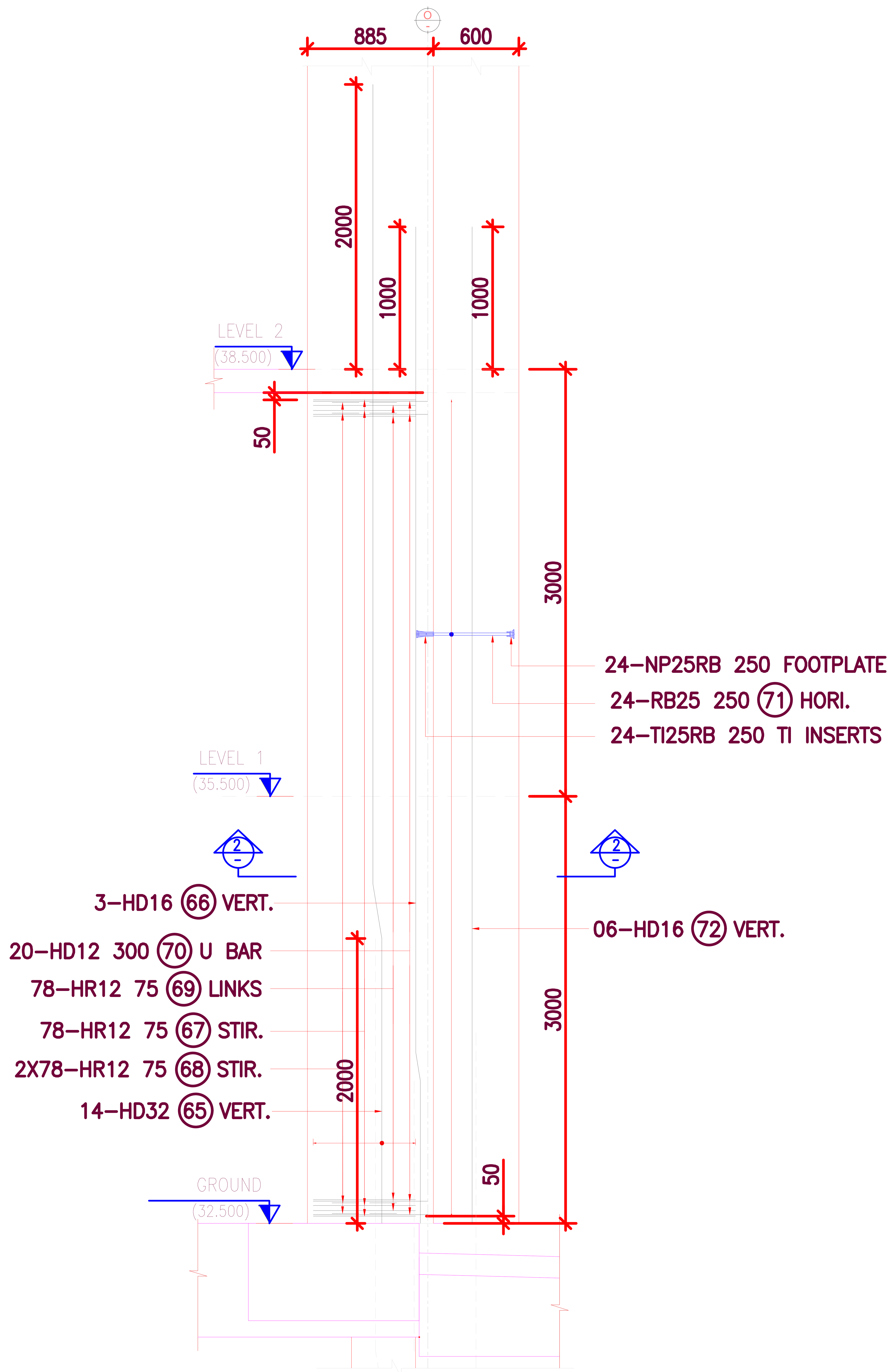
DATE: 29.09.2017
DESIGNED:
DRAWN: DP
CHECKED: HP
CAD REF.
SCALE: As indicated @ A1 @ A3

JOB NUMBER: 11970

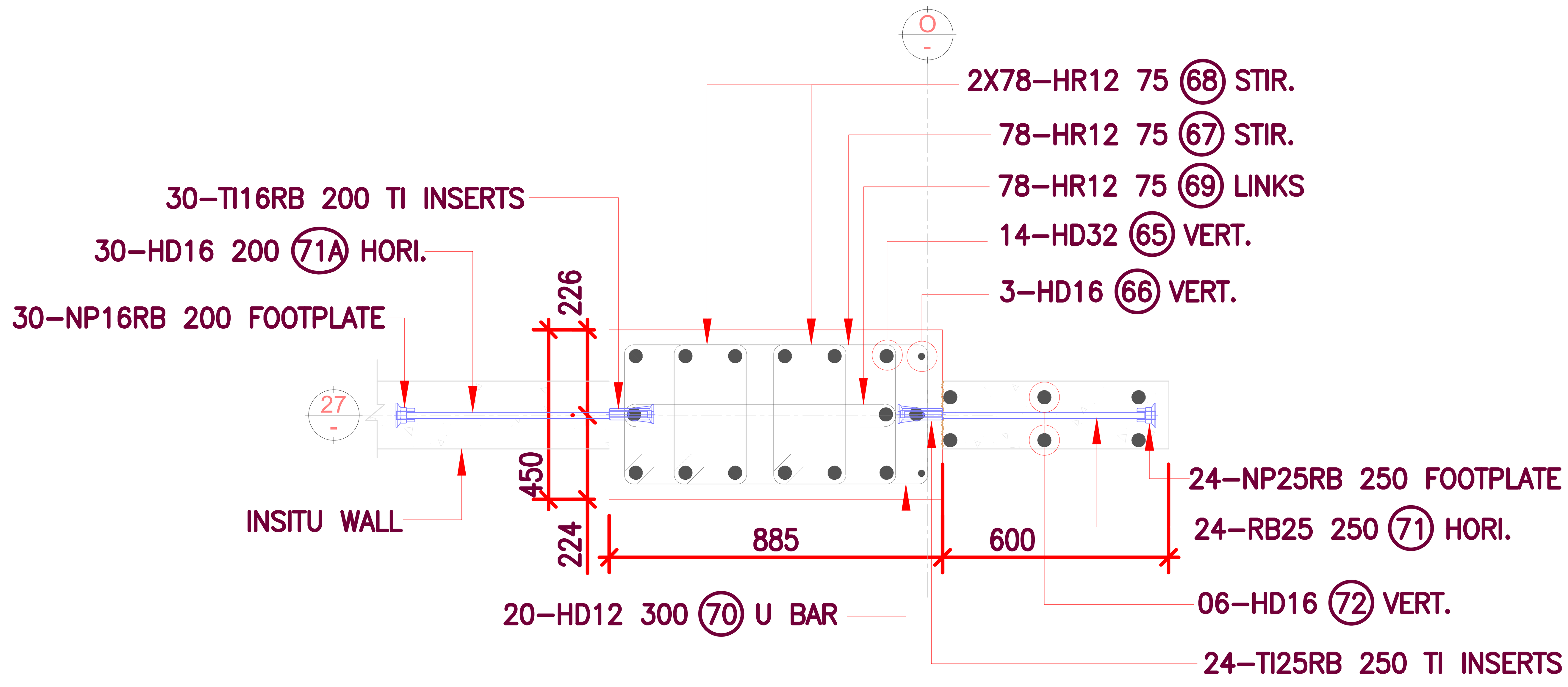
DWG No. S-60

REVISION 0





COLUMN SECTION GRID LINE 27/O
(SCALE–1:20) (1 NO.)



COLUMN PLAN GRID LINE 27/O
(SCALE–1:10)

DATE	REV	AMENDMENT
29.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 29.09.2017

PLAN AND SECTION OF COLUMN REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-2.
GRID LINE 27/O_BLOCK D

DATE:	29.09.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-59

REVISION 0

COLUMN GRID 29/O

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	56	R	HD32	0	14	31	0	5616	389	2000	0	0	64	0	384		VERTICAL
500E	57	R	HD16	0	3	31	0	5808	195	2000	0	0	32	0	192		VERTICAL
500E	58	P	HR12	75	78	T1	95	685	370	685	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	59	P	HR12	75	156	T1	95	185	370	185	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	60	P	HR12	75	78	1	94	680	0	0	0	94	0	36	0		STIRRUPS @ 75 CTRS
500E	61	R	HD12	300	20	17	0	800	370	800	0	0	0	0	0		U BAR @ 300CTRS
500E	62	R	RB25	200	58	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	63	R	RB16	200	29	S	0	830	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	64	R	HD16	0	6	S	0	7000	0	0	0	0	0	0	0		VERTICAL
500E	64A	R	HD20	0	3	S	0	7250	0	0	0	0	0	0	0		VERTICAL
	NP25RB	M	NP25RB	200	58												FOOTPLATE

COLUMN GRID 27/O

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	65	R	HD32	0	14	31	0	5616	389	2000	0	0	64	0	384		VERTICAL
500E	66	R	HD16	0	3	31	0	5809	192	1000	0	0	32	0	192		VERTICAL
500E	67	P	HR12	75	78	T1	95	685	370	685	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	68	P	HR12	75	156	T1	95	185	370	185	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	69	P	HR12	75	78	1	94	680	0	0	0	94	0	36	0		STIRRUPS @ 75 CTRS
500E	70	R	HD12	300	20	17	0	800	370	800	0	0	0	0	0		U BAR @ 300 CTRS
500E	71	R	RB25	250	24	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 250 CTRS
500E	71A	R	HD16	200	30	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 200 CTRS
500E	72	R	HD16	200	6	S	0	7000	0	0	0	0	0	0	0		VERTICAL
	NP25RB	M	NP25RB	250	24												FOOTPLATE
	TI25RB	M	TI25RB	250	24												TI INSERTS
	NP16RB	M	NP16RB	200	30												FOOTPLATE
	TI16RB	M	TI16RB	200	30												TI INSERTS

COLUMN GRID 27/L

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	73	R	HD32	0	14	31	0	5878	389	2000	0	0	64	0	384		VERTICAL
500E	74	P	HR12	75	81	T1	95	740	370	740	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	75	P	HR12	75	162	T1	95	196	370	196	370	95	0	0	0		STIRRUPS @ 75 CTRS
500E	76	P	HR12	75	81	1	94	740	0	0	0	94	0	36	0		STIRRUPS @ 75 CTRS
500E	77	R	RB20	250	25	S	0	650	0	0	0	0	0	0	0		HORIZONTAL @ 250 CTRS
500E	78	R	HD16	200	6	S	0	7237	0	0	0	0	0	0	0		VERTICAL
	NP20RB	M	NP20RB	250	25												FOOTPLATE
	TI20RB	M	TI20RB	250	25												TI INSERTS

DATE	REV	AMENDMENT
14.10.2017	1	CLOUDED BAR MARK REVISED
29.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 14.10.2017

PLAN AND SECTION OF COLUMN REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-2.
GRID LINE 29/O, 27/O & 27/L_BLOCK D

DATE: 29.09.2017
DESIGNED:
DRAWN: DP
CHECKED: HP
CAD REF.
SCALE: As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-60

REVISION 1

DATE	REV	AMENDMENT
14.10.2017	1	CLOUDED BAR MARK REVISED
29.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 14.10.2017

PLAN AND SECTION OF COLUMN REINFORCEMENT FROM GROUND FLOOR TO LEVEL-2. GRID LINE 29/O , 27/O & 27/L_BLOCK D

DATE:	29.09.2017
DESIGNED:	
DRAWN:	DP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3
JOB NUMBER:	11970
DWG No.	S-59
REVISION	1

WALL GRID 27

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	1	R	HD16	150	42	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	2	R	HD16	150	14	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	3	R	HD16	150	14	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	4	R	HD16	150	14	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	5	R	HD16	150	14	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	6	R	HD16	200	118	2	1855	200	0	0	0	1855	0	0	0	0	HORIZONTAL @ 200 CTRS

DATE	REV	AMENDMENT
28.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 28.09.2017

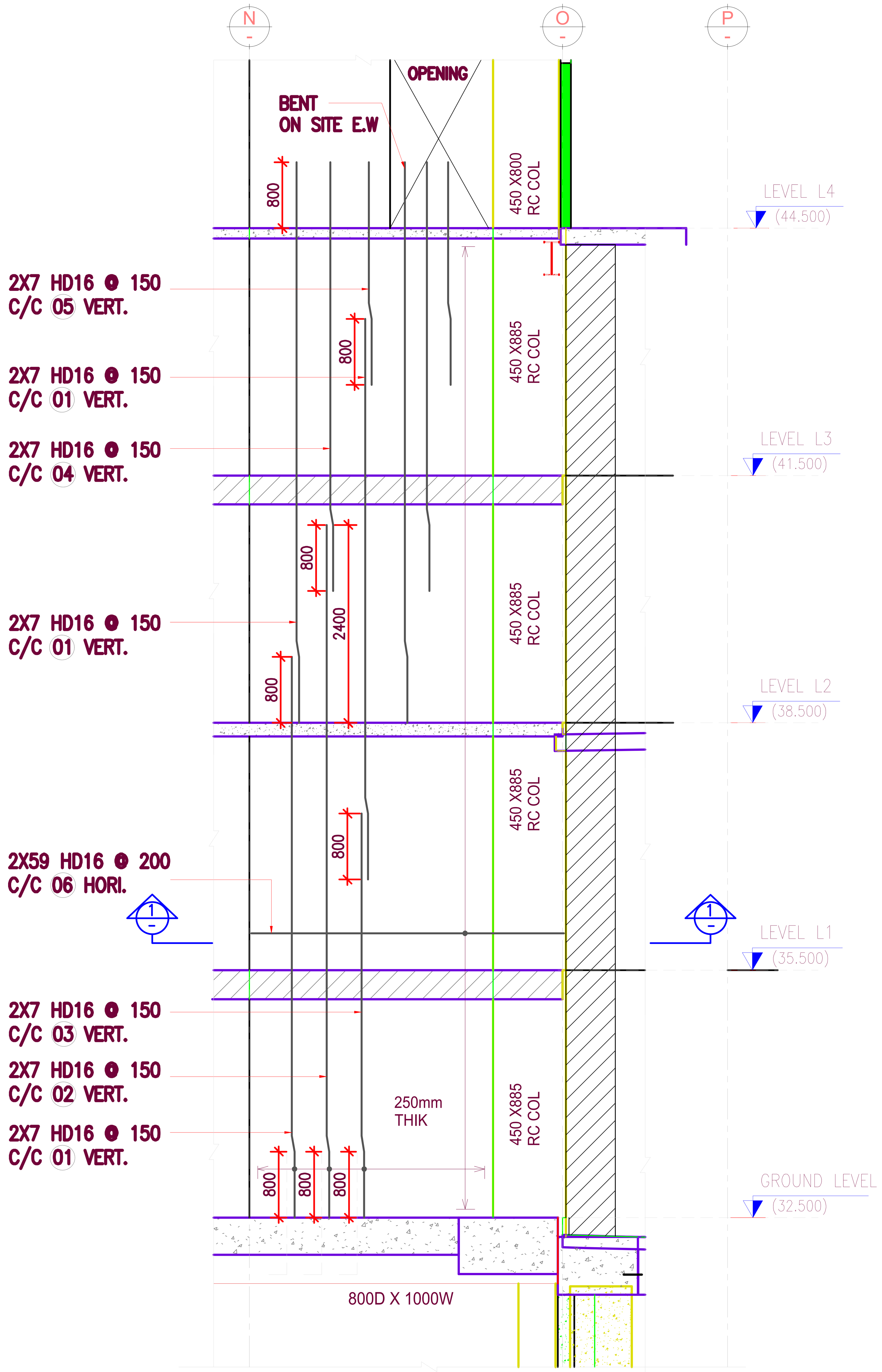
BAR BENDING SCHEDULE OF WALL REINFORCEMENT
FROM GROUND FLOOR TO LEVEL-4.
GRID LINE 27_BLOCK D

DATE:	28.09.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF.	
SCALE:	As indicated @ A1 @ A3

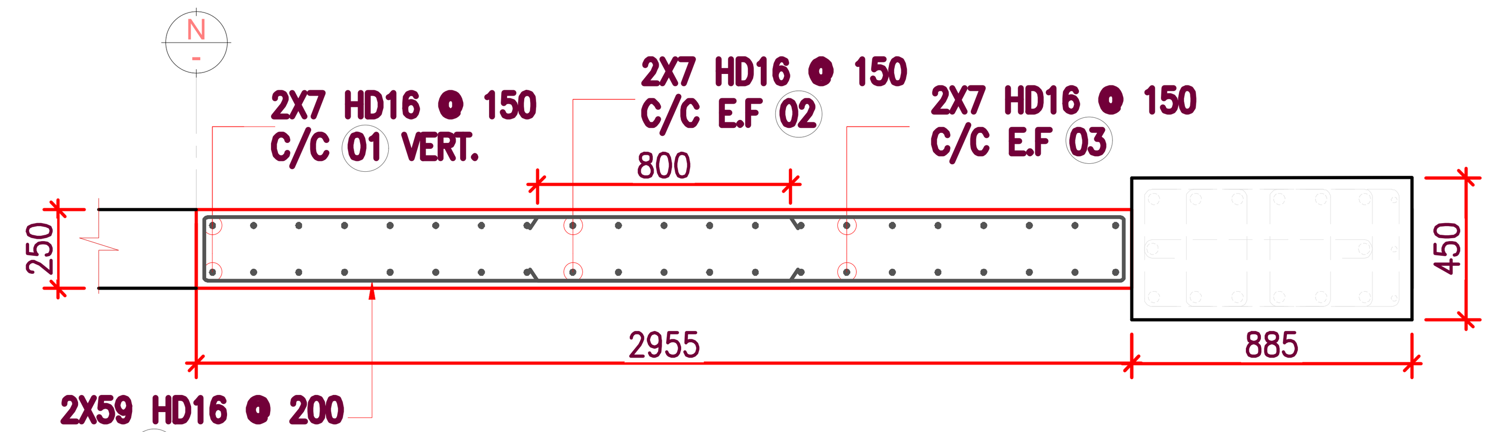
JOB NUMBER: 11970

DWG No. S-52

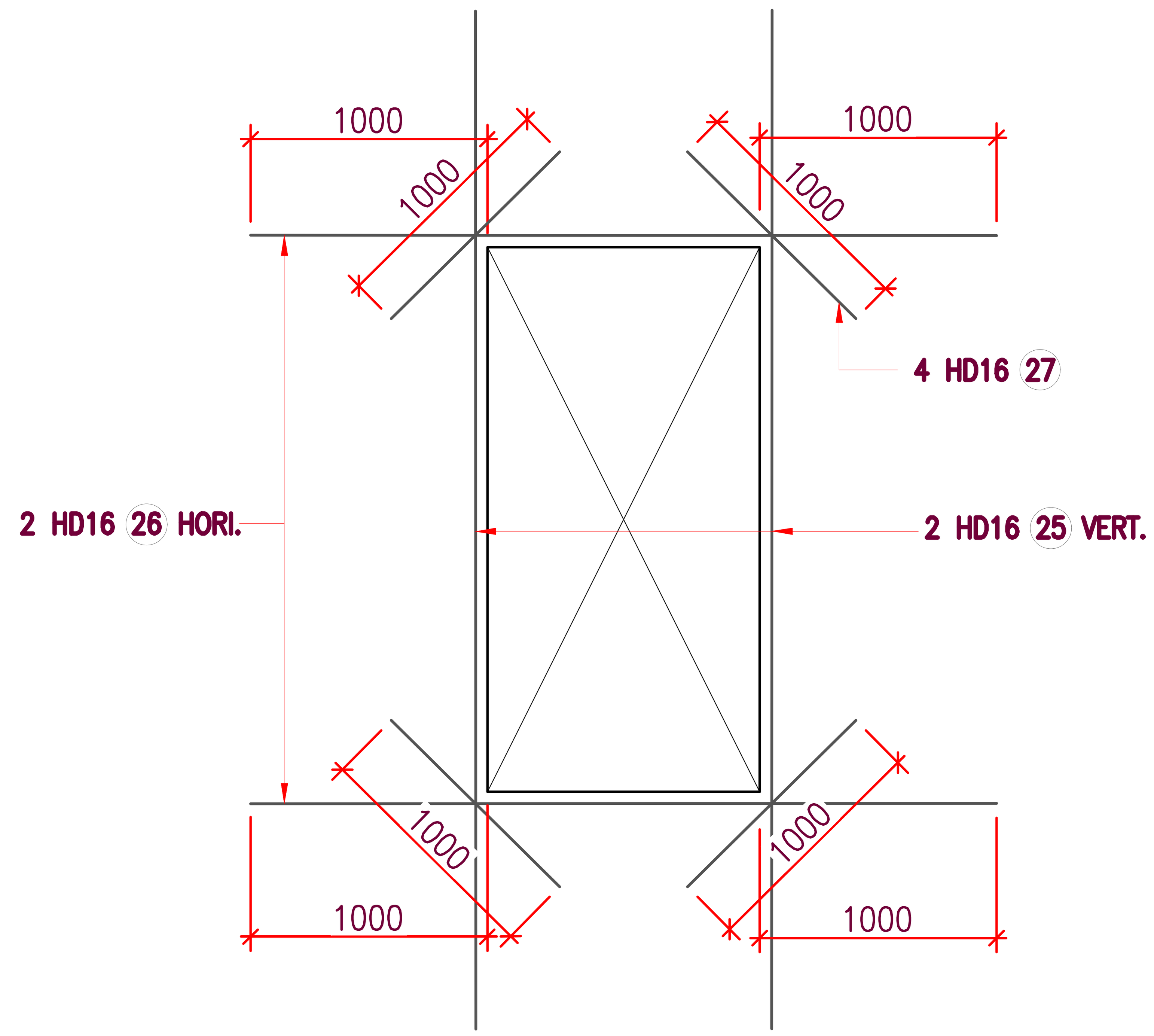
REVISION 0



INSITU WALL ELEVATION GRID LINE 27
(SCALE–1:40) (1 NO.)



1 WALL PLAN GRID LINE 27
(SCALE–1:20)



4 OPENING AND TRIMMER BAR DETAIL
(SCALE–1:20) (4 NO.)

KEY LEGEND :-

00 - 00 - 00-(00)- 00

- BAR MEMBER
- BAR MARK
- SPACING OF BARS
- DIA OF BARS
- NO OF BARS

DATE	REV	AMENDMENT
28.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 28.09.2017

PLAN AND ELEVATION OF WALL REINFORCEMENT FROM GROUND FLOOR TO LEVEL-4. GRID LINE 27_BLOCK D

DATE:	28.09.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No: S-51

REVISION: 0

WALL GRID 27

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	1	R	HD16	150	42	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	2	R	HD16	150	14	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	3	R	HD16	150	14	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	4	R	HD16	150	14	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	5	R	HD16	150	14	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	6	R	HD16	200	118	2	1855	200	0	0	0	1855	0	0	0	0	HORIZONTAL @ 200 CTRS

WALL GRID N-

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	7	R	HD16	200	54	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	8	R	HD16	200	18	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	9	R	HD16	200	18	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	10	R	HD16	200	18	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	11	R	HD16	200	18	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	12	R	HD16	200	118	2	800	150	0	0	0	800	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	12A	R	HD16	200	118	S	0	5130	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
300E	12B	P	D12	200	24	2	150	875	0	0	0	0	0	0	0	0	SLAB DOWEL BAR @ 200 CTRS

WALL GRID N+

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	13	R	HD16	150	36	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	14	R	HD16	150	12	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	15	R	HD16	150	12	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	16	R	HD16	150	12	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	17	R	HD16	150	12	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	18	R	HD16	150	92	2	1200	200	0	0	0	1200	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	18A	R	HD16	150	92	S	0	4330	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	19	P	HR16	200/100	34	T1	125	680	200	680	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
500E	20	P	HR16	200	34	T1	125	1090	200	1090	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
500E	21	P	HR16	200	34	T1	125	480	200	480	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
300E	22	P	D12	200	24	2	150	925	0	0	0	0	0	0	0	0	SLAB DOWEL BAR @ 200 CTRS
	23 (OMITED)																
500E	24	R	HD16	150	64	2	200	3650	0	0	0	200	0	0	0	0	VERTICAL @ 150 CTRS
500E	25	R	HD16	0	8	S	0	4300	0	0	0	0	0	0	0	0	TRIMMER BAR
500E	26	R	HD16	0	8	S	0	3200	0	0	0	0	0	0	0	0	TRIMMER BAR
500E	27	R	HD16	0	16	S	0	1000	0	0	0	0	0	0	0	0	DIAGONAL

DATE	REV	AMENDMENT
28.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 28.09.2017

BAR BENDING SCHEDULE OF IN-SITU WALL REINFORCEMENT FROM GROUND FLOOR TO LEVEL-4. GRID LINE 27, N-,N+_BLOCK D

DATE: 28.09.2017
DESIGNED:
DRAWN: KP
CHECKED: HP
CAD REF.
SCALE: As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-52

REVISION 0

WALL GRID 27

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	1	R	HD16	150	42	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	2	R	HD16	150	14	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	3	R	HD16	150	14	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	4	R	HD16	150	14	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	5	R	HD16	150	14	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	6	R	HD16	200	118	2	1855	200	0	0	0	1855	0	0	0	0	HORIZONTAL @ 200 CTRS

WALL GRID N-

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	7	R	HD16	200	54	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	8	R	HD16	200	18	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	9	R	HD16	200	18	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	10	R	HD16	200	18	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	11	R	HD16	200	18	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 200 CTRS
500E	12	R	HD16	200	118	2	800	150	0	0	0	800	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	12A	R	HD16	200	118	S	0	5130	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
300E	12B	P	D12	200	24	2	150	875	0	0	0	0	0	0	0	0	SLAB DOWEL BAR @ 200 CTRS

WALL GRID N+

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	G	H	J	K	O	COMMENTS
500E	13	R	HD16	150	36	31	0	800	195	5810	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	14	R	HD16	150	12	31	0	800	195	7410	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	15	R	HD16	150	12	31	0	800	195	3910	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	16	R	HD16	150	12	31	0	800	195	4210	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	17	R	HD16	150	12	31	0	800	195	1710	0	0	32	0	192	0	VERTICAL @ 150 CTRS
500E	18	R	HD16	150	92	2	1200	200	0	0	0	1200	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	18A	R	HD16	150	92	S	0	4330	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	19	P	HR16	200/100	34	T1	125	680	200	680	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
500E	20	P	HR16	200	34	T1	125	1090	200	1090	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
500E	21	P	HR16	200	34	T1	125	480	200	480	200	125	0	20	0	0	STIRRUPS @ 200 CTRS
300E	22	P	D12	200	24	2	150	925	0	0	0	0	0	0	0	0	SLAB DOWEL BAR @ 200 CTRS
	23 (OMITED)																
500E	24	R	HD16	150	64	2	200	3650	0	0	0	200	0	0	0	0	VERTICAL @ 150 CTRS
500E	25	R	HD16	0	8	S	0	4300	0	0	0	0	0	0	0	0	TRIMMER BAR
500E	26	R	HD16	0	8	S	0	3200	0	0	0	0	0	0	0	0	TRIMMER BAR
500E	27	R	HD16	0	16	S	0	1000	0	0	0	0	0	0	0	0	DIAGONAL

DATE	REV	AMENDMENT
28.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 28.09.2017

BAR BENDING SCHEDULE OF IN-SITU WALL REINFORCEMENT FROM GROUND FLOOR TO LEVEL-4. GRID LINE 27, N-,N+_BLOCK D

DATE:	28.09.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF.	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-52

REVISION 0

DATE	REV	AMENDMENT
28.09.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 28.09.2017

PLAN AND ELEVATION OF IN-SITU WALL REINFORCEMENT FROM GROUND FLOOR TO LEVEL-4 GRID LINE 27, N-,N+_BLOCK D

DATE:	28.09.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-51

REVISION 0

GRADE	ELEMENT	Material	BAR	SPACING	No.	SHAPE	A	B	C	D	E	F	G	H	J	K	O	COMMENTS
500E	1	R	HD16	200	83	2	200	9390	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
300E	1A	P	D20	150	124	2	1885	200	0	0	0	0	1885	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	2	R	HD16	200	158	2	200	3415	0	0	0	0	200	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	3	P	HR16	150	246	T1	125	800	335	800	335	0	125	0	0	0	0	STIRRUPS @ 150 CTRS
500E	4	P	HR16	150	246	T1	125	315	335	315	335	0	125	0	0	0	0	STIRRUPS @ 150 CTRS
500E	5	R	HD16	200	33	2	200	1455	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	5A	R	HD16	200	33	2	200	5060	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	6	R	HD16	200	128	S	0	12000	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	6A	R	HD16	150	25	S	0	12000	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	7	R	HD16	200	40	S	0	8400	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	8	R	RB20	150	94	2	240	1230	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	9	R	HD16	200	45	2	200	8520	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	10	R	HD16	200	2	2	200	8310	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	10A	R	HD16	200	2	2	200	4710	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	11	R	HD16	200	8	S	0	9900	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	12	R	HD16	150	9	2	200	3425	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	12A	R	HD16	150	10	2	200	7230	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	13	R	HD32	0	10	S	0	12000	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	14	R	HD32	0	10	2	300	6870	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS
500E	15	R	HD16	150	34	2	200	5125	0	0	0	0	200	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	16	R	HD16	150	23	2	200	5125	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	17	R	HD16	150	18	2	200	8380	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	17A	R	HD16	150	18	2	200	1430	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	18	R	HD16	150	7	2	200	4925	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	19	R	HD16	150	31	2	200	2900	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
300E	19A	P	D20	150	57	2	200	2900	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	20	R	HD16	150	8	2	200	6880	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	20A	R	HD16	150	7	2	200	1180	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	21	R	HD16	150	8	2	200	5775	0	0	0	0	200	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	22	R	HD16	150	4	2	200	1860	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	23	R	HD16	150	34	2	200	2955	0	0	0	0	200	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	24	R	HD16	150	70	2	200	5430	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 150 CTRS
500E	25	R	HD16	200	54	2	200	6075	0	0	0	0	0	0	0	0	0	HORIZONTAL @ 200 CTRS

DATE	REV	AMENDMENT
07.11.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE: 07.11.2017

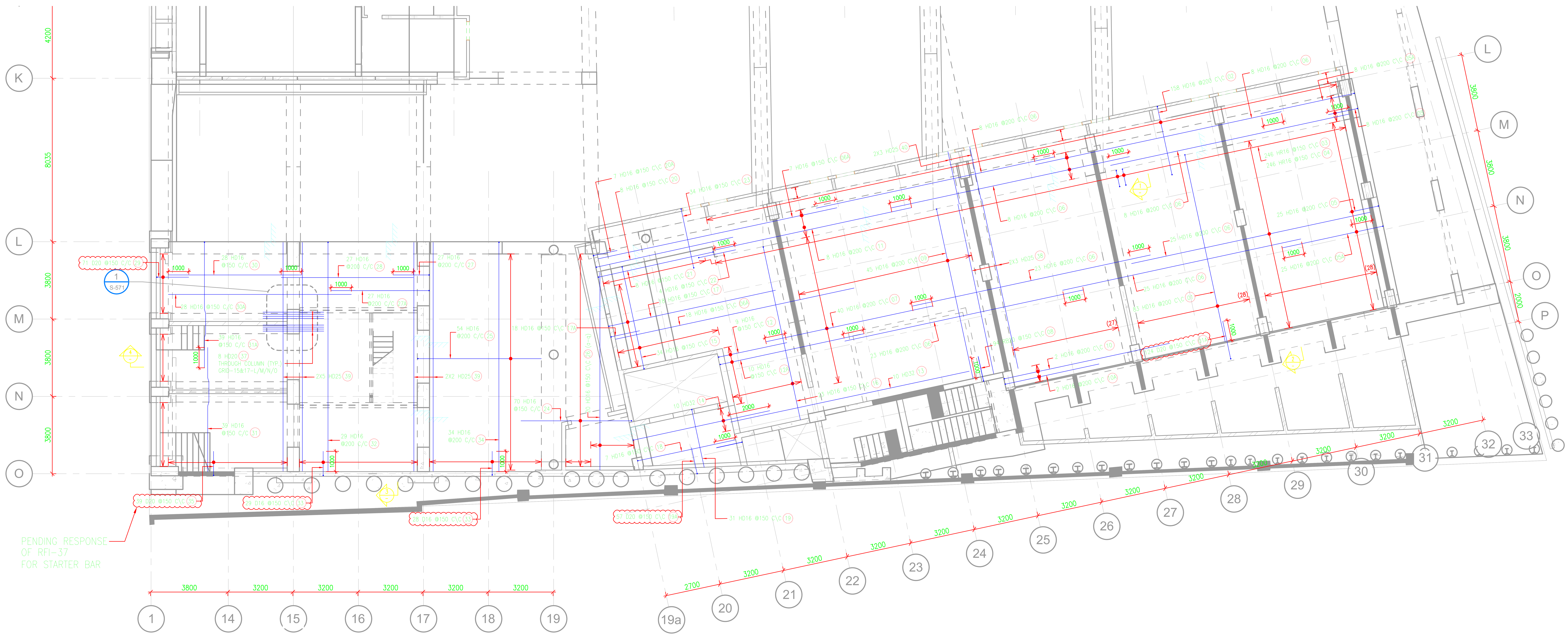
BAR BENDING SCHEDULE OF GROUND FLOOR SLAB BLOCK-D

DATE: 07.11.2017
DESIGNED:
DRAWN: KP
CHECKED: HP
CAD REF:
SCALE: As indicated @ A1 @ A3

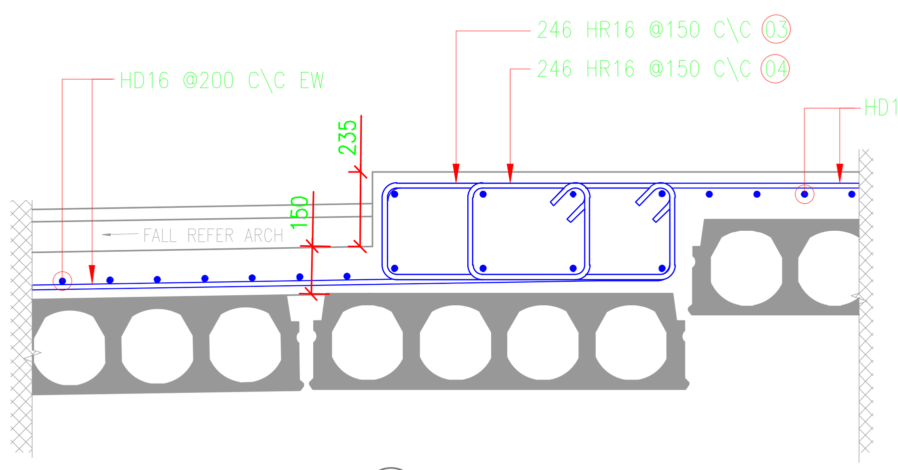
JOB NUMBER: 11970

DWG No: S-572

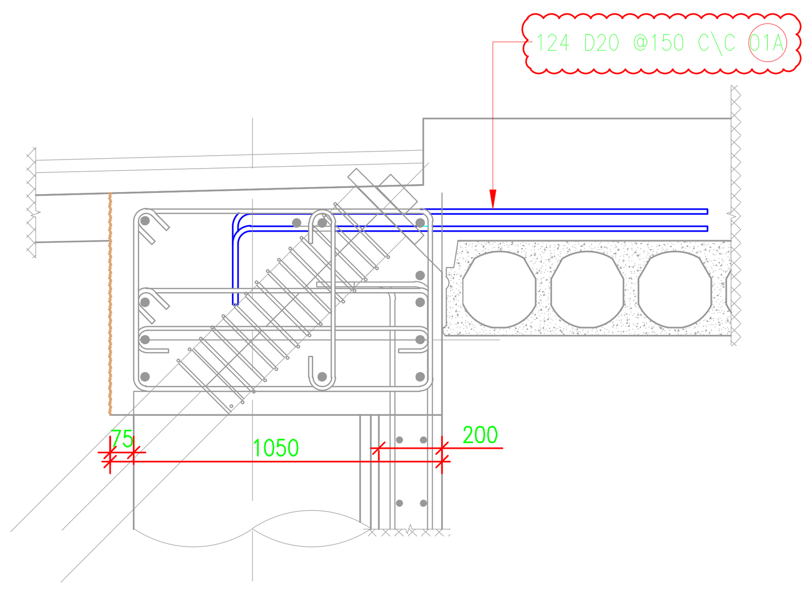
REVISION: 0



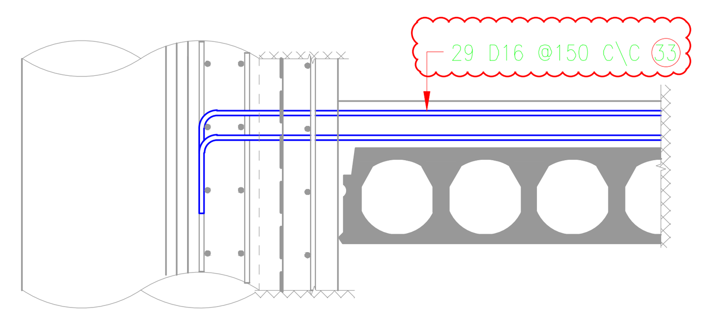
GROUND FLOOR SLAB LAYOUT
(SCALE-1:100)



1 SECTION



2 SECTION



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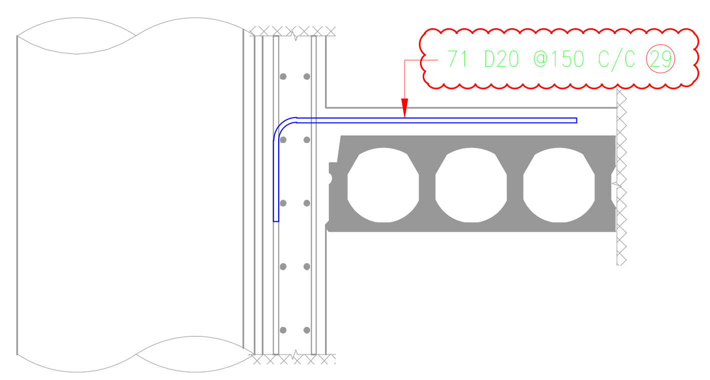
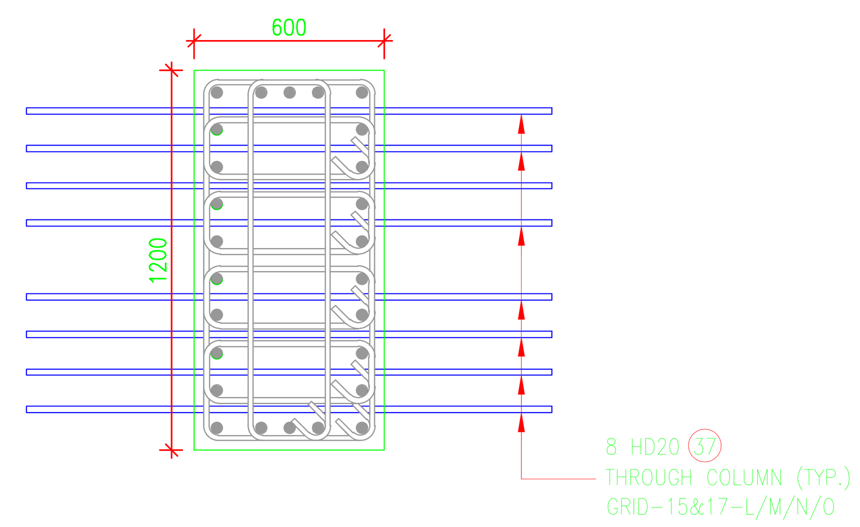


4 SECTION



DETAIL-1

KEY LEGEND :-

00 - 00 - 00- 00 - 00

- BAR MEMBER
- BAR MARK
- SPACING OF BARS
- DIA OF BARS
- NO OF BARS

DATE	REV	AMENDMENT
07.11.2017	0	FOR APPROVAL

CONSULTANT:

PROJECT:

DRAWING TITLE:

GROUND FLOOR SLAB LAYOUT
BLOCK-D

07.11.2017

DATE:	07.11.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @ A1 @ A3

JOB NUMBER: 11970

DWG No. S-571

REVISION 0

GROUND FLOOR SLAB LAYOUT

(SCALE-1:50)

KEY LEGEND :-

00 - 00 - 00- 00 - 00

BAR MEMBER
BAR MARK
SPACING OF BARS
DIA OF BARS
NO OF BARS

07.11.2017	0	FOR APPROVAL
DATE	REV	AMENDMENT

CONSULTANT:

PROJECT:

DRAWING TITLE: 07.11.2017

GROUND FLOOR SLAB LAYOUT
BLOCK-D

DATE:	07.11.2017	JOB NUMBER:	11970
DESIGNED:			
DRAWN:	KP	DWG No.	S-571
CHECKED:	HP	REVISION	0
CAD REF:			
SCALE:	As indicated @A1 @A3		

GROUND FLOOR SLAB LAYOUT
(SCALE-1:50)

KEY LEGEND :-

00 - 00 - 00- 00 - 00

- BAR MEMBER
- BAR MARK
- SPACING OF BARS
- DIA OF BARS
- NO OF BARS

07.11.2017	0	FOR APPROVAL
DATE	REV	AMENDMENT

CONSULTANT:

PROJECT:

DRAWING TITLE: 07.11.2017

GROUND FLOOR SLAB LAYOUT
BLOCK-D

DATE:	07.11.2017
DESIGNED:	
DRAWN:	KP
CHECKED:	HP
CAD REF:	
SCALE:	As indicated @A1 @A3

JOB NUMBER: 11970

DWG No: S-571

REVISION: 0

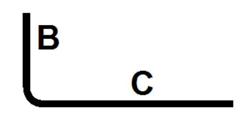
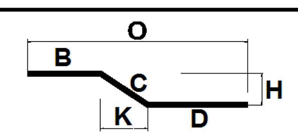
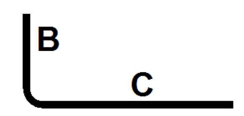
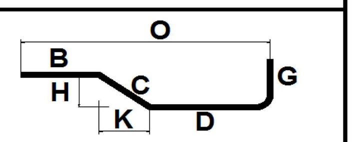
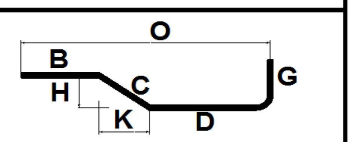
REBAR DETAILING SAMPLES

JEDDAH INTERNATIONAL AIRPORT

BAR BENDING SCHEDULE

Aircraft Maintenance Hangers Project Jeddah

Drawing No:-	433-A001-S-SH-11-2-1901	Rev	11	Date Prepared	23.04.2014	SHEET	04	OF	12

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm *	TOTAL Wt KG	BAR SHAPE
GIRDER B1-219 / B1-219A	40	1	4	4	T 25	2735	17		600	2135										42.16	
	41	1	4	4	T 25	11200	0		11200											172.65	STRAIGHT
	42	1	4	4	T 25	8400	0		8400											129.49	STRAIGHT
	43	1	4	4	T 25	3555	31		1375	305	1875				50		300	3550		54.80	
	44	1	4	4	T 25	11100	0		11100											171.11	STRAIGHT
	45	1	4	4	T 25	8320	0		8320											128.26	STRAIGHT
	46	1	4	4	T 25	2735	17		600	2135										42.16	
	47	1	3	3	T 25	8340	6		1375	305	6060			600	50		300	7735		96.42	
	48	1	3	3	T 25	12000	0		12000											138.74	STRAIGHT
	49	1	4	4	T 25	10880	0		10880											167.72	STRAIGHT
	50	1	3	3	T 25	8240	6		1375	305	5960			600	50		300	7635		95.27	
																		Weight		1238.78	

NOTES / LEGENDS

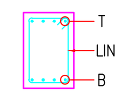
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR BEAM REINFORCEMENT = 40 mm

6. LEGEND FOR CALLOUT

5X8 T20 01 150 T1
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION
- FB – FACE BAR
- T – THICKNESS
- T.O.C – TOP OF CONCRETE
- SF – SIDE FACE
- EF – EACH FACE
- CJ – CONSTRUCTION JOINT
- EXJ – EXPANSION JOINT
- EL – ELEVATION

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1080	1375	1375	1785
T32	1355	1760	1760	2285



BEAM SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-52-2-1012	05	LEVEL 2 FRAMING PLAN AREA AA12
02	433-A001-S-FD-51-F-1012	05	FOUNDATION PLAN (AREA AA12)
03	433-A001-S-FD-58-X-0021	05	CONCRETE BEAM SCHEDULE
04	433-A001-S-FD-58-X-0010	05	CONCRETE COLUMN SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	16.04.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

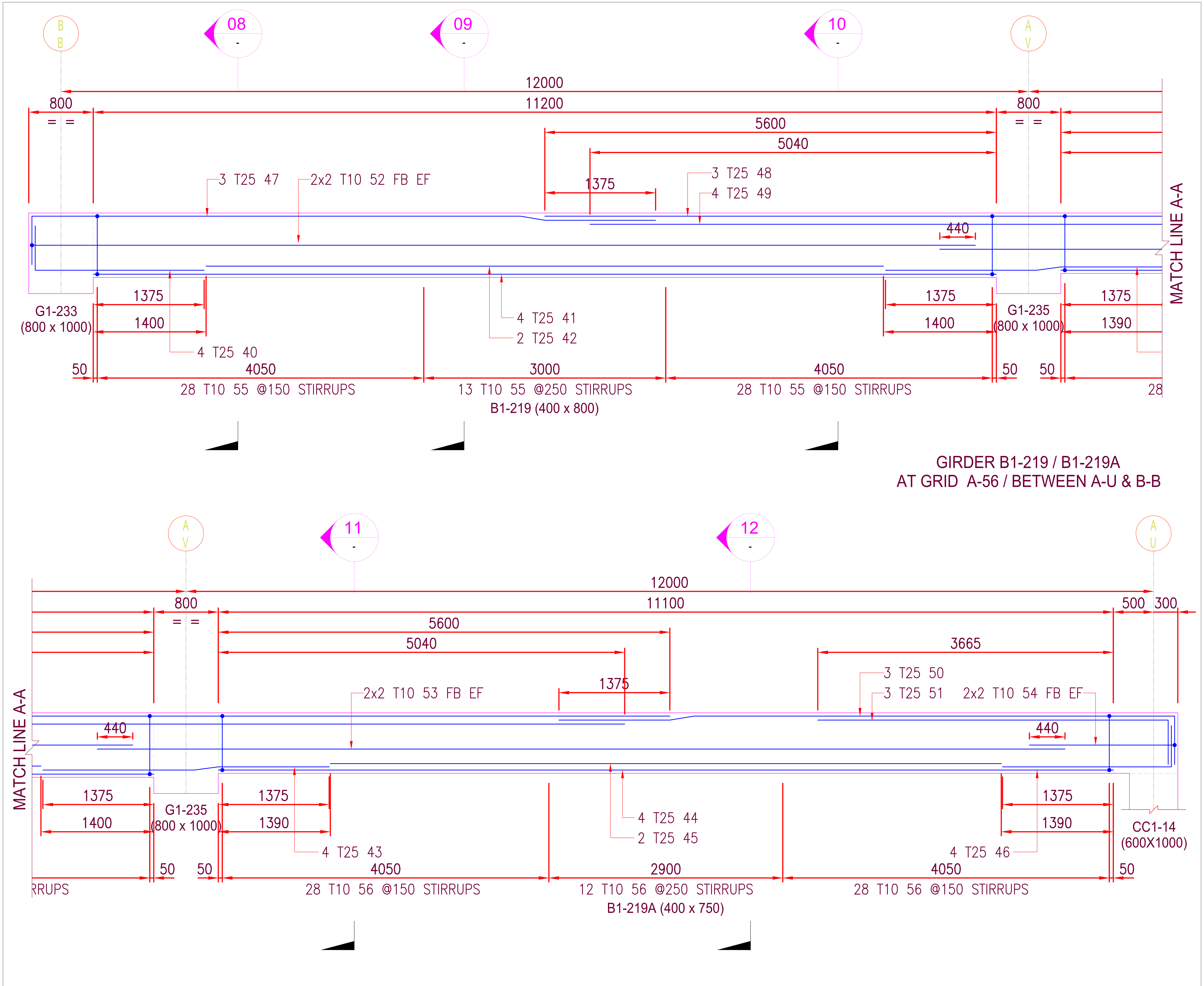
PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

LEVEL-2 BEAM
REINFORCEMENT DETAILS - AREA AA12
SHEET 1 OF 8

PROJECT NUMBER	DRAWING NUMBER	REV.
SIZE A0 / SCALE	S-SH-11-2-1901	11



01 TO 115 BAR MARK FOR BEAM REINFORCEMENT

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR BEAM REINFORCEMENT = 40 mm

6. LEGEND FOR CALLOUT

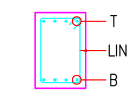
5X8 T20 01 150 T1
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION

- FB – FACE BAR
- T – THICKNESS
- T.O.C – TOP OF CONCRETE
- SF – SIDE FACE
- EF – EACH FACE
- CJ – CONSTRUCTION JOINT
- EXJ – EXPANSION JOINT
- EL – ELEVATION

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



BEAM SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-52-2-1012	05	LEVEL 2 FRAMING PLAN AREA AA12
02	433-A001-S-FD-51-F-1012	05	FOUNDATION PLAN (AREA AA12)
03	433-A001-S-FD-58-X-0021	05	CONCRETE BEAM SCHEDULE
04	433-A001-S-FD-58-X-0010	05	CONCRETE COLUMN SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	16.04.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

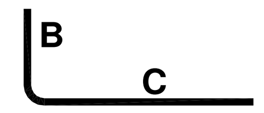
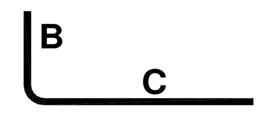
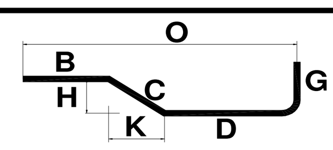
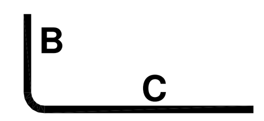
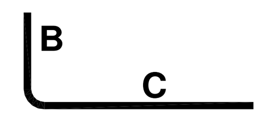
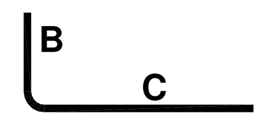
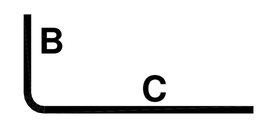
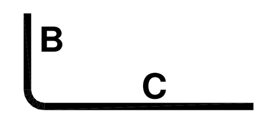
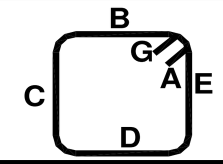
DRAWING TITLE:

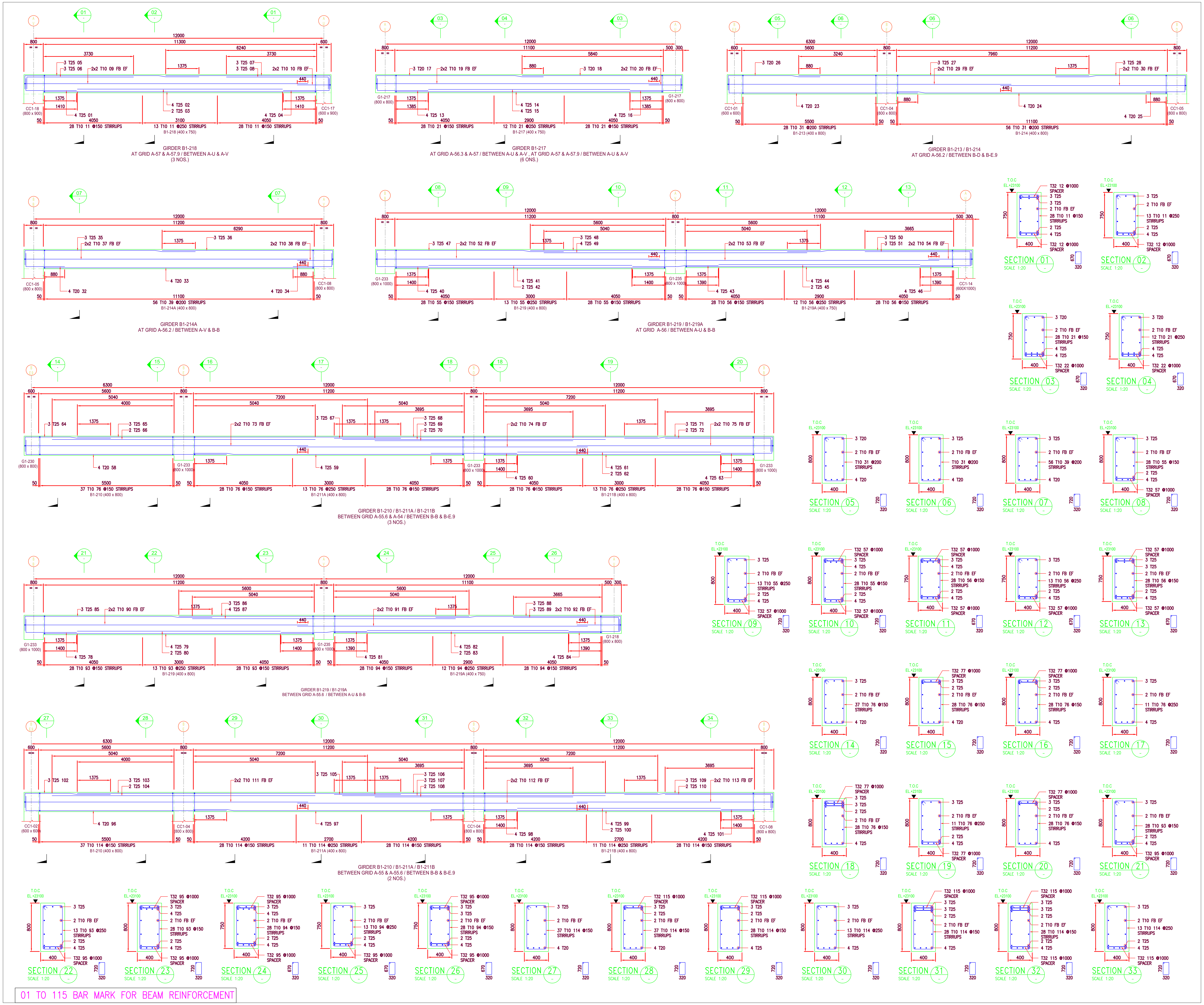
LEVEL-2 BEAM
REINFORCEMENT DETAILS - AREA AA12
SHEET 1 OF 8

PROJECT NUMBER	DRAWING NUMBER	REV.
	S-SH-11-2-1901	11
SIZE: A0 / SCALE: 1:15		

BAR BENDING SCHEDULE

Drawing No:-	433-A001-S-SH-11-2-1901	Rev	11	Date Prepared	23.04.2014	SHEET	01	OF	12

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
GIRDER B1-218	01	3	4	12	T 25	2685	17		550	2135										124.17	
	02	3	4	12	T 25	11300	0		11300											522.58	STRAIGHT
	03	3	2	6	T 25	8480	0		8480											196.08	STRAIGHT
	04	3	4	12	T 25	2485	17		550	1935										114.92	
	05	3	3	9	T 25	7750	6		1375	305	5520			550	50		300	7195		268.81	
	06	3	3	9	T 25	5040	17		550	4490										174.81	
	07	3	3	9	T 25	7350	17		550	6800										254.93	
	08	3	3	9	T 25	4840	17		550	4290										167.87	
	09	3	4	12	T 10	12000	17		300	11700										88.79	
	10	3	4	12	T 10	1660	17		300	1360										12.28	
	11	3	69	207	T 10	2210	T1	115	320	670	320	670		115						282.08	
	12	3	16	48	T 32	320	0		320											96.99	STRAIGHT
																		Weight		2304.33	



NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR BEAM REINFORCEMENT = 40 mm

6. LEGEND FOR CALLOUT

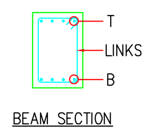
5X8 T20 01 150 T1

- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION

- FB – FACE BAR
- T – THICKNESS
- T.O.C – TOP OF CONCRETE
- SF – SIDE FACE
- EF – EACH FACE
- CJ – CONSTRUCTION JOINT
- EXJ – EXPANSION JOINT
- EL – ELEVATION

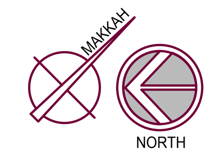
LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-52-2-1012	05	LEVEL 2 FRAMING PLAN AREA AA12
02	433-A001-S-FD-51-F-1012	05	FOUNDATION PLAN (AREA AA12)
03	433-A001-S-FD-58-X-0021	05	CONCRETE BEAM SCHEDULE
04	433-A001-S-FD-58-X-0010	05	CONCRETE COLUMN SCHEDULE

KEY PLAN



REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	ISSUED FOR APPROVAL	JT	NP	23.04.2014
10	ISSUED FOR APPROVAL	JT	NP	16.04.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

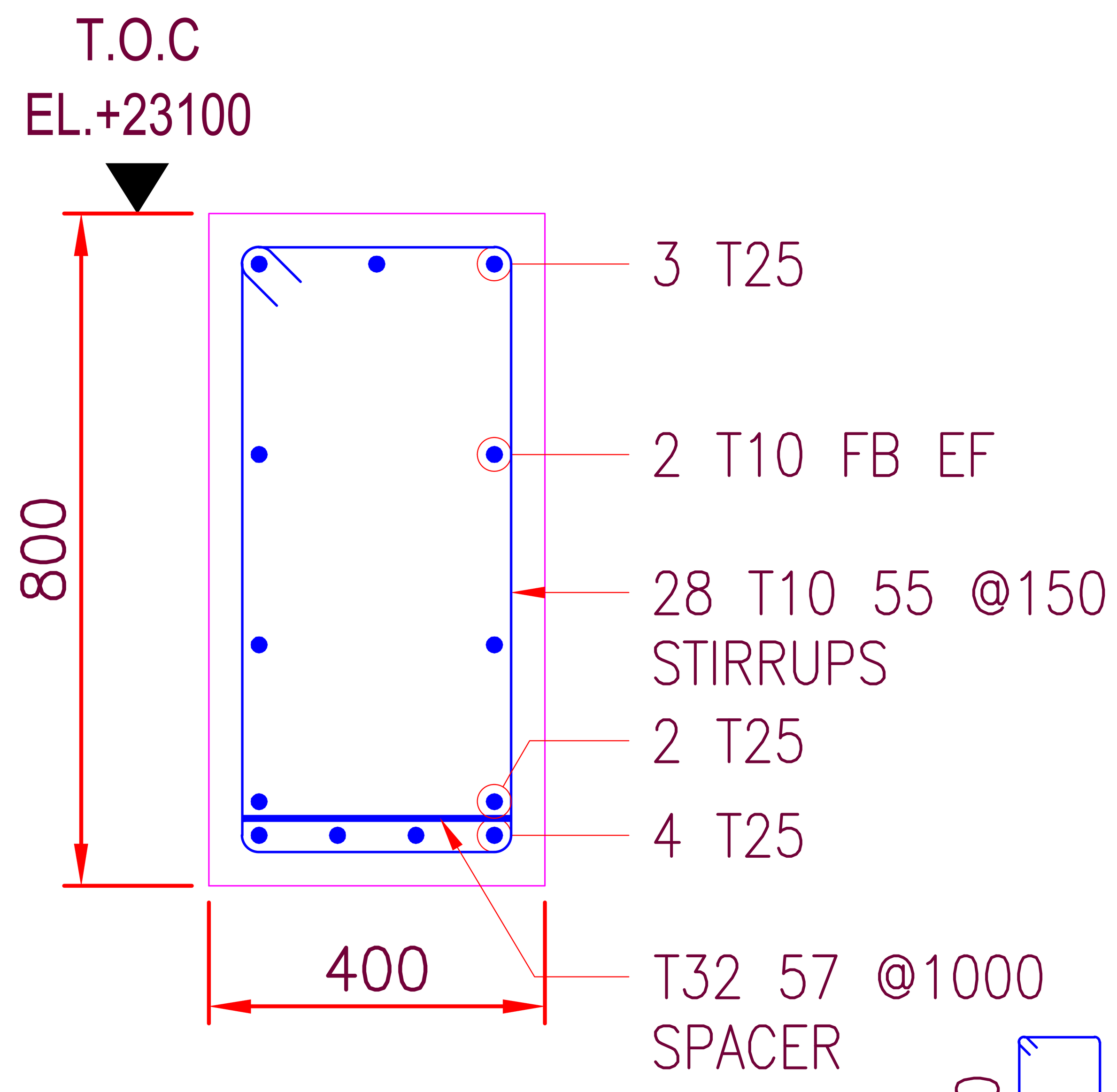
SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

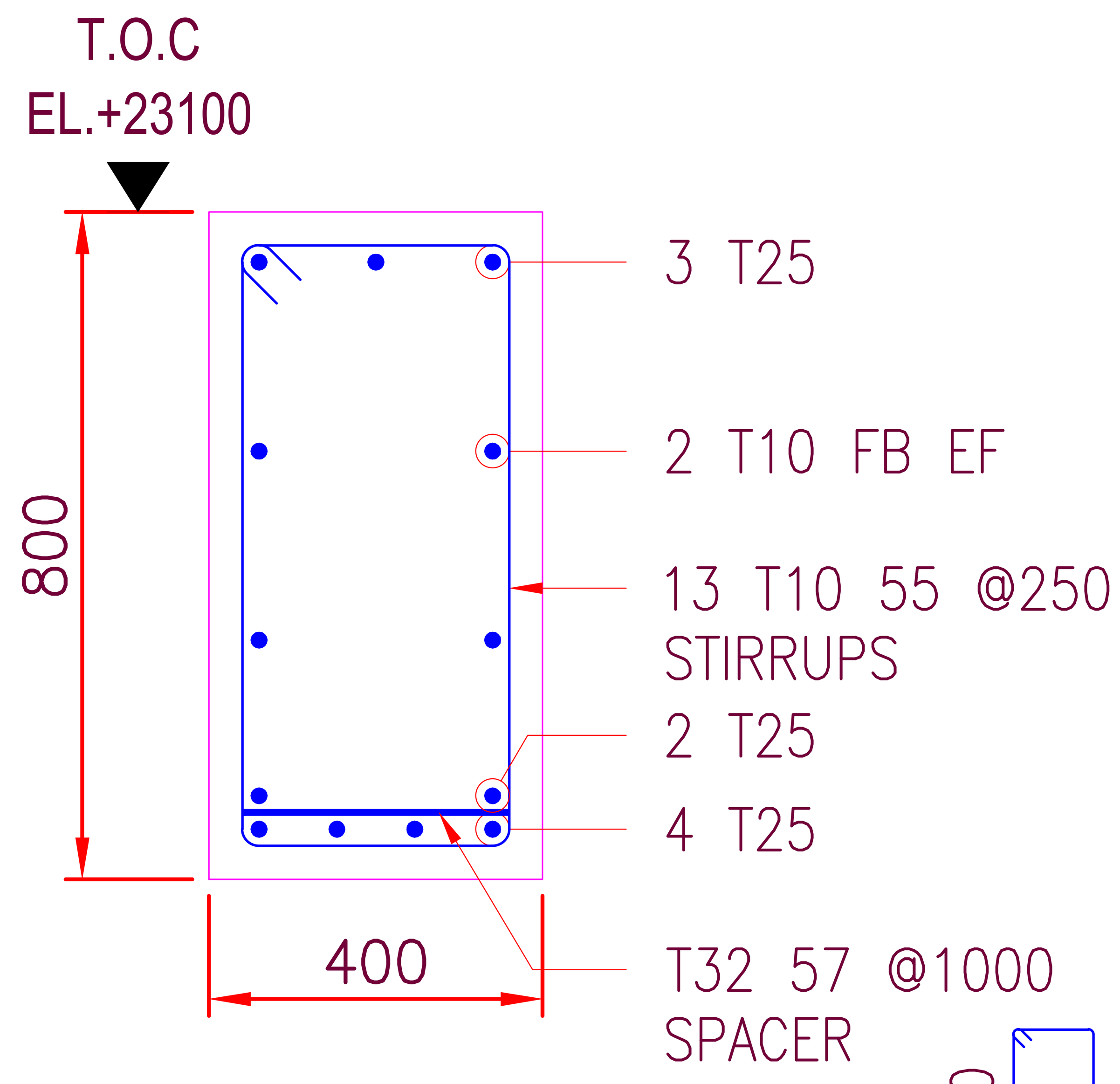
LEVEL-2 BEAM
REINFORCEMENT DETAILS - AREA AA12
SHEET 1 OF 8

PROJECT NUMBER	DRAWING NUMBER	REV.
	433-A001-S-SH-11-2-1901	11

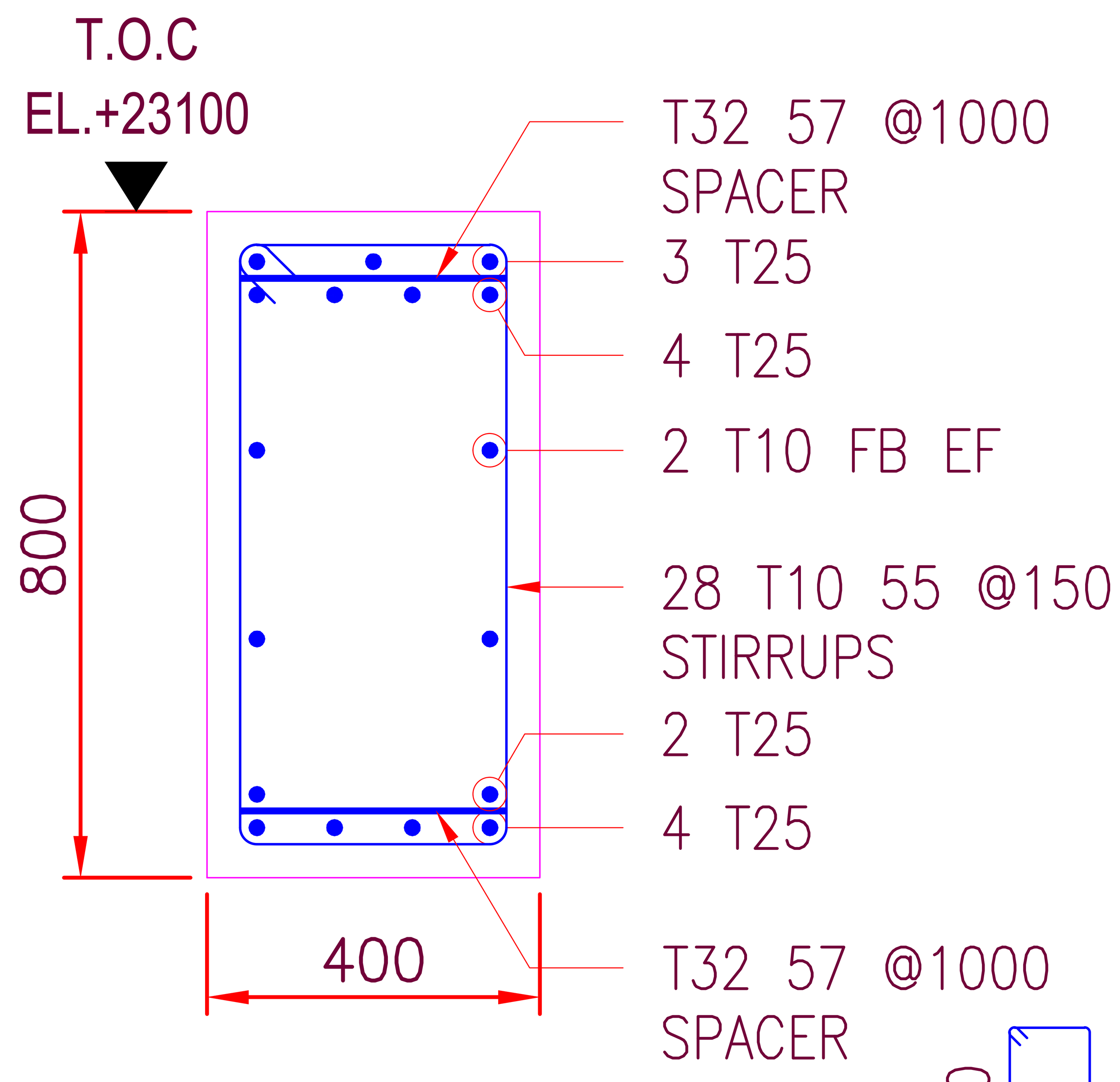
SIZE	SCALE
A0	1:50 / 1:20



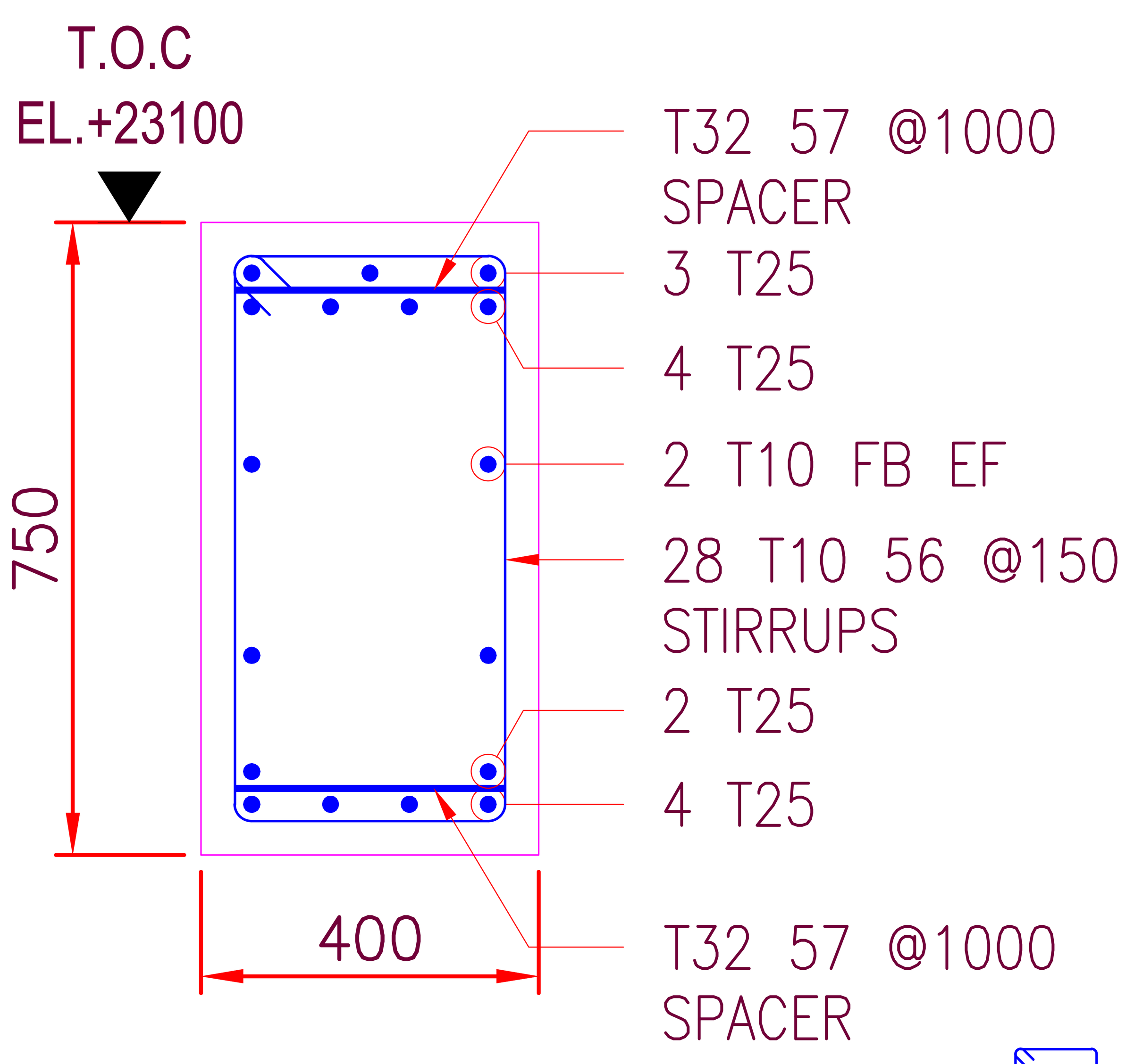
SECTION 08 -
SCALE 1:5



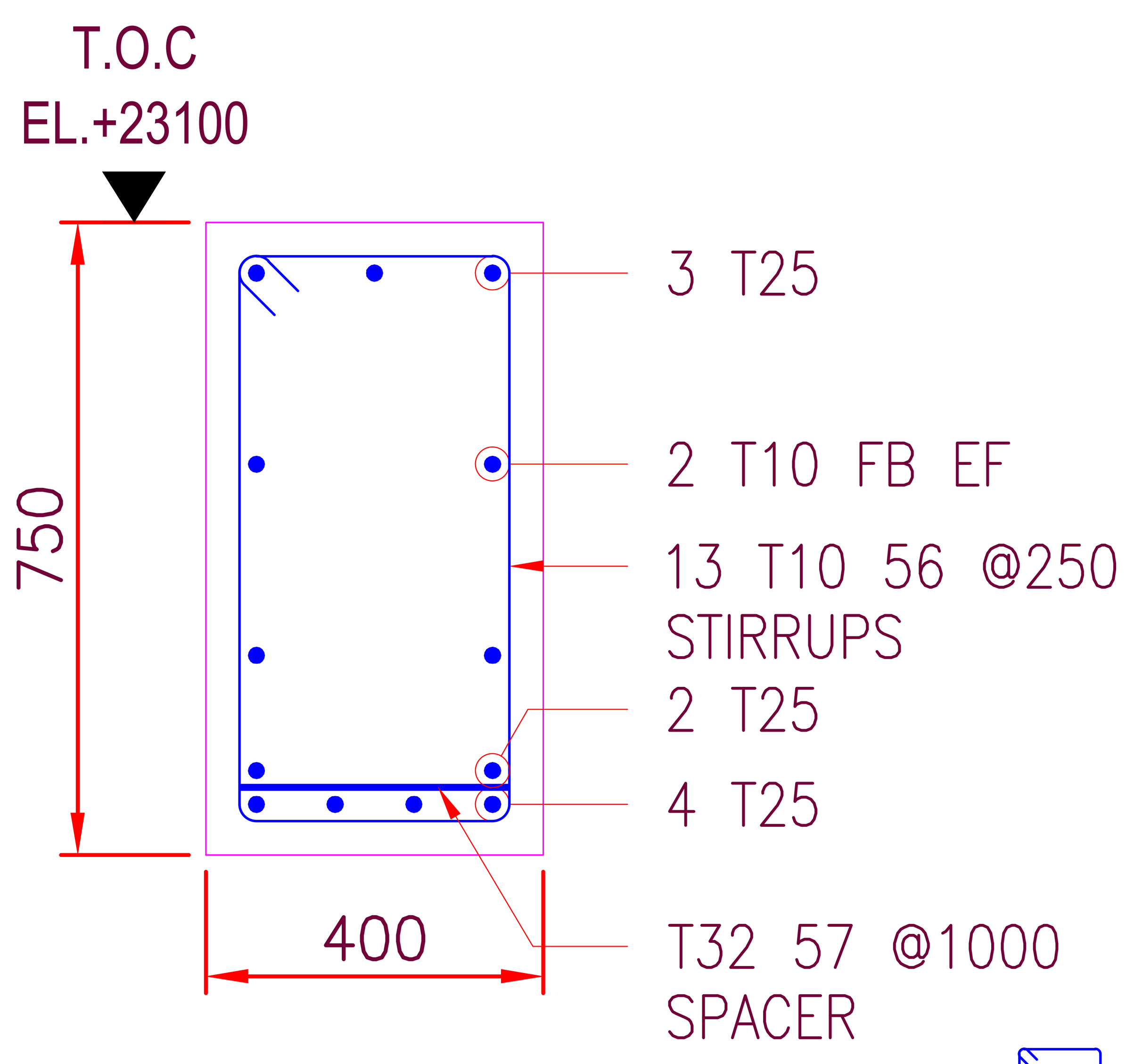
SECTION 09 -
SCALE 1:5



SECTION 10 -
SCALE 1:5



SECTION 11 -
SCALE 1:5



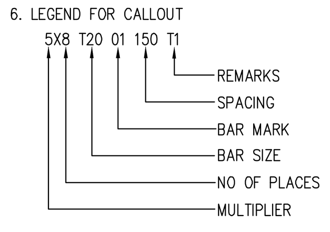
SECTION 12 -
SCALE 1:5

01 TO 115 BAR MARK FOR BEAM REINFORCEMENT

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR BEAM REINFORCEMENT = 40 mm

6. LEGEND FOR CALLOUT

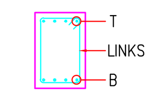


7. ABBREVIATION

FB – FACE BAR
T – THICKNESS
T.O.C – TOP OF CONCRETE
SF – SIDE FACE
EF – EACH FACE
CJ – CONSTRUCTION JOINT
EXJ – EXPANSION JOINT
EL – ELEVATION

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



BEAM SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-52-2-1012	05	LEVEL 2 FRAMING PLAN AREA AA12
02	433-A001-S-FD-51-F-1012	05	FOUNDATION PLAN (AREA AA12)
03	433-A001-S-FD-58-X-0021	05	CONCRETE BEAM SCHEDULE
04	433-A001-S-FD-58-X-0010	05	CONCRETE COLUMN SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	16.04.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:
AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

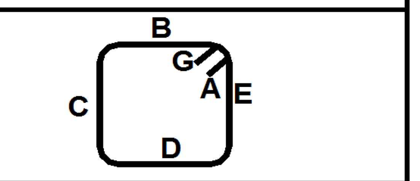
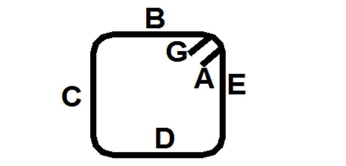
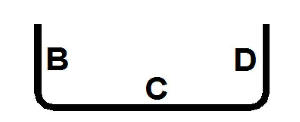
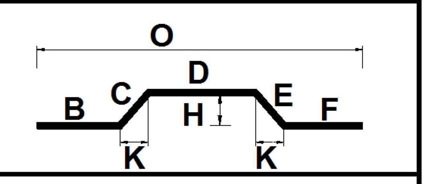
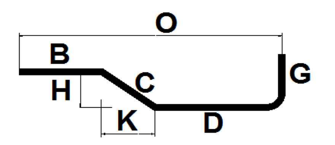
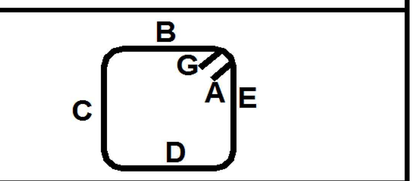
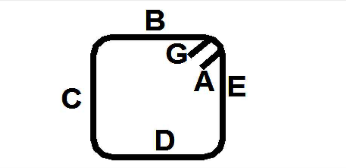
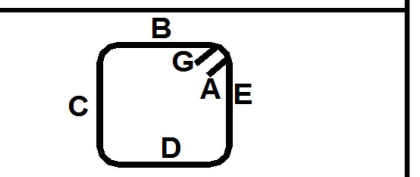
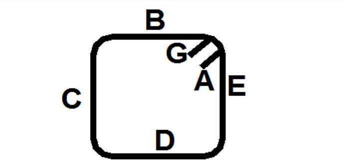
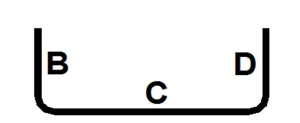
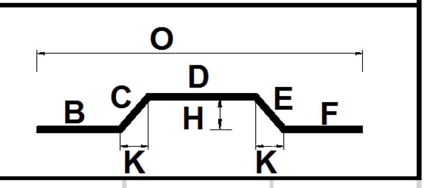
PHASE & DISCIPLINE:
SHOP DRAWING
STRUCTURAL

DRAWING TITLE:
LEVEL-2 BEAM
REINFORCEMENT DETAILS - AREA AA12
SHEET 1 OF 8

PROJECT NUMBER		DRAWING NUMBER	REV.
SIZE A0	SCALE	S-SH-11-2-1901	11

Aircraft Maintenance Hangers Project
Jeddah

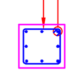
Drawing No:- 433-A001-S-SH-12-G-1902 | **Rev** 10 | **Date Prepared** 29.01.2014 | **SHEET** 2 **OF** 5

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE		TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
LINKS	51	3	62	186	T	10	3110	T1	115	720	720	720	720		115						356.69	
LINKS	52	3	110	330	T	10	2400	T1	115	385	700	385	700		115						488.36	
LINKS	53	3	44	132	T	10	1635	T1		720	195	720									133.08	
Column CC1-04 VERT.	54	1	16	16	T	25	9485	3		1375	305	4725	305	2775		50		300	9475		584.86	
VERT.	55	1	16	16	T	25	6880	6		5200	305	925			450	50		300	6425		424.23	
LINKS	56	1	7	7	T	10	3030	T1	115	700	700	700	700		115						13.08	
LINKS	57	1	14	14	T	10	2380	T1	115	375	700	375	700		115						20.55	
LINKS	58	1	64	64	T	10	3110	T1	115	720	720	720	720		115						122.73	
LINKS	59	1	106	106	T	10	2400	T1	115	385	700	385	700		115						156.87	
LINKS	60	1	22	22	T	10	1635	T1		720	195	720									22.18	
Column CC1-05 VERT.	61	2	20	40	T	25	8585	3		1375	305	3825	305	2775		50		300	8575		1323.42	
																			Weight		3289.35	

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR COLUMN REINFORCEMENT
   BELOW GROUND LEVEL – 50 mm
   ABOVE GROUND LEVEL – 40 mm
6. PROVIDE 19 mm CHAMFER STRIP AT ALL EXPOSED CORNERS OF CONCRETE WALLS, INCLUDING EXPOSED CORNERS OF CONCRETE PIERS.
7. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   REMARKS
   SPACING
   BAR MARK
   BAR SIZE
   NO OF PLACES
   MULTIPLIER
8. ABBREVIATION
   VERT. – VERTICAL
   C.J. – CONSTRUCTION JOINT
   TOF – TOP OF FOOTING
   SOG – SLAB ON GRADE

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1080	1375	1375	1785
T32	1355	1760	1760	2285



COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1012	03	FOUNDATION PLAN (AREA-AA12)
02	433-A001-S-FD-51-F-1112	02	SLAB ON GRADE PLAN (AREA-AA12)
03	433-A001-S-FD-52-1-1012	04	LAVEL1 FRAMING PLAN(AREA-AA12)
04	433-A001-S-FD-52-2-1012	04	LAVEL2 FRAMING PLAN(AREA-AA12)
05	433-A001-S-FD-58-X-0010	03	CONCRETE COLUMN SCHEDULE
06	433-A001-S-FD-58-X-0020	03	CONCRETE BEAM SCHEDULE
07	433-A001-S-FD-58-X-0021	04	CONCRETE BEAM SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
00	ISSUED FOR APPROVAL	PV	NP	13.02.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:
AIRCRAFT MAINTENANCE HANGARS

CLIENT:

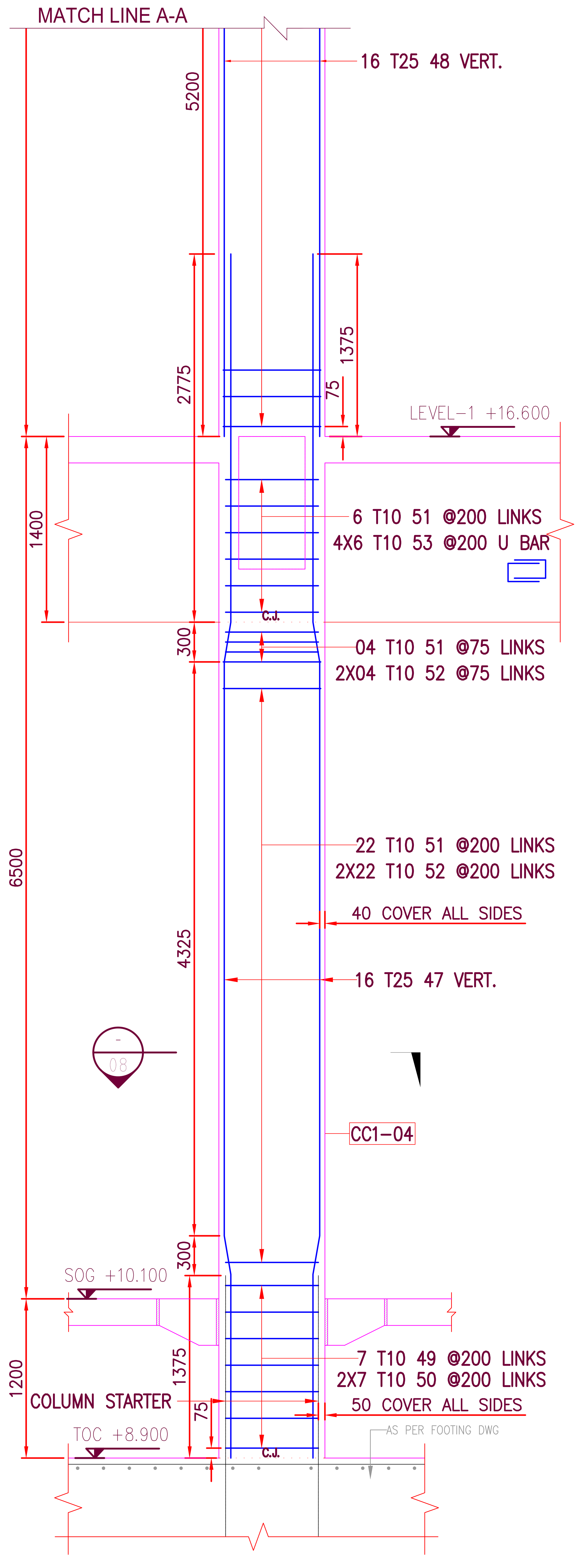
ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:
SHOP DRAWING
STRUCTURAL

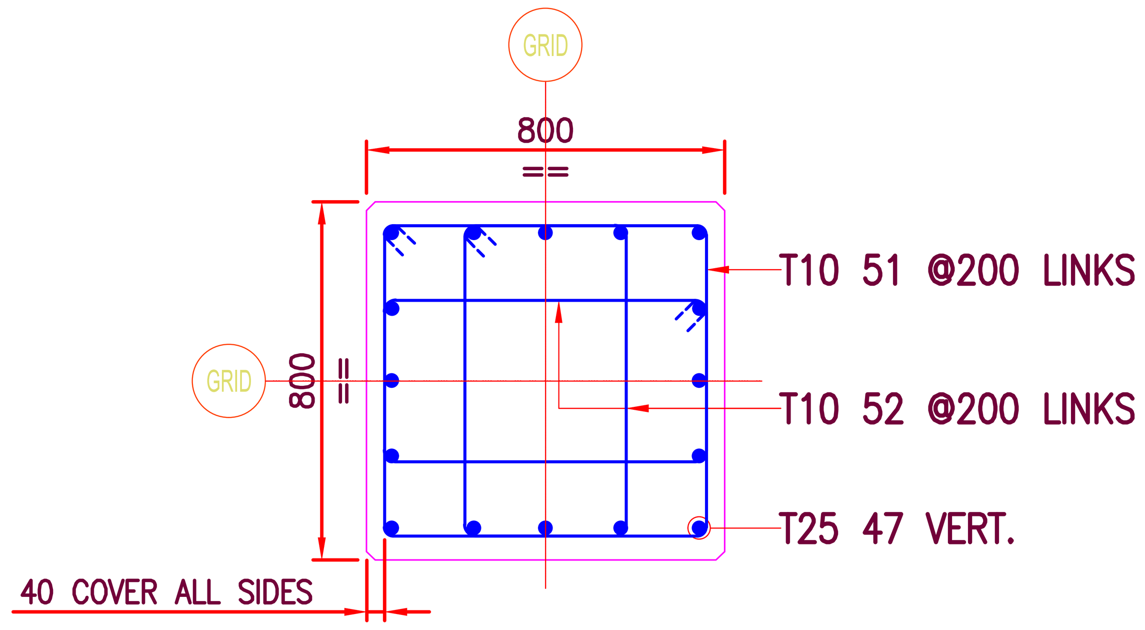
DRAWING TITLE:
AIRCRAFT COMPONENT MAINTENANCE SHOPS
COLUMN REINFORCEMENT DETAILS
GROUND LVL.TO ROOF LVL. - AREA AA12
SHEET 2 OF 4

PROJECT NUMBER	DRAWING NUMBER	REV.
SIZE A0 SCALE 1:25	433-A001-S-SH-12-G-1902	00



COLUMN CC1-04 @ A52-A53.8/BB, A52/BD

SCALE 1:15 (03 NO REQ.)

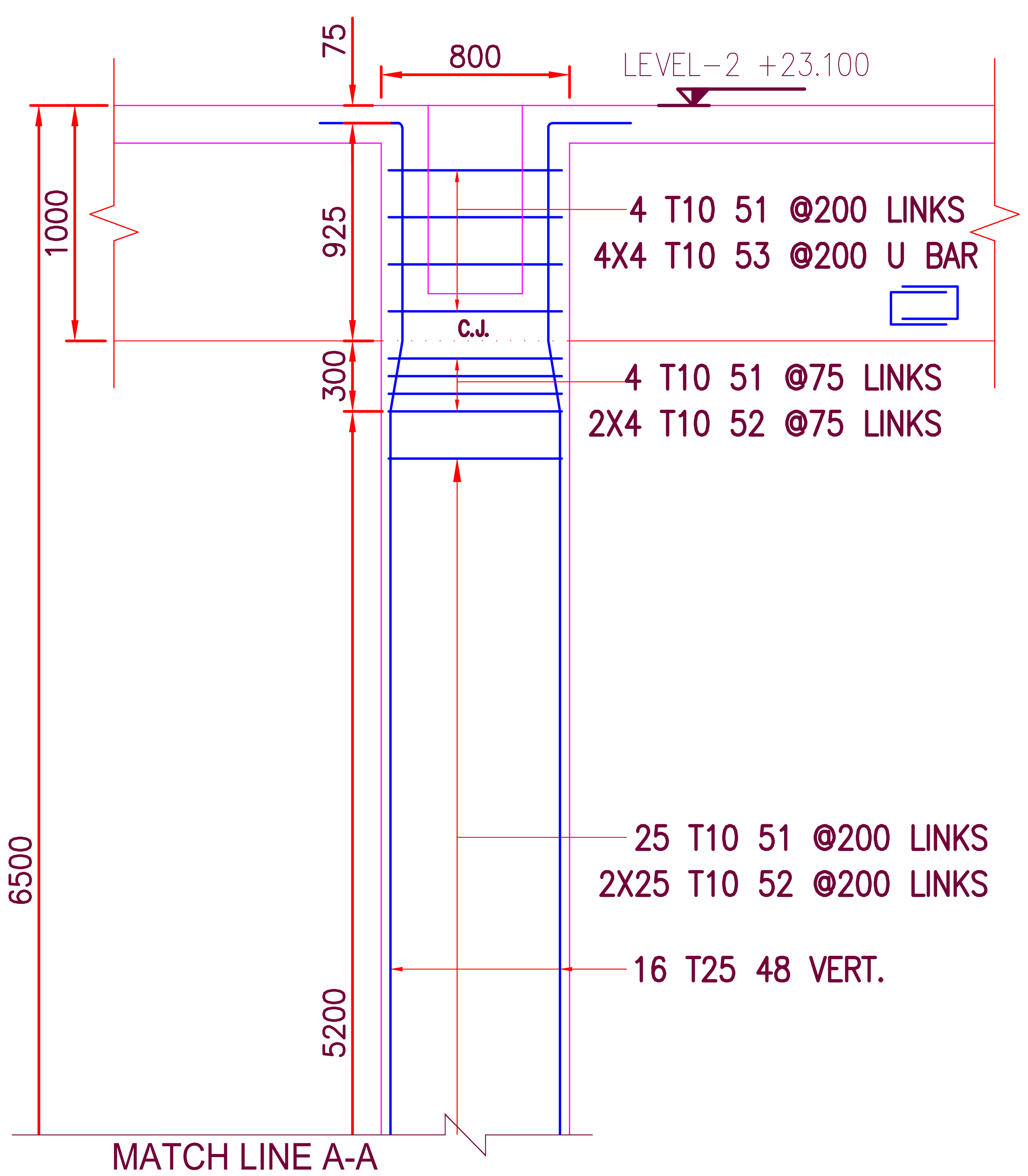


SECTION-08

SCALE 1:10

SECTION-08

SCALE 1:10



40 TO 81 BAR MARK FOR COLUMN REINFORCEMENT

NOTES / LEGENDS

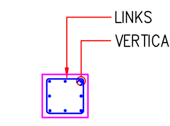
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR COLUMN REINFORCEMENT
   - BELOW GROUND LEVEL – 50 mm
   - ABOVE GROUND LEVEL – 40 mm
6. PROVIDE 19 mm CHAMFER STRIP AT ALL EXPOSED CORNERS OF CONCRETE WALLS, INCLUDING EXPOSED CORNERS OF CONCRETE PIERS.
7. LEGEND FOR CALLOUT

   5X8 T20 01 150 T1
   - REMARKS
   - SPACING
   - BAR MARK
   - BAR SIZE
   - NO OF PLACES
   - MULTIPLIER
8. ABBREVIATION

   VERT. – VERTICAL
   C.J. – CONSTRUCTION JOINT
   TOF – TOP OF FOOTING
   SOG – SLAB ON GRADE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1012	03	FOUNDATION PLAN (AREA-AA12)
02	433-A001-S-FD-51-F-1112	02	SLAB ON GRADE PLAN (AREA-AA12)
03	433-A001-S-FD-52-1-1012	04	LAVEL1 FRAMING PLAN(AREA-AA12)
04	433-A001-S-FD-52-2-1012	04	LAVEL2 FRAMING PLAN(AREA-AA12)
05	433-A001-S-FD-58-X-0010	03	CONCRETE COLUMN SCHEDULE
06	433-A001-S-FD-58-X-0020	03	CONCRETE BEAM SCHEDULE
07	433-A001-S-FD-58-X-0021	04	CONCRETE BEAM SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
00	ISSUED FOR APPROVAL	PV	NP	13.02.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

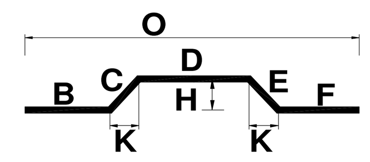
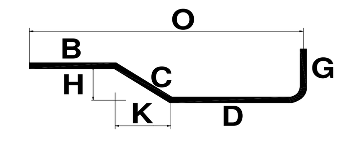
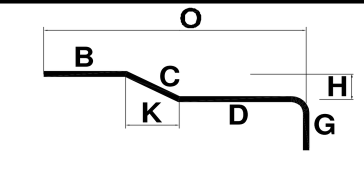
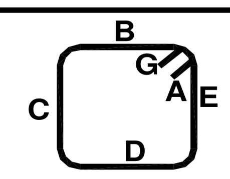
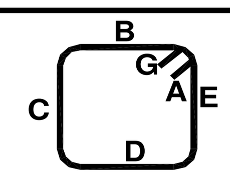
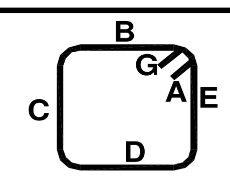
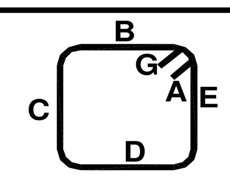
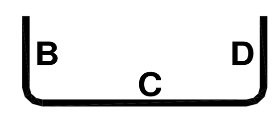
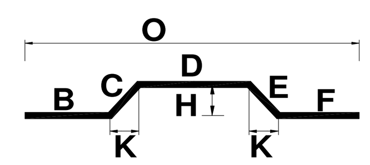
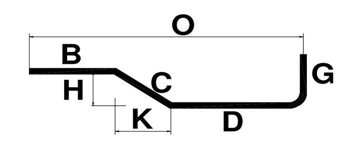
DRAWING TITLE:

AIRCRAFT COMPONENT MAINTENANCE SHOPS
COLUMN REINFORCEMENT DETAILS
GROUND LVL.TO ROOF LVL. - AREA AA12
SHEET 2 OF 4

PROJECT NUMBER		DRAWING NUMBER	REV.
		433-A001-S-SH-12-G-1902	00
SIZE	SCALE		
A0	1:25		

BAR BENDING SCHEDULE

Drawing No:- 433-A004-S-SH-12-G-1902 | Rev 11 | Date Prepared 15.02.2014 | SHEET 1 OF 6

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
Column CC4-01 VERT.	46	1	16	16	T 25	9885	3		1375	305	5525	305	2375		50		300	9875		609.53	
VERT.	47	1	9	9	T 25	6880	6		5400	305	725			450	50		300	6425		238.63	
VERT.	48	1	7	7	T 25	6880	27		5400	305	725			450	50		300	6425		185.60	
LINKS	49	1	7	7	T 10	3030	T1	115	700	700	700	700		115						13.08	
LINKS	50	1	14	14	T 10	2380	T1	115	375	700	375	700		115						20.55	
LINKS	51	1	70	70	T 10	3110	T1	115	720	720	720	720		115						134.24	
LINKS	52	1	124	124	T 10	2440	T1	115	385	720	385	720		115						186.56	
U BAR	53	1	32	32	T 10	1825	17		720	385	720									36.01	
Column CC4-01 VERT.	54	2	16	32	T 25	8585	3		1375	305	4425	305	2175		50		300	8575		1058.73	
VERT.	55	2	9	18	T 25	6880	6		5400	305	725			450	50		300	6425		477.26	
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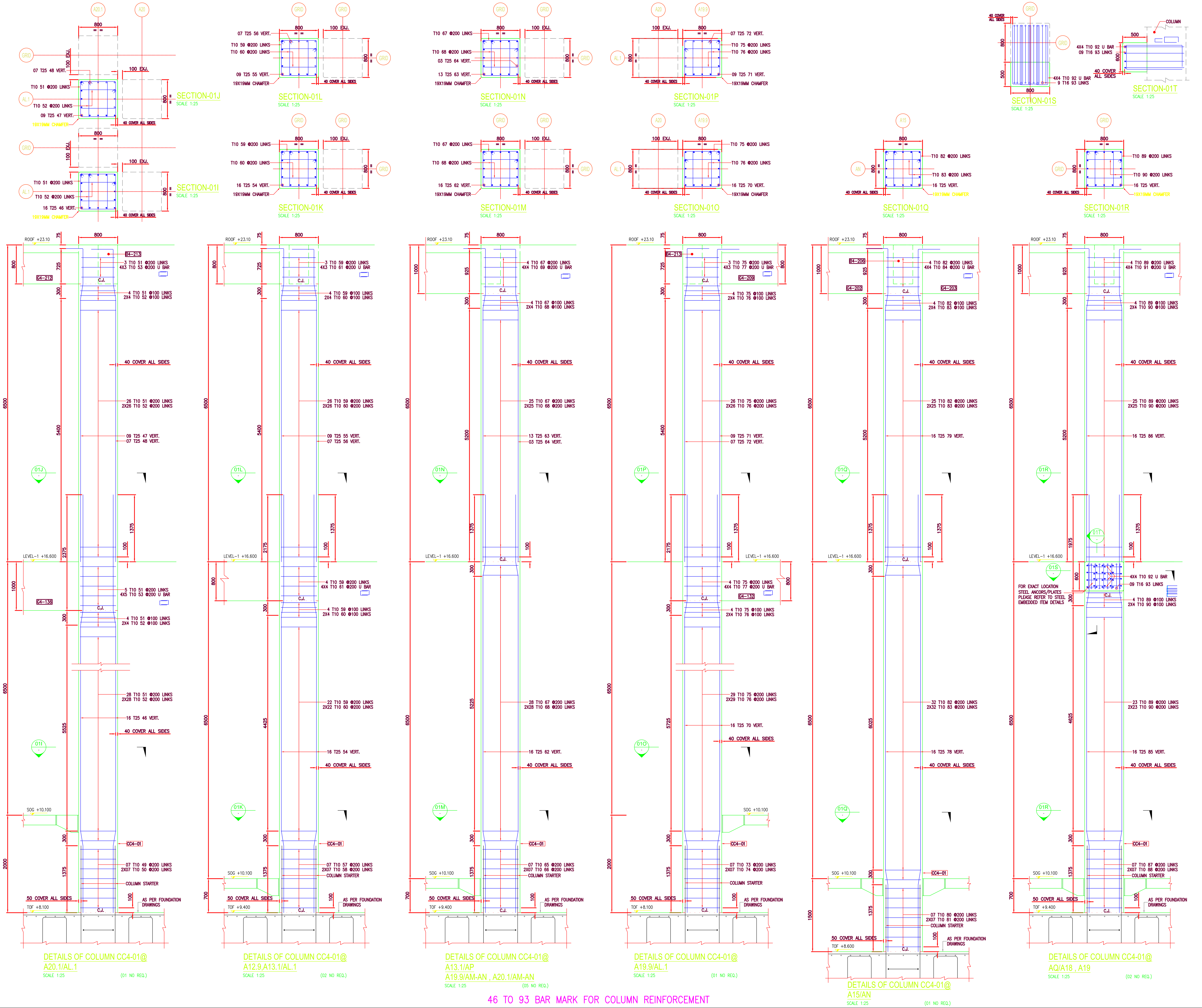
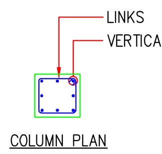


NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR COLUMN REINFORCEMENT
   BELOW GROUND LEVEL – 50 mm
   ABOVE GROUND LEVEL – 40 mm
6. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   REMARKS
   SPACING
   BAR MARK
   BAR SIZE
   NO OF PLACES
   MULTIPLIER
7. ABBREVIATION
   VERT. – VERTICAL
   C.J. – CONSTRUCTION JOINT
   TOF – TOP OF FOOTING
   SOG – SLAB ON GRADE
   TRS – TUNNEL ROOF SLAB

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A004-S-FD-51-F-1109	02	SLAB ON GRADE PLAN AREA AA9
02	433-A004-S-FD-51-F-1009	03	FOUNDATION PLAN AREA AA9
03	433-A004-S-FD-51-T-1009	02	TUNNEL FOUNDATION PLAN AREA AA9
04	433-A004-S-FD-51-T-1109	02	TUNNEL SLAB PLAN AREA AA9
05	433-A004-S-FD-52-1-1009	03	LEVEL 1 FRAMING PLAN AREA AA9
06	433-A004-S-FD-52-R-1009	03	ROOF LEVEL FRAMING PLAN AREA AA9
07	433-A004-S-FD-54-X-0001	02	CORBEL PLAN AND DETAILS
08	433-A004-S-FD-58-X-0010	03	CONCRETE COLUMN SCHEDULE
09	433-A004-S-FD-58-X-0020	03	CONCRETE BEAM SCHEDULE
10	433-A004-S-FD-58-X-0022	00	CONCRETE BEAM SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	ISSUED FOR APPROVAL	RU	NP	15.02.2014
10	ISSUED FOR APPROVAL	RU	NP	28.01.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

AIRCRAFT COMPONENT MAINTENANCE SHOPS
COLUMN REINFORCEMENT DETAILS
GROUND LVL.TO ROOF - AREA AA9
SHEET 2 OF 9

PROJECT NUMBER		DRAWING NUMBER	REV.
SAEI 4600000433		433-A004-S-SH-12-G-1902	11
SIZE	SCALE		
A0	1:25		

BAR BENDING SCHEDULE

Aircraft Maintenance Hangers Project Jeddah

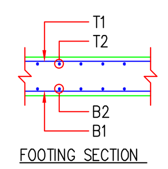
Drawing No:-	433-A003-S-SH-07-F-4051	Rev	11	Date Prepared	26-07-2014	SHEET	1	OF	14

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
B2	01	1	20	20	T 25	10075	17		1700	8375										776.55	B C
B2	02	1	20	20	T 25	8700	17		1700	7000										670.57	B C
B4	03	1	10	10	T 25	8375	0		8375											322.76	STRAIGHT
B4	04	1	10	10	T 25	7000	0		7000											269.77	STRAIGHT
T2	05	1	20	20	T 25	5400	17		1700	3700										416.22	B C
T2	06	1	20	20	T 25	6775	17		1700	5075										522.20	B C
T4	07	1	10	10	T 25	3700	0		3700											142.59	STRAIGHT
T4	08	1	10	10	T 25	5075	0		5075											195.58	STRAIGHT
B3	09	1	37	37	T 25	5900	0		5900											841.30	STRAIGHT
B1	10	1	74	74	T 25	9300	17		1700	5900	1700									2652.23	B C D
																		Weight		6809.77	

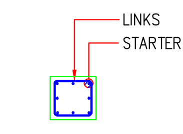
NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. REFERENCE FINISH GROUND FLOOR ELEVATION = 0.0 (0.0= +10.10m MSL)
5. GRADE OF STEEL = A615M GRADE 420.
6. COVER FOR FOUNDATION REINFORCEMENT
   CAST AGAINST SOIL OR BLINDING – 75 mm
   NOT CAST AGAINST SOIL OR BLINDING – 50 mm
   COLUMN:
   ALL SIDES 50 mm
7. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   REMARKS
   SPACING
   BAR MARK
   BAR SIZE
   NO OF PLACES
   MULTIPLIER
8. ABBREVIATION
   B1 – BOTTOM FIRST LAYER
   B2 – BOTTOM SECOND LAYER
   T1 – TOP FIRST LAYER
   T2 – TOP SECOND LAYER
   TOC – TOP OF CONCRETE
   SF – SIDE FACE
   ES – EACH SIDE
   TYP. – TYPICAL
   SOG – SLAB ON GRADE
   TOF – TOP OF FOOTING
   REQ. – REQUIRED
   T – THICKNESS
   IJ – ISOLATION JOINT
   MJ – MOVEMENT JOINT
   EF – EACH FACE

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



FOOTING SECTION



COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A0003-S-FD-51-F-0000	01	OVERALL FOUNDATION PLAN
02	433-A0003-S-FD-51-F-1004	03	FOUNDATION PLAN AREA AA4
03	433-A0003-S-FD-51-F-1005	03	FOUNDATION PLAN AREA AA5
04	433-A0003-S-FD-55-X-0201	01	TYPICAL FOUNDATION LEVEL DETAILS
05	433-A0003-S-FD-55-X-0203	02	COMBINED FOUNDATION DETAILS
06	433-A0003-S-FD-58-X-0001	02	FOUNDATION SCHEDULE AND TYPACAL DETAILS
07	433-A0003-S-FD-58-X-0011	03	CONCRETE COLUMN SCHEDULE
08	433-A0003-S-FD-58-X-0012	02	CONCRETE SHEAR WALL SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	COLUMN (CC3–08) STARTER REVISED	AA	NP	26.07.2014
10	ISSUED FOR APPROVAL	AA	NP	23.07.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

CLIENT:

ENGINEER:

CONTRACTOR:

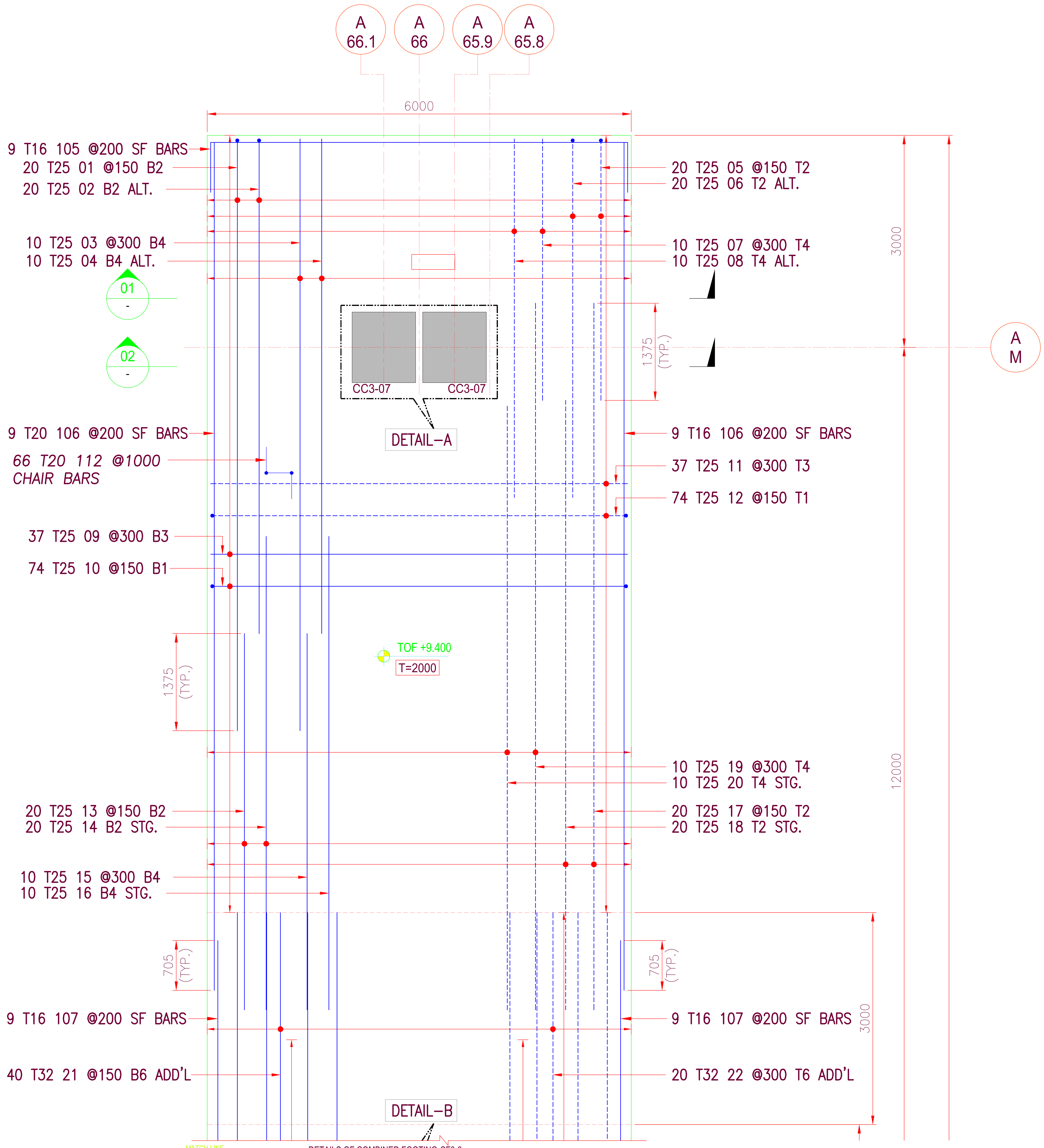
PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

SUPPLY CHAIN
COMBINED FOOTING, COLUMN & WALL STARTER
REINFORCEMENT DETAILS - AREA AA4
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
SIZE	SCALE	433-A003-S-SH-07-F-4051	11
A0	1:50 & 1:25		



MATCH LINE A-A

DETAILS OF COMBINED FOOTING-CF3-3

SCALE 1:20

57,115,117,119,121 BAR MARK OMITTED

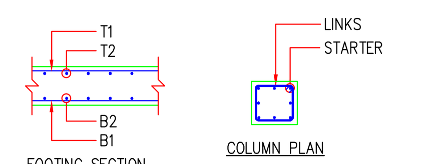
01 TO 100 & 105 TO 113 BAR MARK FOR COMBINED FOOTING REINFORCEMENT
101 TO 104 BAR MARK FOR WALL STARTER
114 TO 121 BAR MARK FOR COLUMN STARTER

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. REFERENCE FINISH GROUND FLOOR ELEVATION = 0.0 (0.0= +10.10m MSL)
5. GRADE OF STEEL = A615M GRADE 420.
6. COVER FOR FOUNDATION REINFORCEMENT
   - CAST AGAINST SOIL OR BLINDING – 75 mm
   - NOT CAST AGAINST SOIL OR BLINDING – 50 mm
   - COLUMN:
   - ALL SIDES 50 mm
7. LEGEND FOR CALLOUT
   - 5X8 T20 01 150 T1
   - REMARKS
   - SPACING
   - BAR MARK
   - BAR SIZE
   - NO OF PLACES
   - MULTIPLIER
8. ABBREVIATION
   - B1 – BOTTOM FIRST LAYER
   - B2 – BOTTOM SECOND LAYER
   - T1 – TOP FIRST LAYER
   - T2 – TOP SECOND LAYER
   - TOC – TOP OF CONCRETE
   - SF – SIDE FACE
   - ES – EACH SIDE
   - TYP. – TYPICAL
   - SOG – SLAB ON GRADE
   - TOF – TOP OF FOOTING
   - REQ. – REQUIRED
   - T – THICKNESS
   - IJ – ISOLATION JOINT
   - MJ – MOVEMENT JOINT
   - EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



FOOTING SECTION

COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A0003-S-FD-51-F-0000	01	OVERALL FOUNDATION PLAN
02	433-A0003-S-FD-51-F-1004	03	FOUNDATION PLAN AREA AA4
03	433-A0003-S-FD-51-F-1005	03	FOUNDATION PLAN AREA AA5
04	433-A0003-S-FD-55-X-0201	01	TYPICAL FOUNDATION LEVEL DETAILS
05	433-A0003-S-FD-55-X-0203	02	COMBINED FOUNDATION DETAILS
06	433-A0003-S-FD-58-X-0001	02	FOUNDATION SCHEDULE AND TYPACAL DETAILS
07	433-A0003-S-FD-58-X-0011	03	CONCRETE COLUMN SCHEDULE
08	433-A0003-S-FD-58-X-0012	02	CONCRETE SHEAR WALL SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	COLUMN (CC3-08) STARTER REVISED	AA	NP	26.07.2014
10	ISSUED FOR APPROVAL	AA	NP	23.07.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

CLIENT:

ENGINEER:

CONTRACTOR:

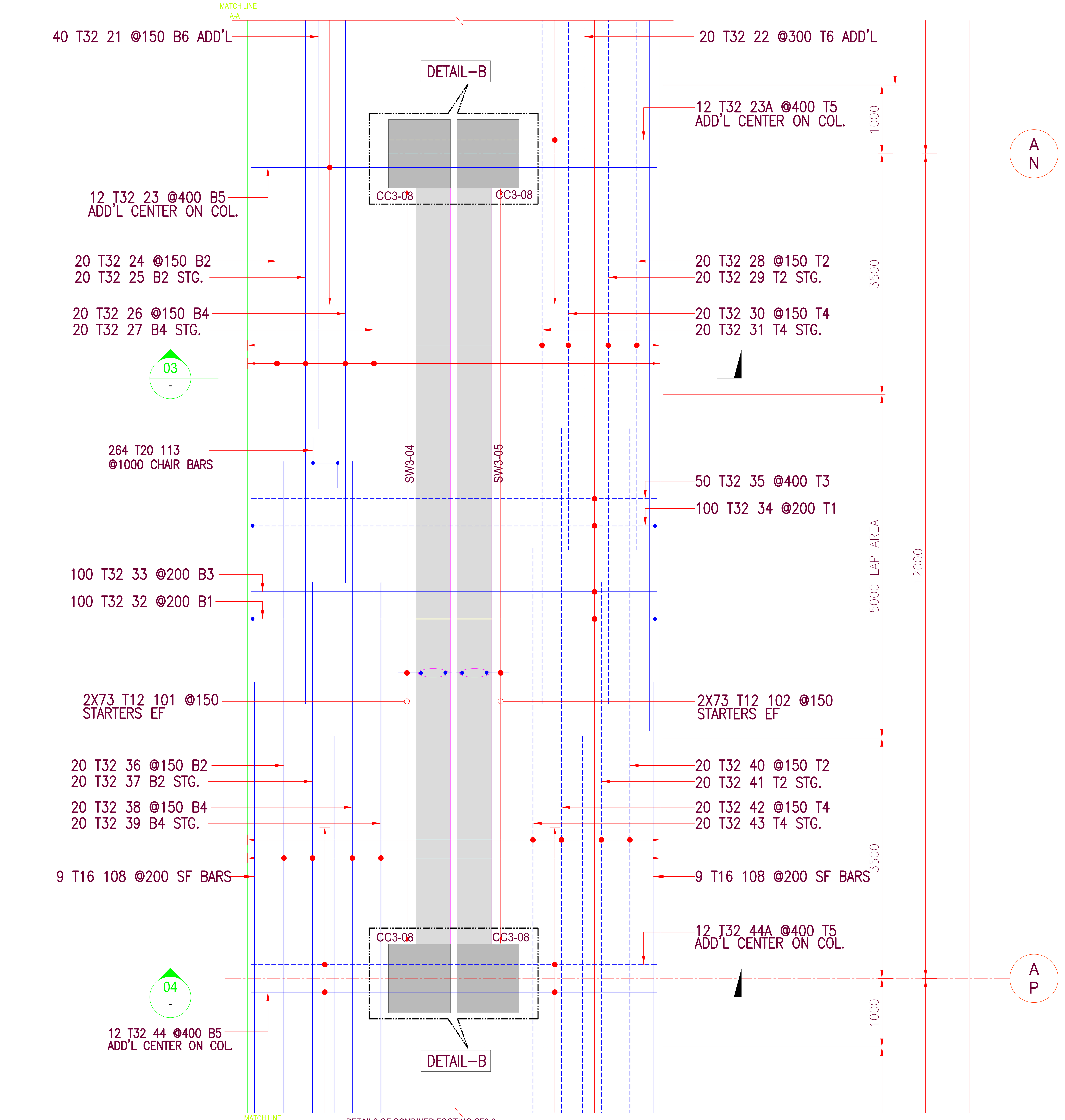
PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

SUPPLY CHAIN
COMBINED FOOTING, COLUMN & WALL STARTER
REINFORCEMENT DETAILS - AREA AA4
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
		433-A003-S-SH-07-F-4051	11
SIZE	SCALE		
A0	1:50 & 1:25		



DETAILS OF COMBINED FOOTING-CF3-3

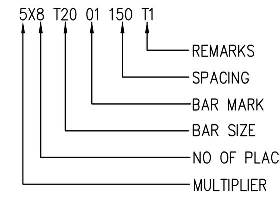
SCALE 1:50

57,115,117,119,121 BAR MARK OMITTED

01 TO 100 & 105 TO 113 BAR MARK FOR COMBINED FOOTING REINFORCEMENT
101 TO 104 BAR MARK FOR WALL STARTER
114 TO 121 BAR MARK FOR COLUMN STARTER

NOTES / LEGENDS

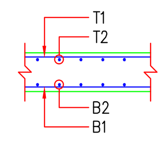
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. REFERENCE FINISH GROUND FLOOR ELEVATION = 0.0 (0.0= +10.10m MSL)
5. GRADE OF STEEL = A615M GRADE 420.
6. COVER FOR FOUNDATION REINFORCEMENT
   - CAST AGAINST SOIL OR BLINDING – 75 mm
   - NOT CAST AGAINST SOIL OR BLINDING – 50 mm
   - COLUMN:
   - ALL SIDES 50 mm
7. LEGEND FOR CALLOUT



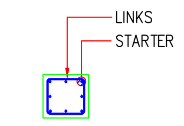
8. ABBREVIATION
   - B1 – BOTTOM FIRST LAYER
   - B2 – BOTTOM SECOND LAYER
   - T1 – TOP FIRST LAYER
   - T2 – TOP SECOND LAYER
   - TOC – TOP OF CONCRETE
   - SF – SIDE FACE
   - ES – EACH SIDE
   - TYP. – TYPICAL
   - SOG – SLAB ON GRADE
   - TOF – TOP OF FOOTING
   - REQ. – REQUIRED
   - T – THICKNESS
   - IJ – ISOLATION JOINT
   - MJ – MOVEMENT JOINT
   - EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



FOOTING SECTION



COLUMN PLAN

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A0003-S-FD-51-F-0000	01	OVERALL FOUNDATION PLAN
02	433-A0003-S-FD-51-F-1004	03	FOUNDATION PLAN AREA AA4
03	433-A0003-S-FD-51-F-1005	03	FOUNDATION PLAN AREA AA5
04	433-A0003-S-FD-55-X-0201	01	TYPICAL FOUNDATION LEVEL DETAILS
05	433-A0003-S-FD-55-X-0203	02	COMBINED FOUNDATION DETAILS
06	433-A0003-S-FD-58-X-0001	02	FOUNDATION SCHEDULE AND TYPACAL DETAILS
07	433-A0003-S-FD-58-X-0011	03	CONCRETE COLUMN SCHEDULE
08	433-A0003-S-FD-58-X-0012	02	CONCRETE SHEAR WALL SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	COLUMN (CC3-08) STARTER REVISED	AA	NP	26.07.2014
10	ISSUED FOR APPROVAL	AA	NP	23.07.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

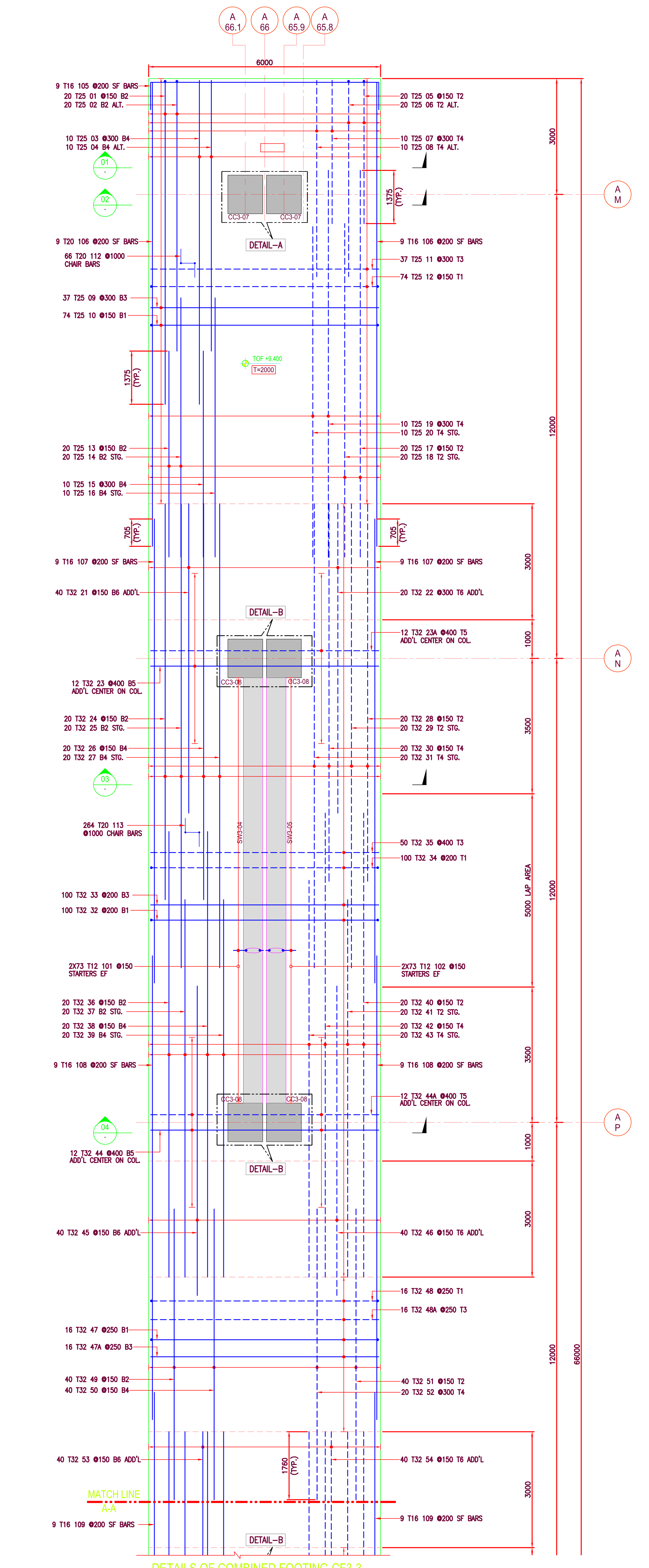
SUPPLY CHAIN
COMBINED FOOTING, COLUMN & WALL STARTER
REINFORCEMENT DETAILS - AREA AA4
SHEET 1 OF 1

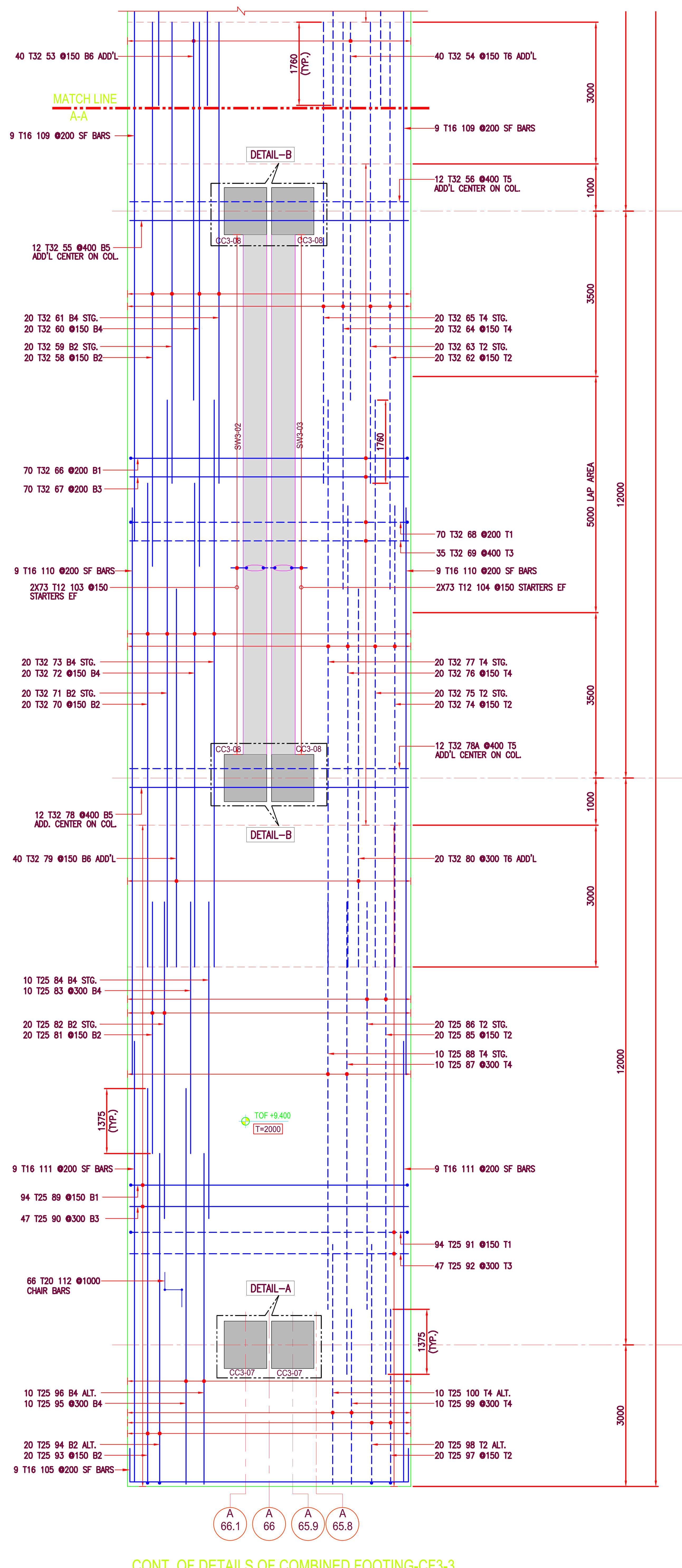
PROJECT NUMBER	DRAWING NUMBER	REV.
	433-A003-S-SH-07-F-4051	11
SIZE: A0 / SCALE: 1:50 & 1:25		

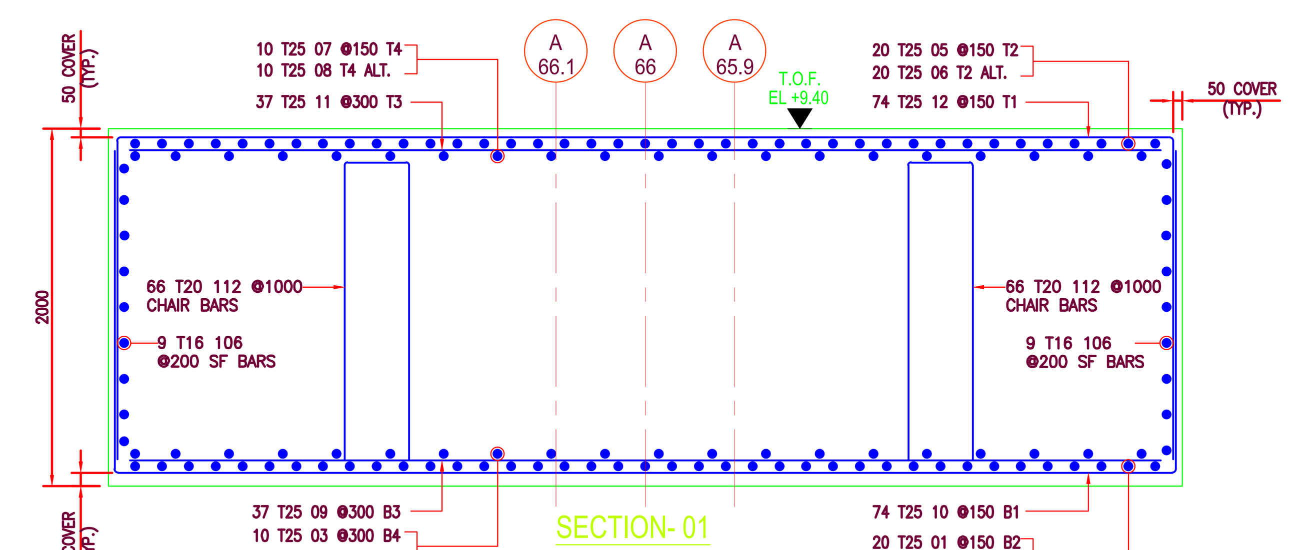
BAR BENDING SCHEDULE

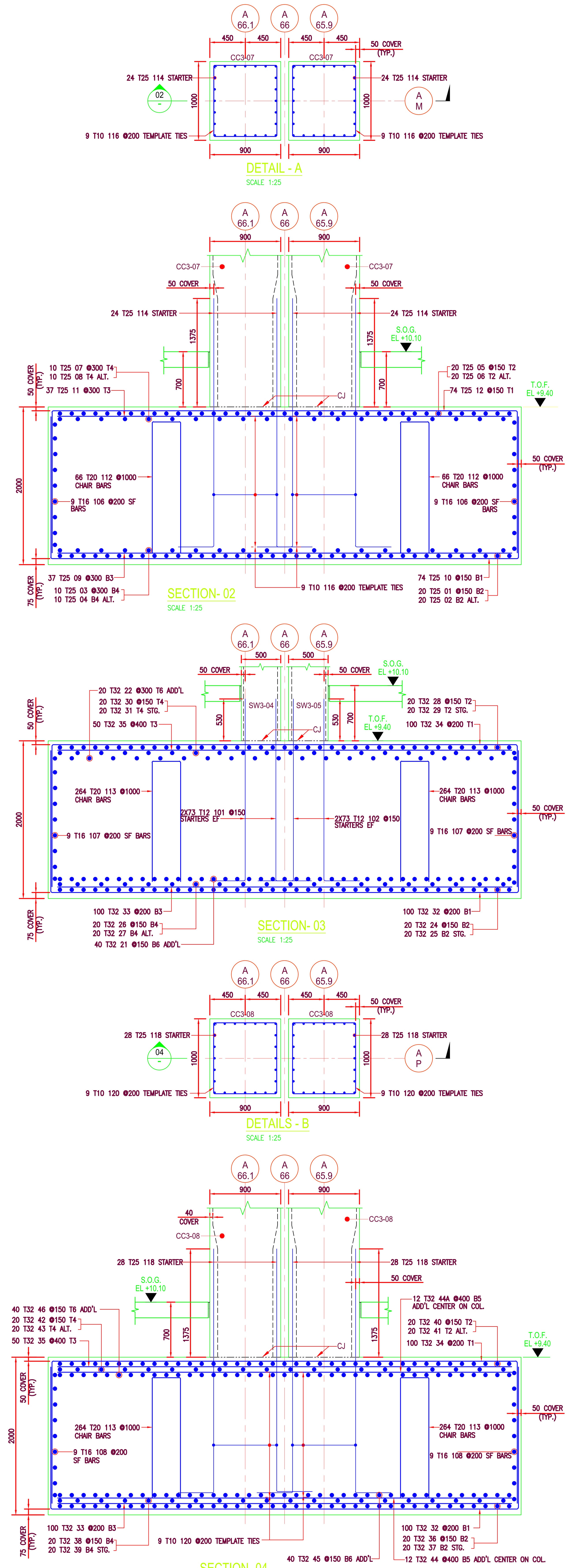
Drawing No:- 433-A003-S-SH-07-F-4051 | Rev 11 | Date Prepared 26-07-2014 | SHEET 1 OF 14

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
B2	01	1	20	20	T 25	10075	17		1700	8375										776.55	B C
B2	02	1	20	20	T 25	8700	17		1700	7000										670.57	B C
B4	03	1	10	10	T 25	8375	0		8375											322.76	STRAIGHT
B4	04	1	10	10	T 25	7000	0		7000											269.77	STRAIGHT
T2	05	1	20	20	T 25	5400	17		1700	3700										416.22	B C
T2	06	1	20	20	T 25	6775	17		1700	5075										522.20	B C
T4	07	1	10	10	T 25	3700	0		3700											142.59	STRAIGHT
T4	08	1	10	10	T 25	5075	0		5075											195.58	STRAIGHT
B3	09	1	37	37	T 25	5900	0		5900											841.30	STRAIGHT
B1	10	1	74	74	T 25	9300	17		1700	5900	1700									2652.23	B C D
																		Weight		6809.77	









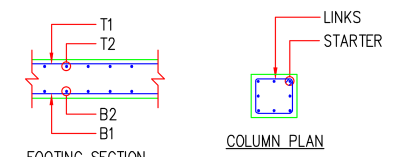
57,115,117,119,121 BAR MARK OMITTED

01 TO 100 & 105 TO 113 BAR MARK FOR COMBINED FOOTING REINFORCEMENT
101 TO 104 BAR MARK FOR WALL STARTER
114 TO 121 BAR MARK FOR COLUMN STARTER

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. REFERENCE FINISH GROUND FLOOR ELEVATION = 0.0 (0.0= +10.10m MSL)
5. GRADE OF STEEL = A615M GRADE 420.
6. COVER FOR FOUNDATION REINFORCEMENT
   - CAST AGAINST SOIL OR BLINDING – 75 mm
   - NOT CAST AGAINST SOIL OR BLINDING – 50 mm
   - COLUMN:
   - ALL SIDES 50 mm
7. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   - REMARKS
   - SPACING
   - BAR MARK
   - BAR SIZE
   - NO OF PLACES
   - MULTIPLIER
8. ABBREVIATION
   - B1 – BOTTOM FIRST LAYER
   - B2 – BOTTOM SECOND LAYER
   - T1 – TOP FIRST LAYER
   - T2 – TOP SECOND LAYER
   - TOC – TOP OF CONCRETE
   - SF – SIDE FACE
   - ES – EACH SIDE
   - TYP. – TYPICAL
   - SOG – SLAB ON GRADE
   - TOF – TOP OF FOOTING
   - REQ. – REQUIRED
   - T – THICKNESS
   - IJ – ISOLATION JOINT
   - MJ – MOVEMENT JOINT
   - EF – EACH FACE

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A0003-S-FD-51-F-0000	01	OVERALL FOUNDATION PLAN
02	433-A0003-S-FD-51-F-1004	03	FOUNDATION PLAN AREA AA4
03	433-A0003-S-FD-51-F-1005	03	FOUNDATION PLAN AREA AA5
04	433-A0003-S-FD-55-X-0201	01	TYPICAL FOUNDATION LEVEL DETAILS
05	433-A0003-S-FD-55-X-0203	02	COMBINED FOUNDATION DETAILS
06	433-A0003-S-FD-58-X-0001	02	FOUNDATION SCHEDULE AND TYPACAL DETAILS
07	433-A0003-S-FD-58-X-0011	03	CONCRETE COLUMN SCHEDULE
08	433-A0003-S-FD-58-X-0012	02	CONCRETE SHEAR WALL SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	COLUMN (CC3-08) STARTER REVISED	AA	NP	26.07.2014
10	ISSUED FOR APPROVAL	AA	NP	23.07.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

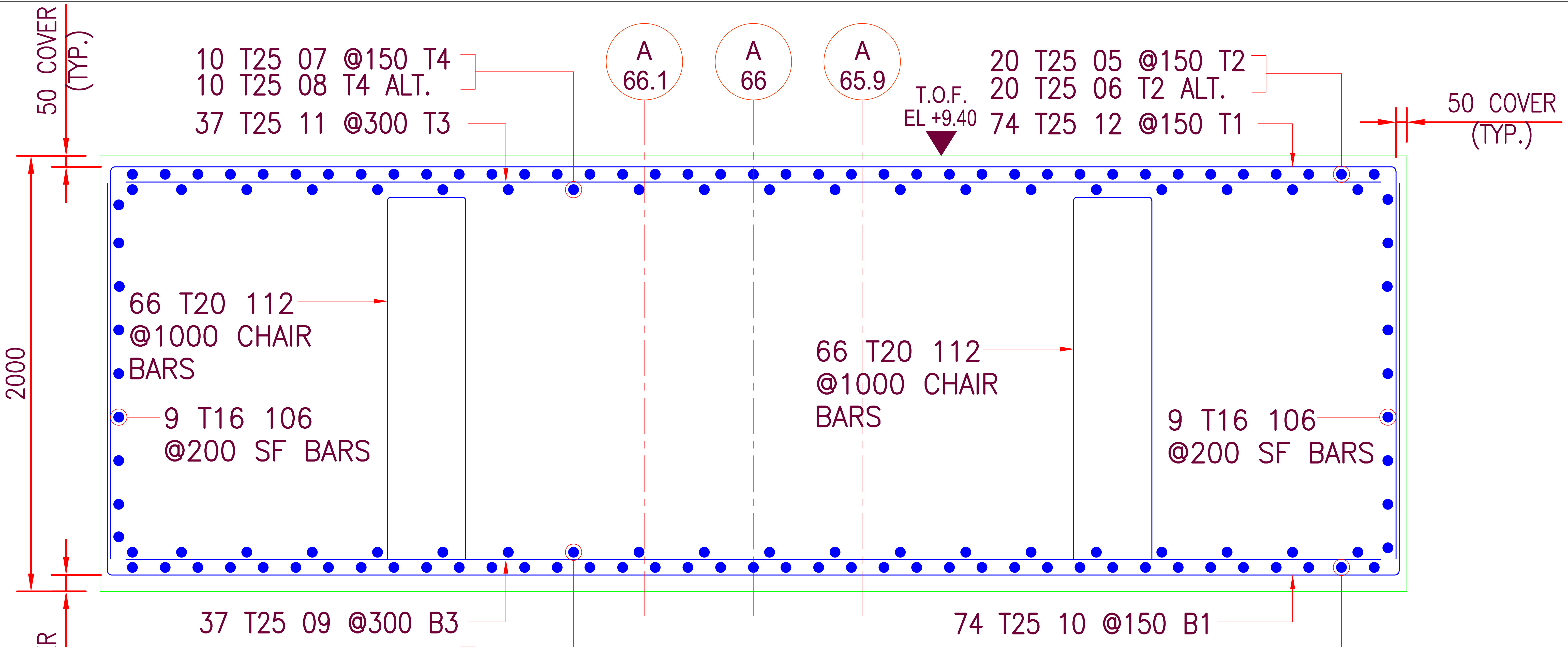
PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

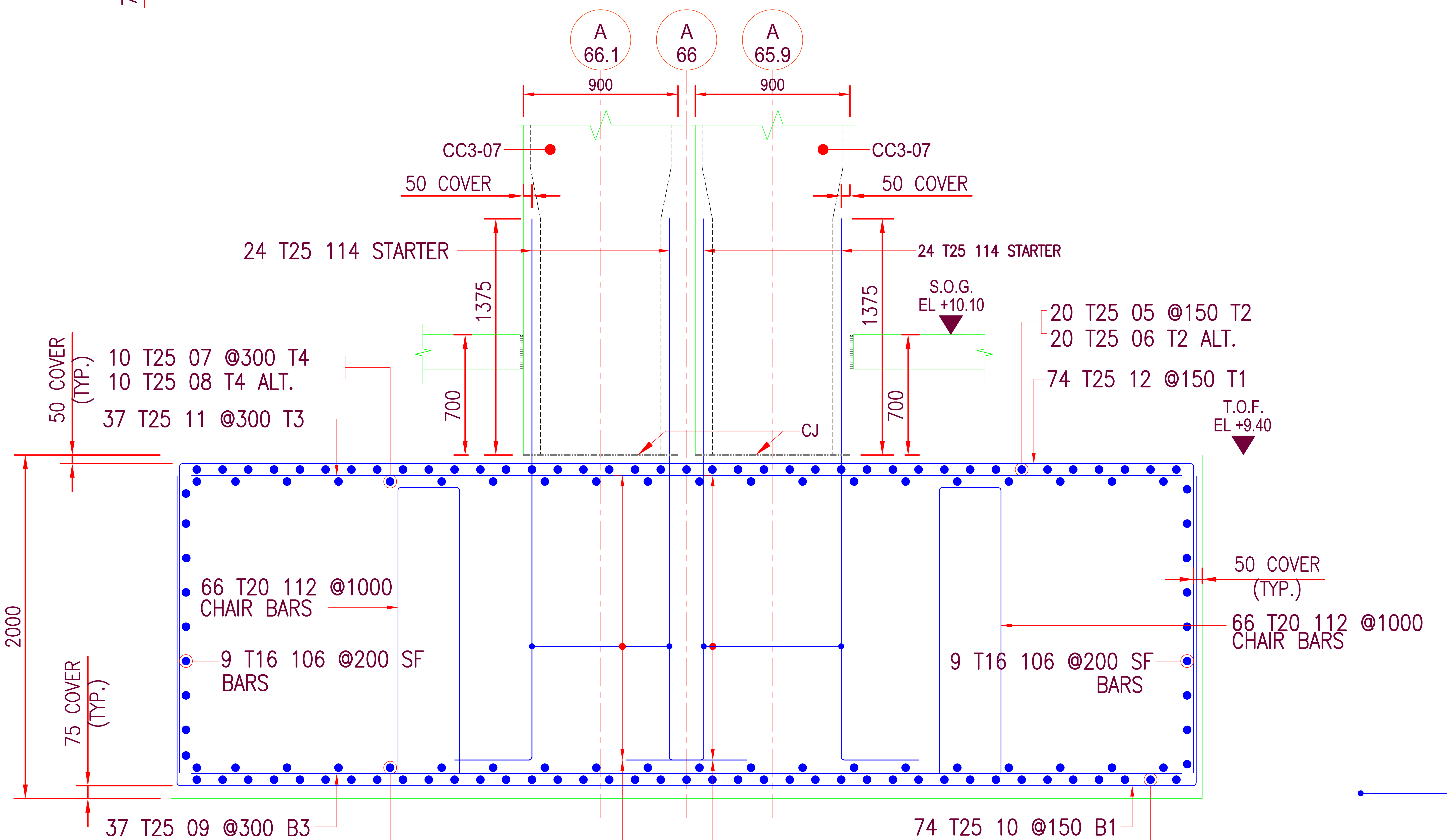
SUPPLY CHAIN
COMBINED FOOTING, COLUMN & WALL STARTER
REINFORCEMENT DETAILS - AREA AA4
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
		433-A003-S-SH-07-F-4051	11
SIZE	SCALE		
A0	1:50 & 1:25		



SECTION- 01

SCALE 1:25



SECTION- 02

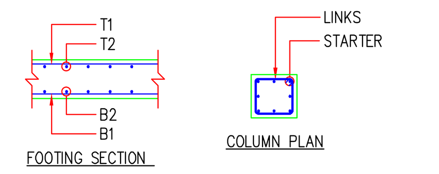
SCALE 1:25

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. REFERENCE FINISH GROUND FLOOR ELEVATION = 0.0 (0.0= +10.10m MSL)
5. GRADE OF STEEL = A615M GRADE 420.
6. COVER FOR FOUNDATION REINFORCEMENT
   CAST AGAINST SOIL OR BLINDING – 75 mm
   NOT CAST AGAINST SOIL OR BLINDING – 50 mm
   COLUMN:
   ALL SIDES 50 mm
7. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   REMARKS
   SPACING
   BAR MARK
   BAR SIZE
   NO OF PLACES
   MULTIPLIER
8. ABBREVIATION
   B1 – BOTTOM FIRST LAYER
   B2 – BOTTOM SECOND LAYER
   T1 – TOP FIRST LAYER
   T2 – TOP SECOND LAYER
   TOC – TOP OF CONCRETE
   SF – SIDE FACE
   ES – EACH SIDE
   TYP. – TYPICAL
   SOG – SLAB ON GRADE
   TOF – TOP OF FOOTING
   REQ. – REQUIRED
   T – THICKNESS
   IJ – ISOLATION JOINT
   MJ – MOVEMENT JOINT
   EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A0003-S-FD-51-F-0000	01	OVERALL FOUNDATION PLAN
02	433-A0003-S-FD-51-F-1004	03	FOUNDATION PLAN AREA AA4
03	433-A0003-S-FD-51-F-1005	03	FOUNDATION PLAN AREA AA5
04	433-A0003-S-FD-55-X-0201	01	TYPICAL FOUNDATION LEVEL DETAILS
05	433-A0003-S-FD-55-X-0203	02	COMBINED FOUNDATION DETAILS
06	433-A0003-S-FD-58-X-0001	02	FOUNDATION SCHEDULE AND TYPACAL DETAILS
07	433-A0003-S-FD-58-X-0011	03	CONCRETE COLUMN SCHEDULE
08	433-A0003-S-FD-58-X-0012	02	CONCRETE SHEAR WALL SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
11	COLUMN (CC3-08) STARTER REVISED	AA	NP	26.07.2014
10	ISSUED FOR APPROVAL	AA	NP	23.07.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

SUPPLY CHAIN
COMBINED FOOTING, COLUMN & WALL STARTER
REINFORCEMENT DETAILS - AREA AA4
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
		433-A003-S-SH-07-F-4051	11
SIZE	SCALE		
A0	1:50 & 1:25		

BAR BENDING SCHEDULE

Aircraft Maintenance Hangers Project
Jeddah

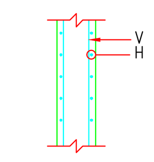
Drawing No:-	433-A001-S-SH-12-G-1954	Rev	10	Date Prepared	12.05.2014	SHEET	1	OF	9

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
SW1- 39 (ELEVATION - A19)	01	2	6	12	T 20	3080	0		3080											91.16	STRAIGHT
V	02	2	42	84	T 12	7030	0		7030											524.34	STRAIGHT
V	03	2	16	32	T 12	4960	17		170	4790										140.93	B C
H	04	2	11	22	T 12	5010	17		450	4390	170									97.87	B C D
H	05	2	11	22	T 12	5010	20		450	4390	170									97.87	B C D
PINS	06	2	66	132	T 10	400	T9	115	170					115						32.56	A B G
H	07	2	42	84	T 12	7100	17		450	6200	450									529.56	B C D
PINS	08	2	165	330	T 10	400	T9	115	170					115						81.39	A B G
ADD'L	09	2	2	4	T 16	1000	0		1000											6.31	STRAIGHT
ADD'L H	10	2	6	12	T 20	2650	0		2650											78.43	STRAIGHT
																	Weight			1680.43	

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SHEAR WALL REINFORCEMENT
   BELOW GROUND LEVEL - 50 mm
   ABOVE GROUND LEVEL - 40 mm
6. LEGEND FOR CALLOUT
   5X8 T20 01 150 T1
   REMARKS
   SPACING
   BAR MARK
   BAR SIZE
   NO OF PLACES
   MULTIPLIER
7. ABBREVIATION
   V - VERTICAL
   H - HORIZONTAL
   C.J. - CONSTRUCTION JOINT
   I.J. - ISOLATION JOINT
   TOF - TOP OF FOOTING
   ADD - ADDITIONAL
   EF - EACH FACE

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



WALL SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1013	05	FOUNDATION PLAN (AREA AA13)
02	433-A001-S-FD-52-1-1013	05	LEVEL-1 FRAMING PLAN (AREA AA13)
03	433-A001-S-FD-52-2-1013	05	LEVEL-2 FRAMING PLAN (AREA AA13)
04	433-A001-S-FD-58-X-0001	05	FOUNDATION SCHEDULES
05	433-A001-S-FD-58-X-0011	03	CONCRETE SHEAR WALL SCHEDULE
06	433-A001-S-FD-55-X-0220	02	SHEAR WALL ENLARGED PLANS

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	12.05.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:
AIRCRAFT MAINTENANCE HANGARS

CLIENT:

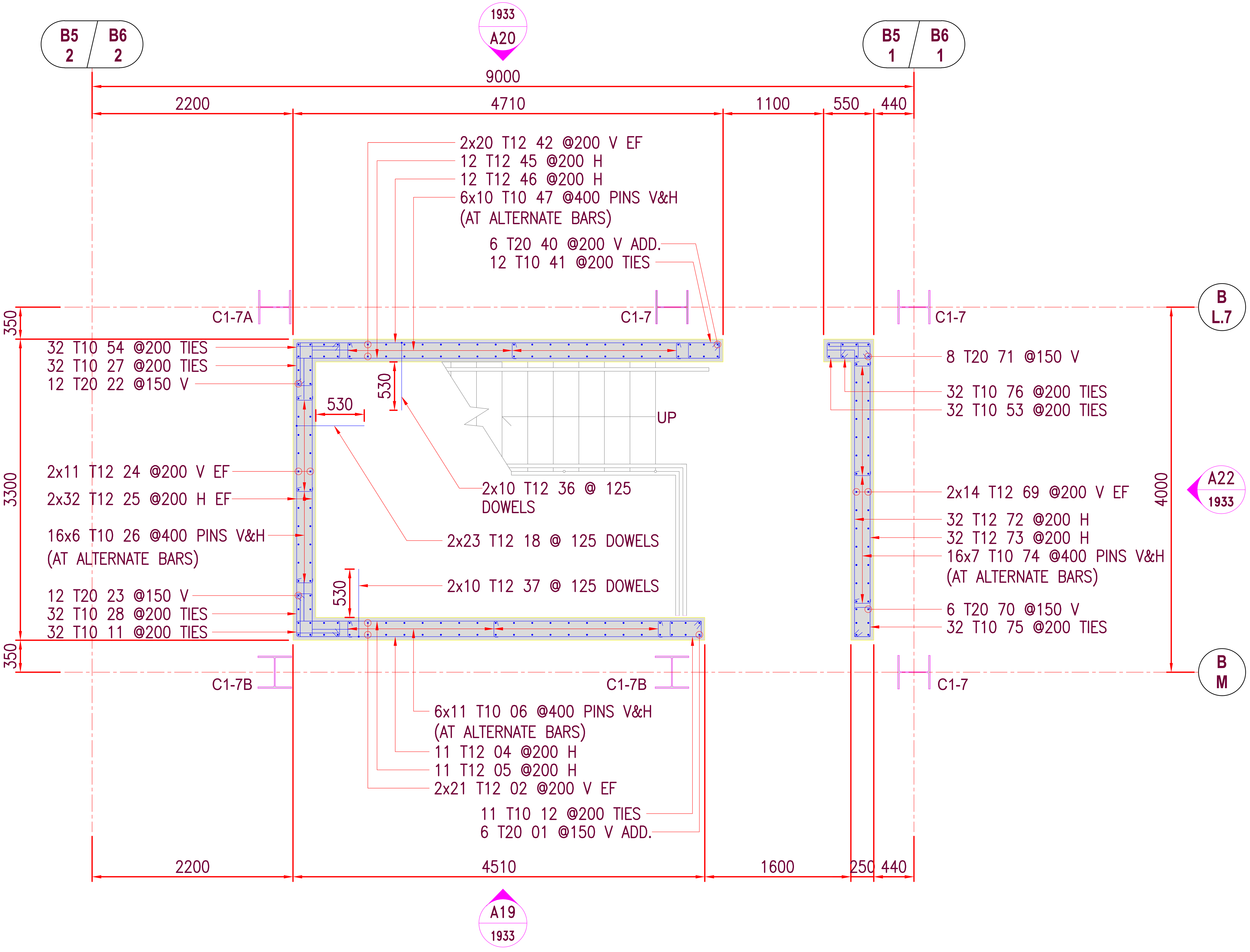
ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:
SHOP DRAWING
STRUCTURAL

DRAWING TITLE:
NARROW BODY HEAVY MAINTENANCE HANGARS
SHEAR WALL S1-38,E1-38,SW1-21 REINFORCEMENT DETAILS GROUND LVL. TO STAIR CABIN AREA AA13
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
SIZE	SCALE	433-A001-S-SH-12-G-1954	10
A0	1:50		



SHEAR WALL SW1-39 - PLAN AT GROUND LEVEL

SCALE 1:50

01 TO 88 BAR MARK FOR SHEAR WALL REINFORCEMENT

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SHEAR WALL REINFORCEMENT
   - BELOW GROUND LEVEL – 50 mm
   - ABOVE GROUND LEVEL – 40 mm
6. LEGEND FOR CALLOUT

5X8 T20 01 150 T1

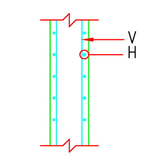
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION

- V – VERTICAL
- H – HORIZONTAL
- C.J. – CONSTRUCTION JOINT
- I.J. – ISOLATION JOINT
- TOF – TOP OF FOOTING
- ADD – ADDITIONAL
- EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



WALL SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1013	05	FOUNDATION PLAN (AREA AA13)
02	433-A001-S-FD-52-1-1013	05	LEVEL-1 FRAMING PLAN (AREA AA13)
03	433-A001-S-FD-52-2-1013	05	LEVEL-2 FRAMING PLAN (AREA AA13)
04	433-A001-S-FD-58-X-0001	05	FOUNDATION SCHEDULES
05	433-A001-S-FD-58-X-0011	03	CONCRETE SHEAR WALL SCHEDULE
06	433-A001-S-FD-55-X-0220	02	SHEAR WALL ENLARGED PLANS

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	12.05.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

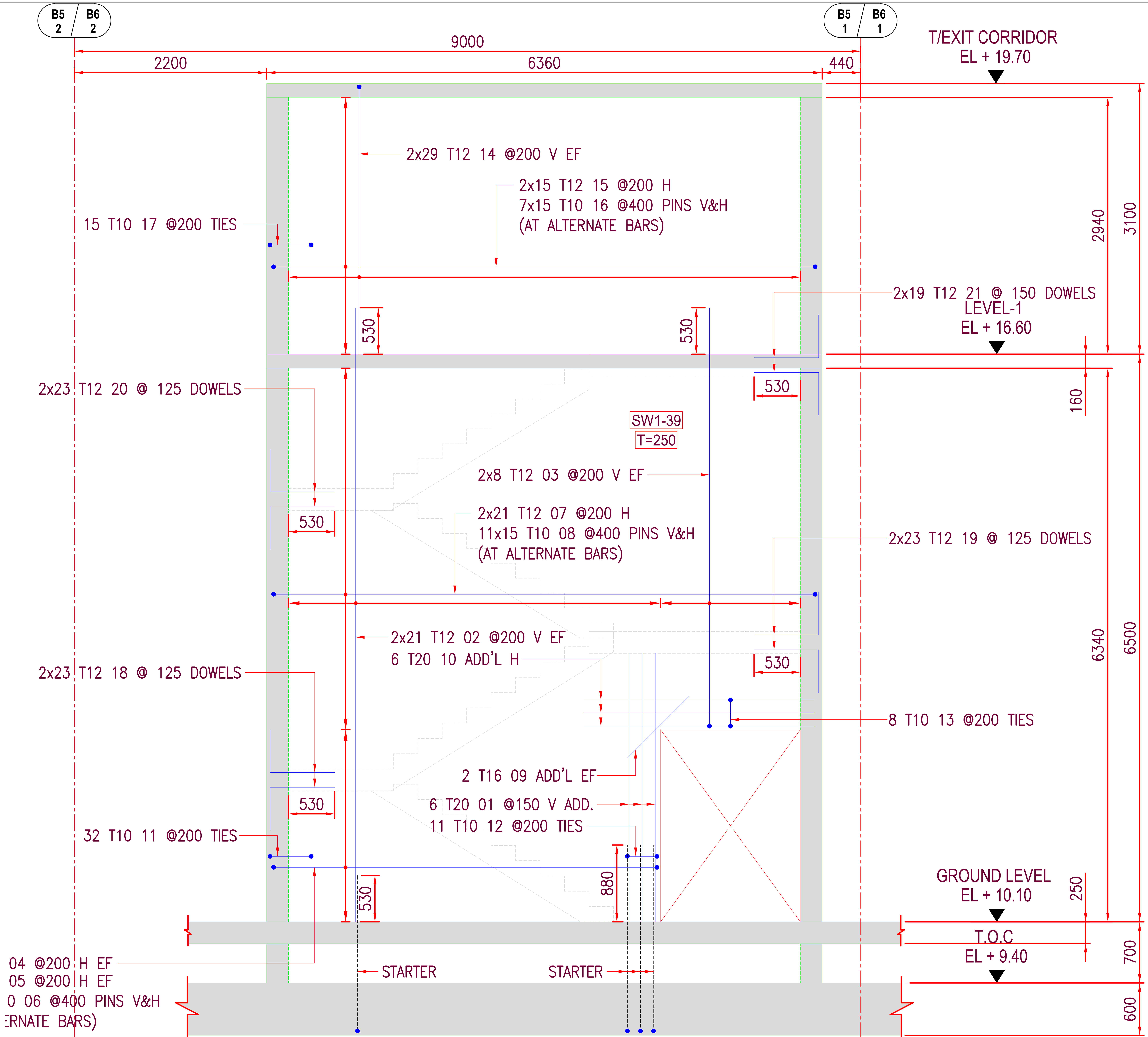
PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

NARROW BODY HEAVY MAINTENANCE HANGARS
SHEAR WALL S1-38,E1-38,SW1-21 REINFORCEMENT DETAILS GROUND LVL. TO STAIR CABIN AREA AA13
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
SIZE	SCALE	433-A001-S-SH-12-G-1954	10
A0	1:50		



ELEVATION - A19

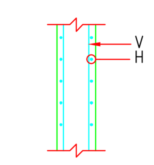
SCALE 1:50

NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SHEAR WALL REINFORCEMENT
   - BELOW GROUND LEVEL – 50 mm
   - ABOVE GROUND LEVEL – 40 mm
6. LEGEND FOR CALLOUT
   - 5X8 T20 01 150 T1
   - T1 – REMARKS
   - 150 – SPACING
   - 01 – BAR MARK
   - T20 – BAR SIZE
   - 8 – NO OF PLACES
   - 5 – MULTIPLIER
7. ABBREVIATION
   - V – VERTICAL
   - H – HORIZONTAL
   - C.J. – CONSTRUCTION JOINT
   - I.J. – ISOLATION JOINT
   - TOF – TOP OF FOOTING
   - ADD – ADDITIONAL
   - EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



WALL SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1013	05	FOUNDATION PLAN (AREA AA13)
02	433-A001-S-FD-52-1-1013	05	LEVEL-1 FRAMING PLAN (AREA AA13)
03	433-A001-S-FD-52-2-1013	05	LEVEL-2 FRAMING PLAN (AREA AA13)
04	433-A001-S-FD-58-X-0001	05	FOUNDATION SCHEDULES
05	433-A001-S-FD-58-X-0011	03	CONCRETE SHEAR WALL SCHEDULE
06	433-A001-S-FD-55-X-0220	02	SHEAR WALL ENLARGED PLANS

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	JT	NP	12.05.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

NARROW BODY HEAVY MAINTENANCE HANGARS
SHEAR WALL S1-38,E1-38,SW1-21 REINFORCEMENT DETAILS GROUND LVL. TO STAIR CABIN AREA AA13
SHEET 1 OF 1

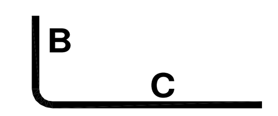
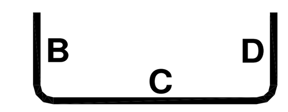
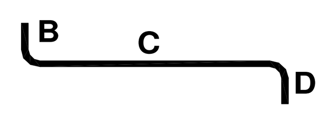
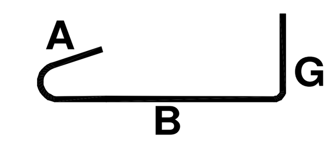
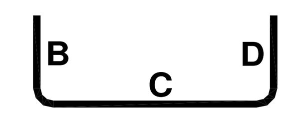
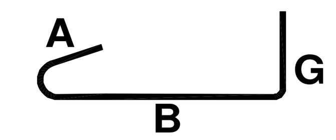
PROJECT NUMBER	DRAWING NUMBER	REV.
	433-A001-S-SH-12-G-1954	10

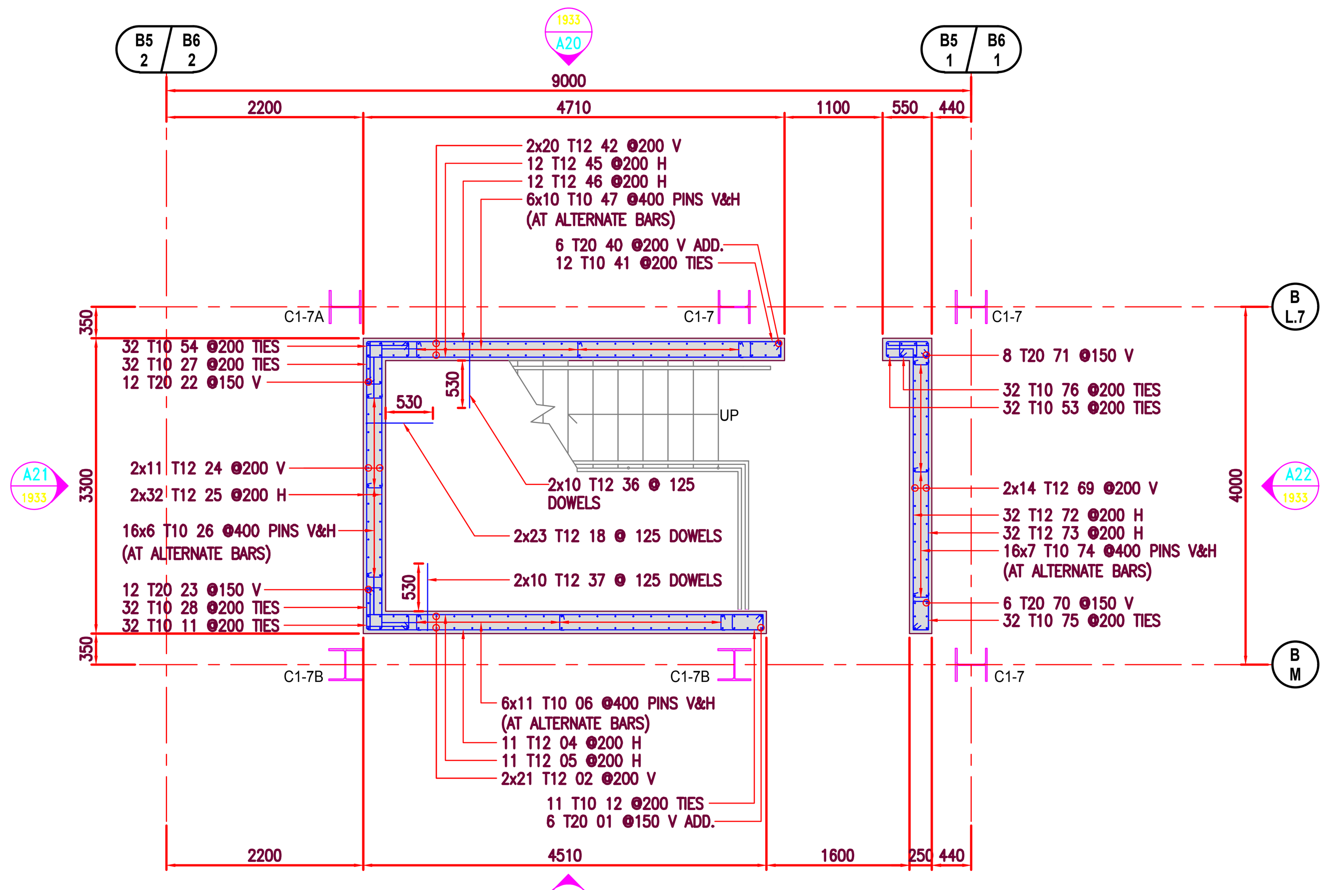
SIZE	SCALE
A0	1:50

BAR BENDING SCHEDULE

Drawing No:- 433-A001-S-SH-12-G-1954

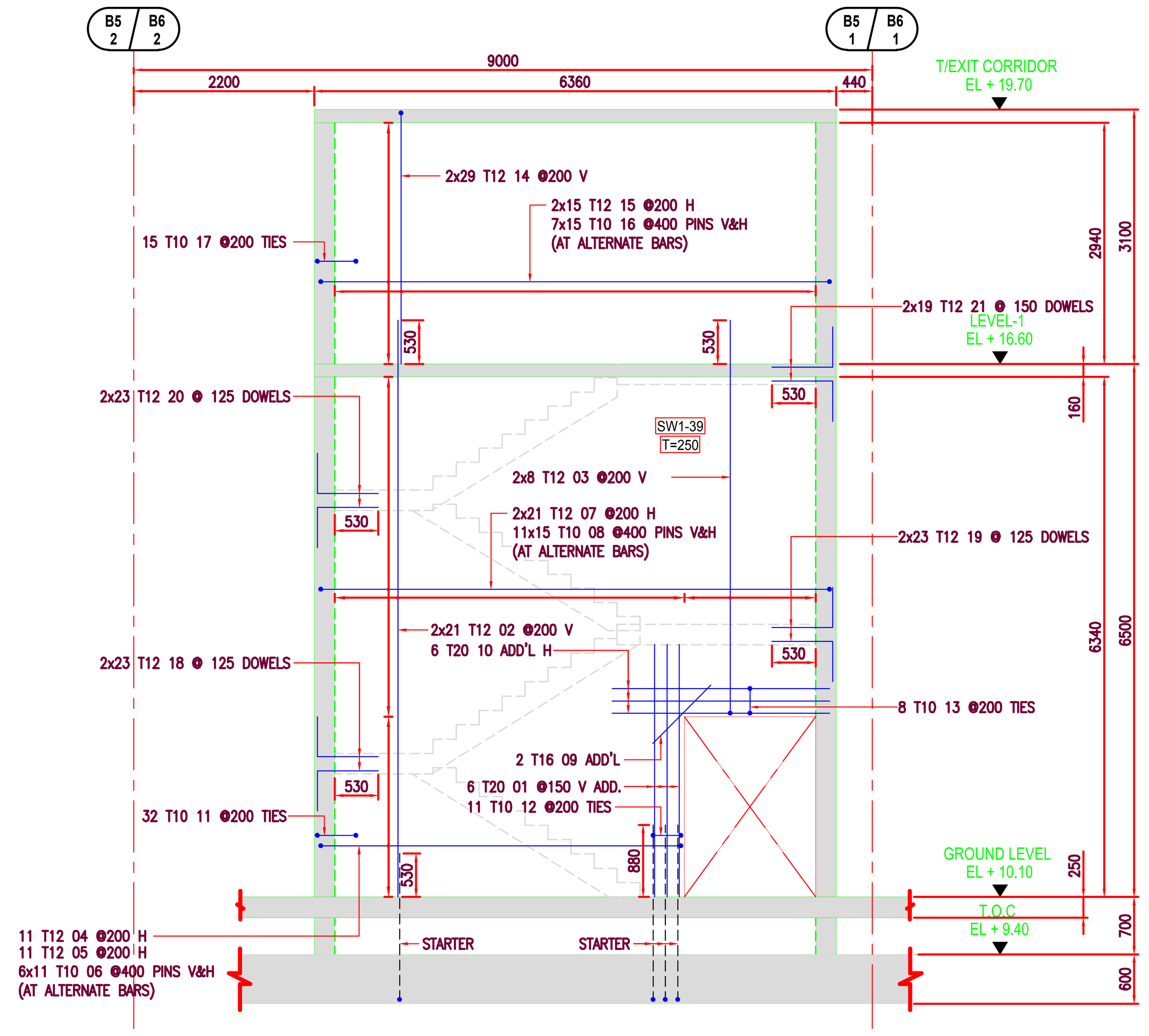
Rev	00	Date Prepared	12.05.2014	SHEET	1	OF	9

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
SWT- 39 (ELEVATIO N - A19) V	01	2	6	12	T 20	3080	0		3080											91.16	STRAIGHT
V	02	2	42	84	T 12	7030	0		7030											524.34	STRAIGHT
V	03	2	16	32	T 12	4960	17		170	4790										140.93	
H	04	2	11	22	T 12	5010	17		450	4390	170									97.87	
H	05	2	11	22	T 12	5010	20		450	4390	170									97.87	
PINS	06	2	66	132	T 10	400	T9	115	170					115						32.56	
H	07	2	42	84	T 12	7100	17		450	6200	450									529.56	
PINS	08	2	165	330	T 10	400	T9	115	170					115						81.39	
ADD'L	09	2	2	4	T 16	1000	0		1000											6.31	STRAIGHT
ADD'L H	10	2	6	12	T 20	2650	0		2650											78.43	STRAIGHT
																		Weight		1680.43	



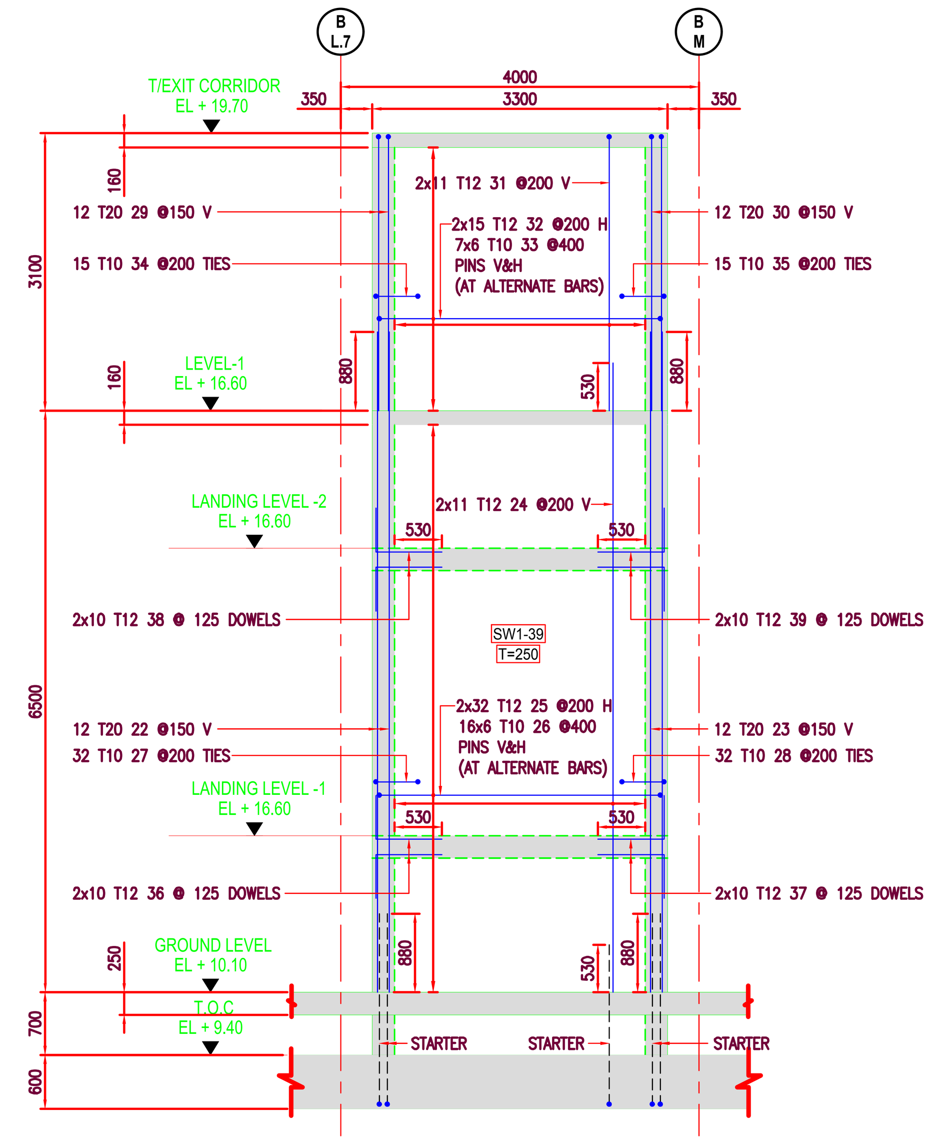
SHEAR WALL SW1-39 - PLAN AT GROUND LEVEL

SCALE 1:50 (2 NO REQ.)



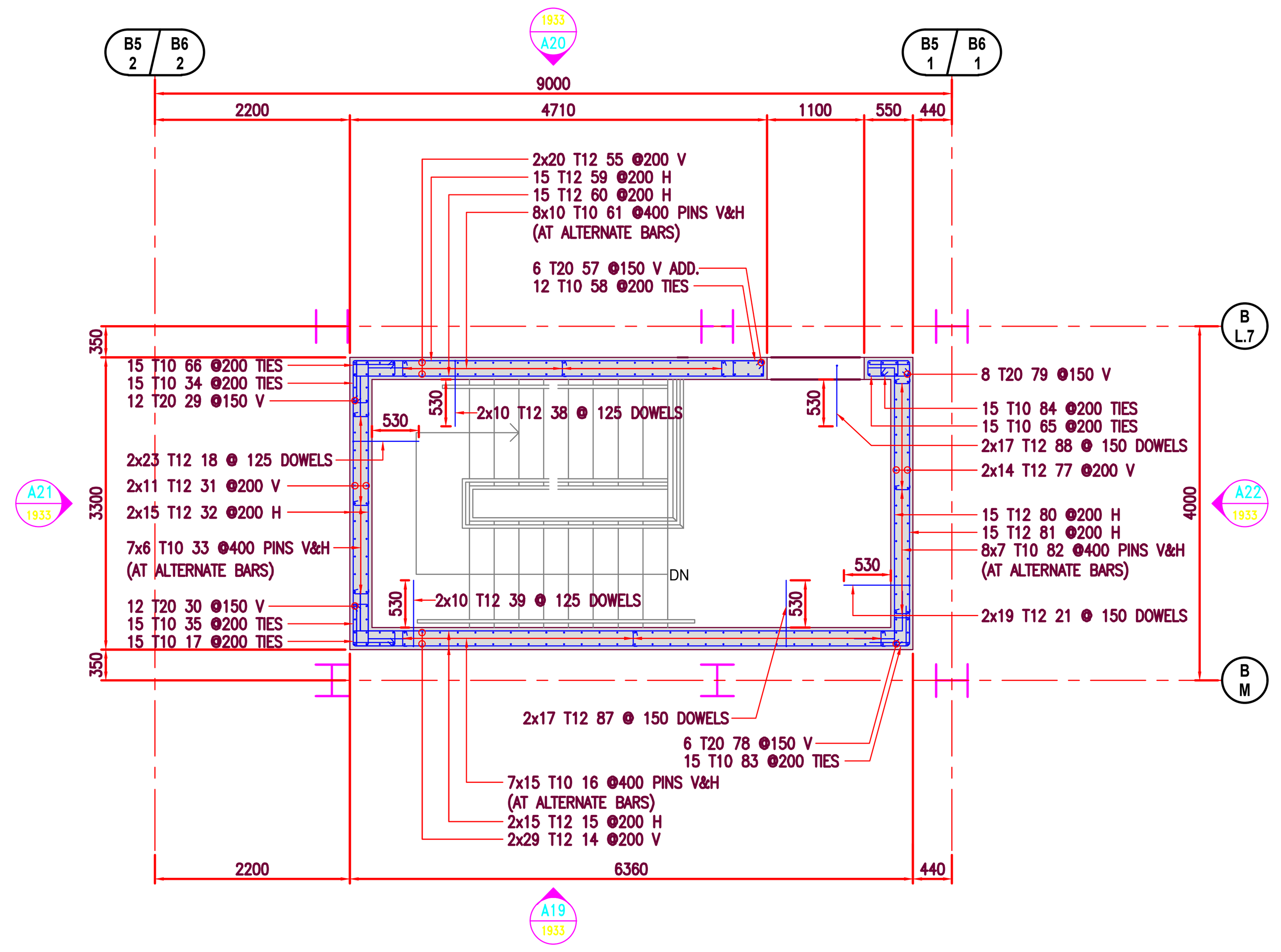
ELEVATION - A19

SCALE 1:50 (2 NO REQ.)



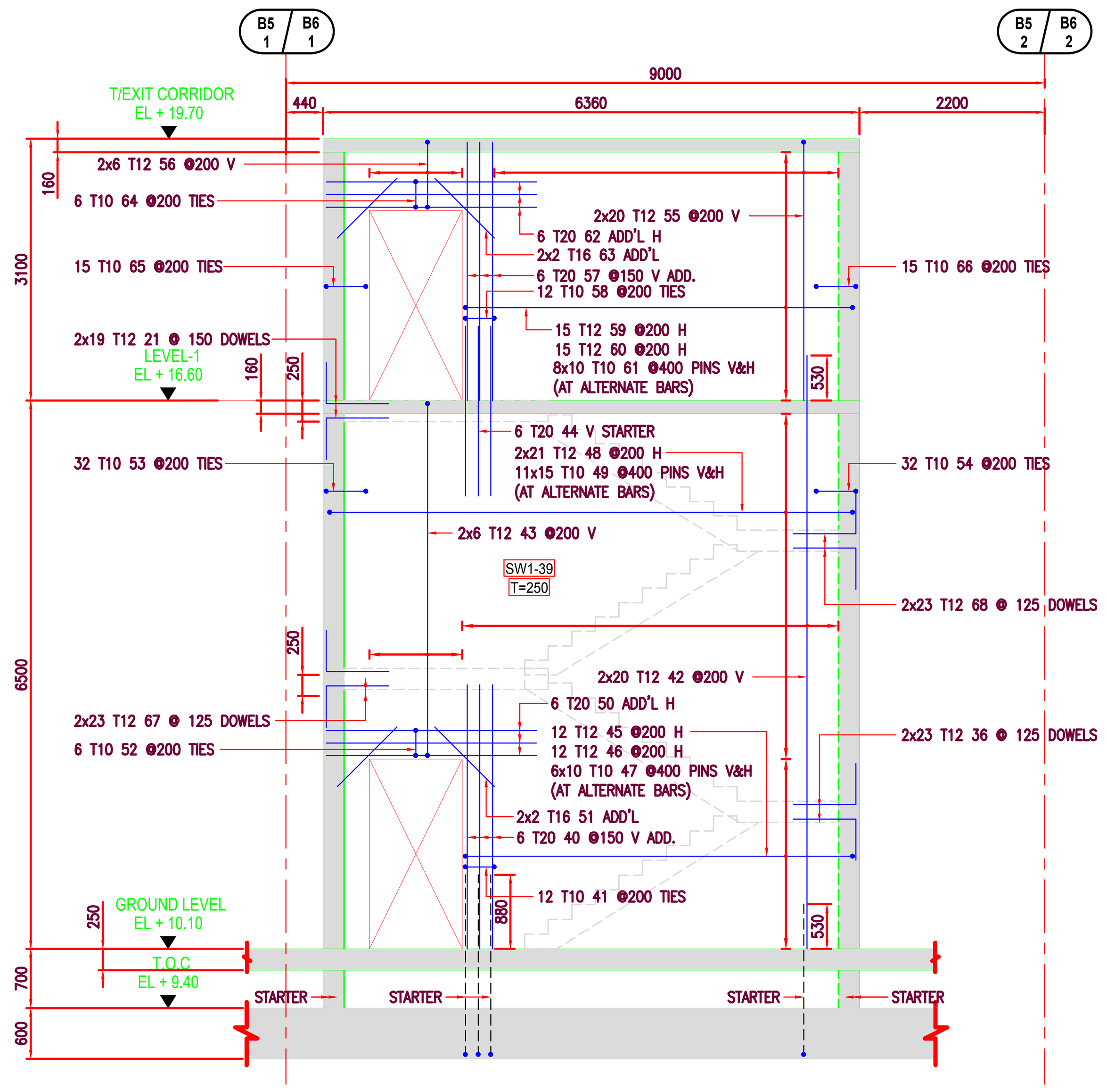
ELEVATION - A21

SCALE 1:50 (2 NO REQ.)



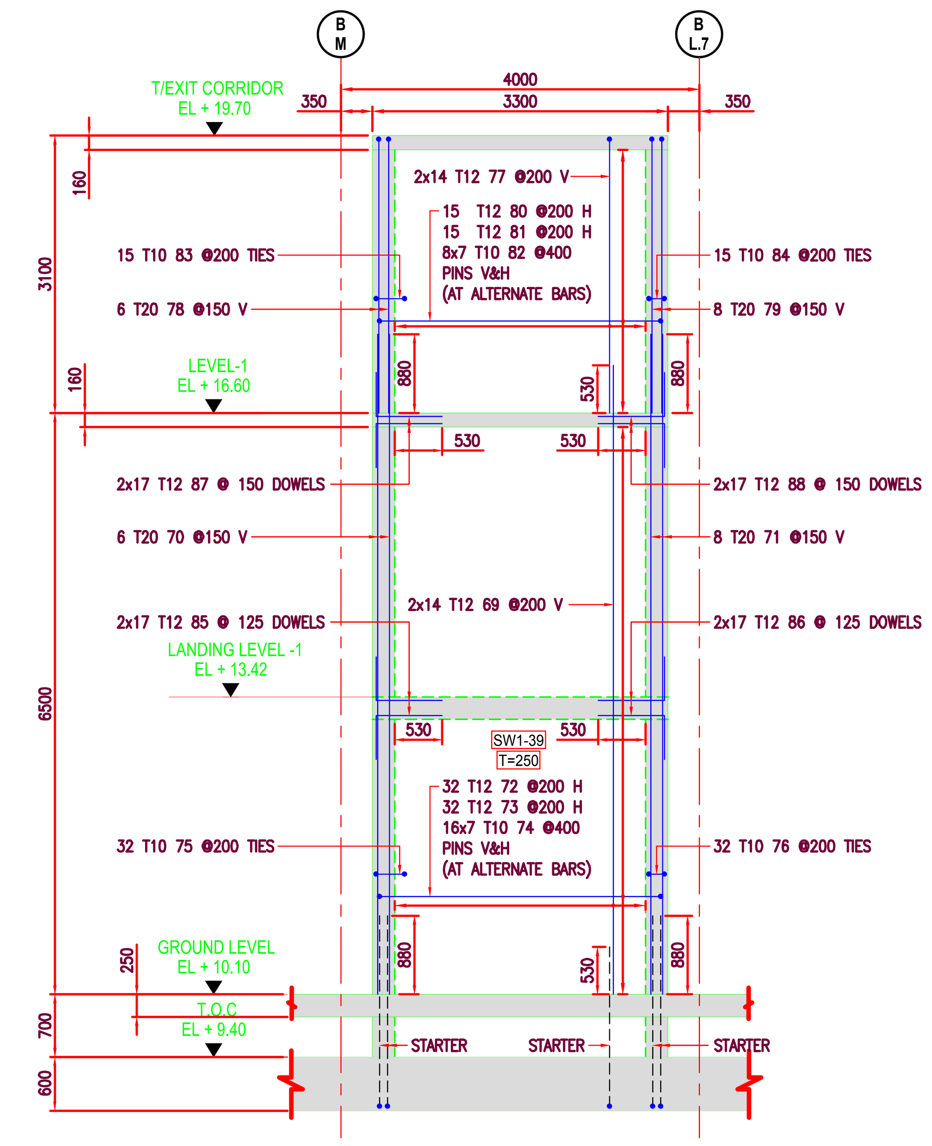
SHEAR WALL SW1-39 - PLAN AT LEVEL-1

SCALE 1:50 (2 NO REQ.)



ELEVATION - A20

SCALE 1:50 (2 NO REQ.)



ELEVATION - A22

SCALE 1:50 (2 NO REQ.)

01 TO 88 BAR MARK FOR SHEAR WALL REINFORCEMENT

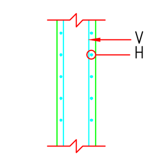
NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SHEAR WALL REINFORCEMENT
   - BELOW GROUND LEVEL – 50 mm
   - ABOVE GROUND LEVEL – 40 mm
6. LEGEND FOR CALLOUT

   5X8 T20 01 150 T1
   - REMARKS
   - SPACING
   - BAR MARK
   - BAR SIZE
   - NO OF PLACES
   - MULTIPLIER
7. ABBREVIATION
   - V – VERTICAL
   - H – HORIZONTAL
   - C.J. – CONSTRUCTION JOINT
   - I.J. – ISOLATION JOINT
   - TOF – TOP OF FOOTING
   - ADD – ADDITIONAL
   - EF – EACH FACE

LAP LENGTHS FOR C35

	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



WALL SECTION

RERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-51-F-1013	05	FOUNDATION PLAN (AREA AA13)
02	433-A001-S-FD-52-1-1013	05	LEVEL-1 FRAMING PLAN (AREA AA13)
03	433-A001-S-FD-52-2-1013	05	LEVEL-2 FRAMING PLAN (AREA AA13)
04	433-A001-S-FD-58-X-0001	05	FOUNDATION SCHEDULES
05	433-A001-S-FD-58-X-0011	03	CONCRETE SHEAR WALL SCHEDULE
06	433-A001-S-FD-55-X-0220	02	SHEAR WALL ENLARGED PLANS

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
00	ISSUED FOR APPROVAL	JT	NP	12.05.2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

NARROW BODY HEAVY MAINTENANCE HANGARS
SHEAR WALL SW1-39 REINFORCEMENT DETAILS
GROUND LVL. TO EXIT CORRIDOR LVL. AREA AA13
SHEET 1 OF 1

PROJECT NUMBER		DRAWING NUMBER	REV.
SAEI 4600000433		433-A001-S-SH-12-G-1954	00
SIZE	SCALE		
A0	1:50		

BAR BENDING SCHEDULE

Aircraft Maintenance Hangers Project Jeddah

Drawing No:-	433-A001-S-SH-10-1-1212	Rev	10	Date Prepared	04.04.2014	SHEET	1	OF	8

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE		TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm *	TOTAL Wt KG	BAR SHAPE
T1	101	1	329	329	T	#	10290	17		100	10190										3006.00	B C
T1	102	1	2099	2099	T	#	12000	0		12000											22365.16	STRAIGHT
T1	103	1	2099	2099	T	#	7285	0		7285											13577.52	STRAIGHT
T1	104	1	159	159	T	#	11125	0		11125											1570.64	STRAIGHT
T1	105	1	167	167	T	#	9680	0		9680											1435.39	STRAIGHT
T1	106	1	311	311	T	#	8020	0		8020											2214.69	STRAIGHT
T1	107	1	329	329	T	#	6480	17		100	6380										1892.99	B C
T1	108	1	147	147	T	#	9395	0		9395											1226.29	STRAIGHT
T1	109	1	162	162	T	#	6695	0		6695											963.04	STRAIGHT
																				Weight	48251.72	

NOTES / LEGENDS

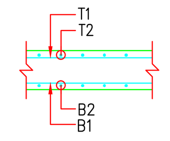
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SLAB REINFORCEMENT = 25 mm
6. LEGEND FOR CALLOUT

5X8 T20 01 150 T1
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION

B – BOTTOM LAYER
T – TOP LAYER
TOC – TOP OF CONCRETE
CJ – CONSTRUCTION JOINT
EJ – EXPANSION JOINT
THK – THICK
EL – ELEVATION
T – THICKNESS
ADD. – ADDITIONAL

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



SLAB SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-50-X-1004	02	GENERAL NOTES
02	433-A001-S-FD-52-1-1013	05	LEVEL 1 FRAMING PLAN (AREA-AA13)
03	433-A001-S-FD-55-X-0302	03	TYPICAL CONCRETE DETAILS
04	433-A001-S-FD-58-X-0022	02	CONCRETE ELEVATED SLAB SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	RS	NP	05/04/2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE
	MS	SB		

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:
AIRCRAFT MAINTENANCE HANGARS

CLIENT:

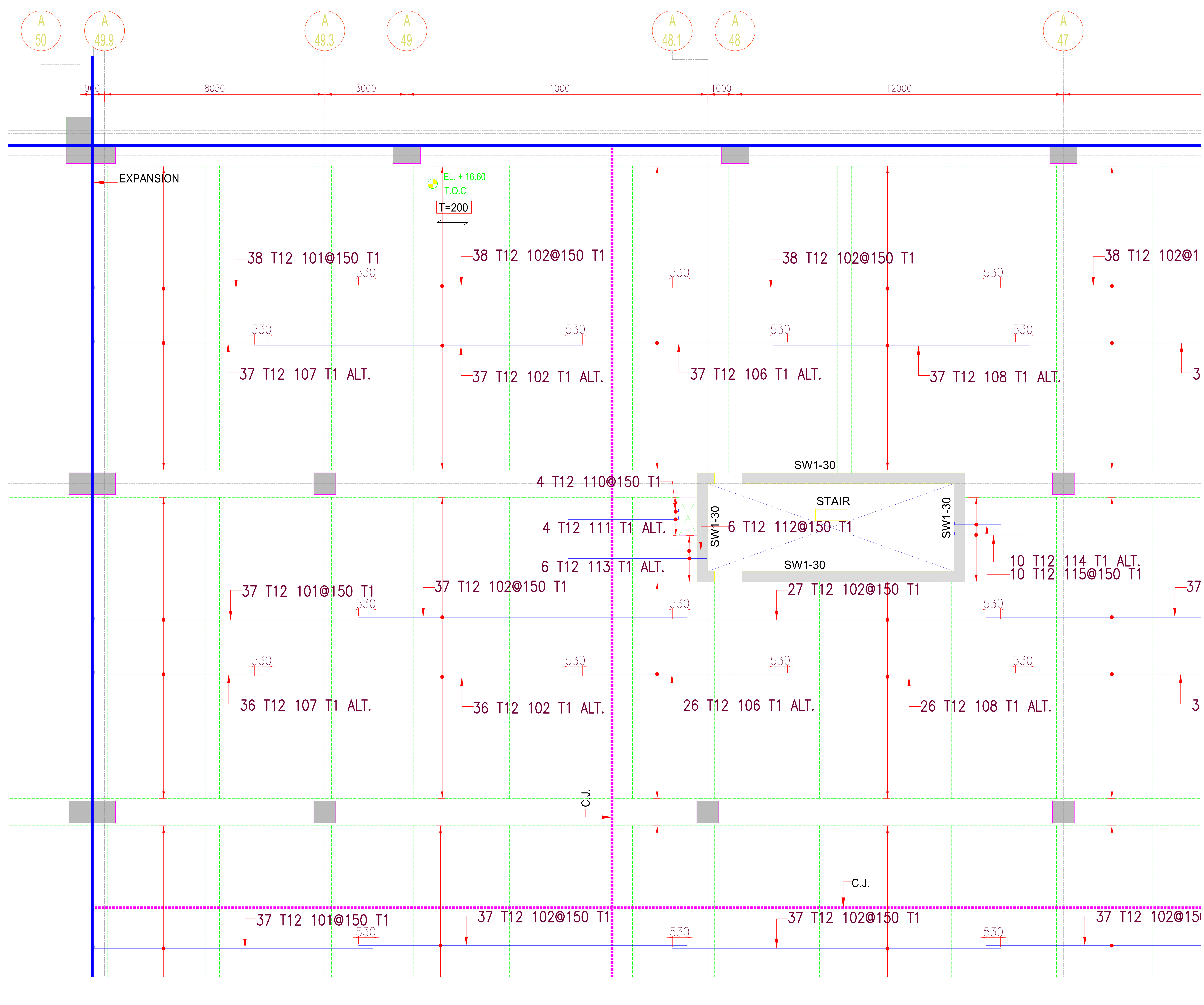
ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:
SHOP DRAWING
STRUCTURAL

DRAWING TITLE:
AIRCRAFT COMPONENT MAINTENANCE SHOPS
LEVEL-1 SLAB REINFORCEMENT DETAILS
TOP B1 LAYER AREA-AA13
SHEET 2 OF 7

PROJECT NUMBER		DRAWING NUMBER	REV.
SIZE A0	SCALE 1:150	433-A001-S-SH-10-1-1212	10



NOTES / LEGENDS

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN M UNLESS OTHERWISE NOTED.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28DAYS = 35 Mpa.
4. GRADE OF STEEL = A615M GRADE 420.
5. COVER FOR SLAB REINFORCEMENT = 25 mm
6. LEGEND FOR CALLOUT

5X8 T20 01 150 T1
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

7. ABBREVIATION

B – BOTTOM LAYER
T – TOP LAYER
TOC – TOP OF CONCRETE
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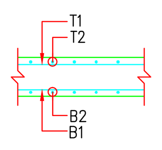
EJ – EXPANSION JOINT
THK – THICK
EL – ELEVATION
T – THICKNESS
ADD. – ADDITIONAL

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285

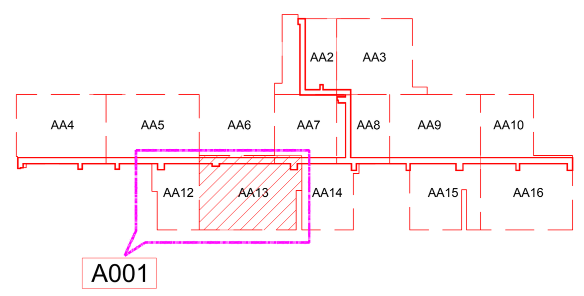


SLAB SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-50-X-1004	02	GENERAL NOTES
02	433-A001-S-FD-52-1-1013	05	LEVEL 1 FRAMING PLAN (AREA-AA13)
03	433-A001-S-FD-55-X-0302	03	TYPICAL CONCRETE DETAILS
04	433-A001-S-FD-58-X-0022	02	CONCRETE ELEVATED SLAB SCHEDULE

KEY PLAN



REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	RS	NP	05/04/2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE
	MS	SB		

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR: TAL JOINT VENTURE

Construction

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

AIRCRAFT COMPONENT MAINTENANCE SHOPS
LEVEL-1 SLAB REINFORCEMENT DETAILS
TOP B1 LAYER AREA-AA13
SHEET 2 OF 7

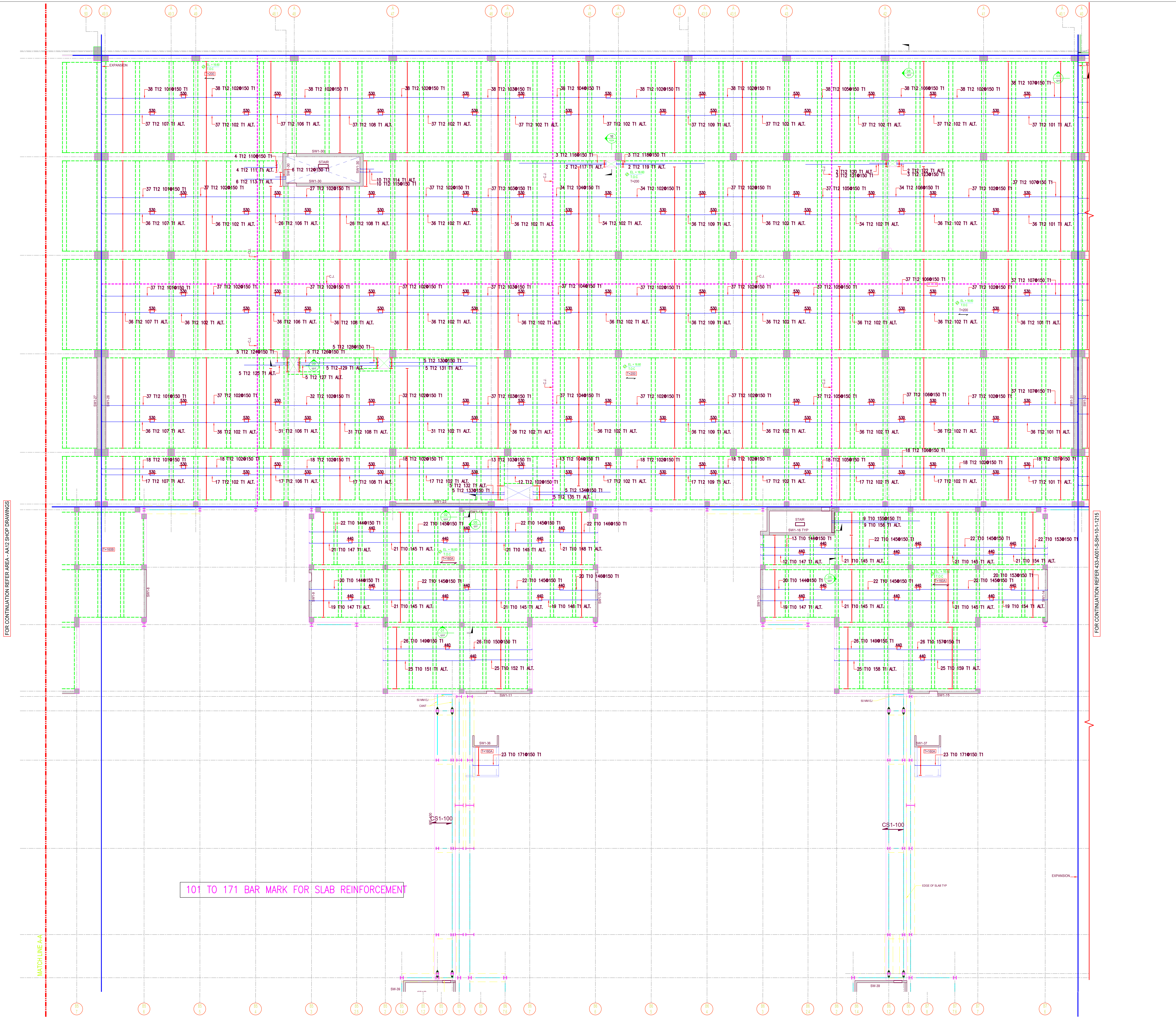
PROJECT NUMBER		DRAWING NUMBER	REV.
SAEI 4600000433		433-A001-S-SH-10-1-1212	10
SIZE	SCALE		
A0	1:150		

BAR BENDING SCHEDULE

Drawing No:- 433-A001-S-SH-10-1-1212

Rev	01	Date Prepared	20/5/2014	SHEET	1	OF	7

MEMBER	BAR MARK	NO OF MBRS	NO. OF BARS IN EACH	QTY	SIZE	TOTAL LENGTH	SHAPE CODE	A mm*	B mm*	C mm*	D mm*	E mm*	F mm*	G mm*	H mm*	J mm*	K mm*	O mm*	R mm*	TOTAL Wt KG	BAR SHAPE
T1	101	1	329	329	T 12	10290	17		100	10190										3006.00	B C
T1	102	1	2099	2099	T 12	12000	0		12000											22365.16	STRAIGHT
T1	103	1	2099	2099	T 12	7285	0		7285											13577.52	STRAIGHT
T1	104	1	159	159	T 12	11125	0		11125											1570.64	STRAIGHT
T1	105	1	167	167	T 12	9680	0		9680											1435.39	STRAIGHT
T1	106	1	311	311	T 12	8020	0		8020											2214.69	STRAIGHT
T1	107	1	329	329	T 12	6480	17		100	6380										1892.99	B C
T1	108	1	147	147	T 12	9395	0		9395											1226.29	STRAIGHT
T1	109	1	162	162	T 12	6695	0		6695											963.04	STRAIGHT
T1	110	1	4	4	T 12	320	17		100	220										1.14	B C
																		Weight		48252.86	



NOTES / LEGENDS

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6. LEGEND FOR CALLOUT

5X8 T20 01 150 T1
- REMARKS
- SPACING
- BAR MARK
- BAR SIZE
- NO OF PLACES
- MULTIPLIER

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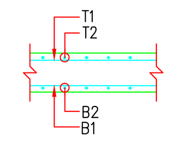
ADD. – ADDITIONAL

LAP LENGTHS FOR C35				
	CLASS A		CLASS B	
DIA	ld	ldt	SA OR SB	SBt
T8	270	355	355	460
T10	340	440	440	575
T12	410	530	530	690
T16	545	705	705	915
T20	680	880	880	1145
T25	1060	1375	1375	1785
T32	1355	1760	1760	2285



SLAB SECTION

REFERENCE DRAWINGS

S.No.	DRAWING NUMBER	REV	TITLE
01	433-A001-S-FD-50-X-1004	02	GENERAL NOTES
02	433-A001-S-FD-52-1-1013	05	LEVEL 1 FRAMING PLAN (AREA-AA13)
03	433-A001-S-FD-55-X-0302	03	TYPICAL CONCRETE DETAILS
04	433-A001-S-FD-58-X-0022	02	CONCRETE ELEVATED SLAB SCHEDULE

KEY PLAN

REVISION:

REV	DESCRIPTION	PREPARED	CHECKED	DATE
10	ISSUED FOR APPROVAL	RS	NP	05/04/2014

DRAWING BY	DESIGNED BY	CHECKED BY	APPROVED BY	DATE
	MS	SB		

	ARCH	CIVL	STRC	PAVM	ELEC	MECH	ELTN	DATE
APPROVED AS SUBMITTED								
APPROVED WITH IND.CHANGES								
DISAPPROVED, RESUBMIT								

PROJECT NAME:

AIRCRAFT MAINTENANCE HANGARS

CLIENT:

ENGINEER:

CONTRACTOR:

PHASE & DISCIPLINE:

SHOP DRAWING
STRUCTURAL

DRAWING TITLE:

AIRCRAFT COMPONENT MAINTENANCE SHOPS
LEVEL-1 SLAB REINFORCEMENT DETAILS
TOP B1 LAYER AREA-AA13
SHEET 2 OF 7

PROJECT NUMBER		DRAWING NUMBER	REV.
SAEI 4600000433		433-A001-S-SH-10-1-1212	10
SIZE	SCALE		
A0	1:150		

REBAR DETAILING SAMPLES

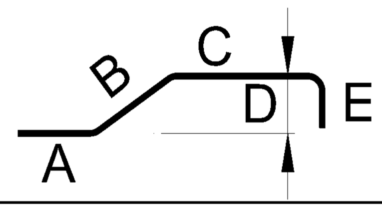
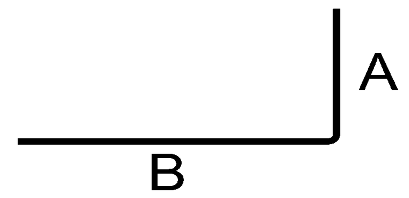
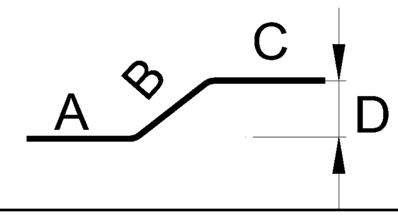
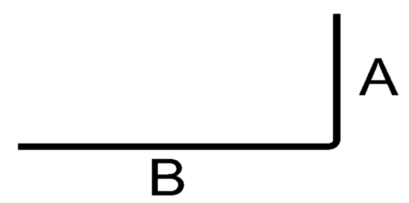
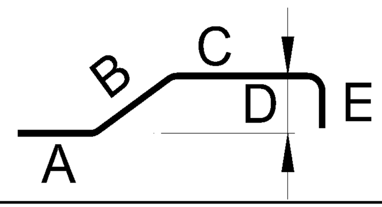
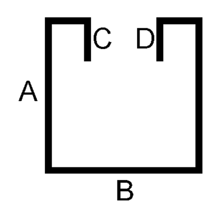
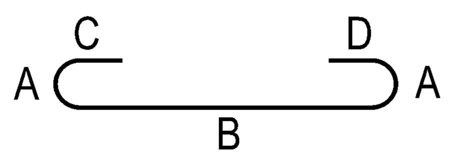
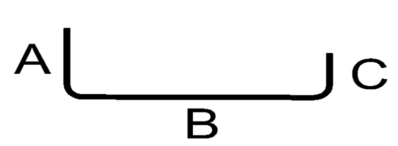
NEW ORBITAL HIGHWAY & TRUCK ROUTE

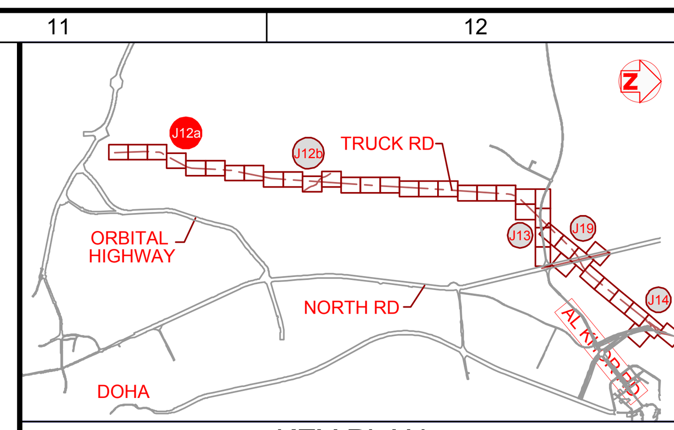
Job No: 095-147
Dwg. Ref: EXW-P023-0004-SE-DEC-DG-15101-004
Location: JUNCTION-12A
Item: UNDERPASS "J12A (BR-NW) (PART-1) BEAM B1,B2,B3 REINFORCEMENT DETAILS
Revision: CB

Date: 09-12-2015

Ref. Page No.: 1 of 3

Document No: EXW-P023-0004-SE-DEC-BS-15101-003

Location	Bar Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
BEAM-1 (B1)	**EQ**	**8**	**32**	**6.313**	**4**	**10**	**40**		**34**	1960	450	**3340**	**35**	**800**			**6550**	**6462**	**1631.83**
BEAM-1 (B1)	**EQ**	**10**	**32**	**6.313**	**4**	**10**	**40**		**11**	900	11185						**12085**	**11997**	**3029.58**
BEAM-1 (B2)	**EQ**	**13**	**32**	**6.313**	**4**	**10**	**40**		**26**	1960	450	**9590**	**35**				**12000**	**12000**	**3030.33**
BEAM-1 (B2)	**EQ**	**14**	**32**	**6.313**	**4**	**10**	**40**		**00**	3160							**3160**	**3160**	**797.99**
BEAM-1 (T1&T2)	**EQ**	**15**	**32**	**6.313**	**4**	**20**	**80**		**11**	2000	7000						**9000**	**8912**	**4501.05**
BEAM-1 (T1)	**EQ**	**16**	**32**	**6.313**	**4**	**10**	**40**		**34**	1960	450	**7500**	**35**	**2000**			**11910**	**11822**	**2985.38**
BEAM-1 (CADRE)	**150**	**17**	**16**	**1.578**	**4**	**85**	**340**		**47**	1100	1080	**210**	**210**				**2600**	**2504**	**1343.70**
BEAM-1 (STIRRUPS)	**150**	**18**	**12**	**0.888**	**4**	**170**	**680**		**47**	40	1100	**130**	**130**				**1400**	**1328**	**801.71**
BEAM-1	**150**	**17 a**	**16**	**1.578**	**4**	**85**	**340**		**21**	**225**	**1080**	**225**					**1530**	**1466**	**786.69**
BEAM-1 (SPACER)	**1000**	**20**	**32**	**6.313**	**4**	**17**	**68**		**00**	1080							**1080**	**1080**	**463.64**
BEAM-1 (SF)	**EQ**	**SF 1**	**12**	**0.888**	**4**	**6**	**24**		**00**	12000							**12000**	**12000**	**255.68**
BEAM-1 (SF)	**EQ**	**SF 2**	**12**	**0.888**	**4**	**6**	**24**		**00**	2800							**2800**	**2800**	**59.66**



KEY PLAN

NOTES:
1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- LINKS: REMARKS
- 100: SPACING
- 01: BAR MARK
- T20: BAR TYPE & DIA
- 10: NUMBER OF BARS
- 3: MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
DG-00010	GENERAL NOTES	D03
DG-01043-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) WALL ELEVATIONS	D03
DG-01044-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 1 OF 3	D03
DG-01045-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 2 OF 3	D04

CONCRETE PROTECTIVE COVER

UNDERPASS / TUNNELS.
- BOTTOM : 100MM
- EARTH FACE : 75MM
- EXPOSED FACE : 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S02	10-12-2015	SECOND ISSUE	PDU	M.M.	C.K.
S01	15-10-2015	FIRST ISSUE	ARS	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

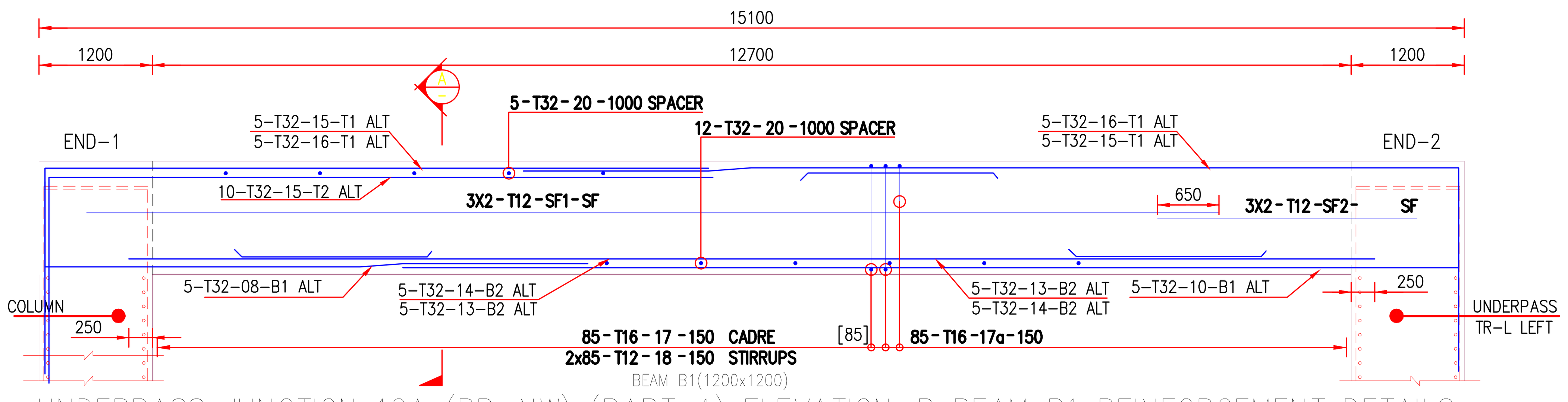
Project Code:

Status: DETAIL DESIGN

Drawing Title: JUNCTION 12A
UNDER PASS "J12A (BR-NW) PART-1
BEAMS (B1, B2 & B3)
REINFORCEMENT DETAIL

Drawn: PDU		Checked: M. MOKHTAR	
Designed: -		Approved: CK	
Date: 10/12/2015		Scale: AS SHOWN	

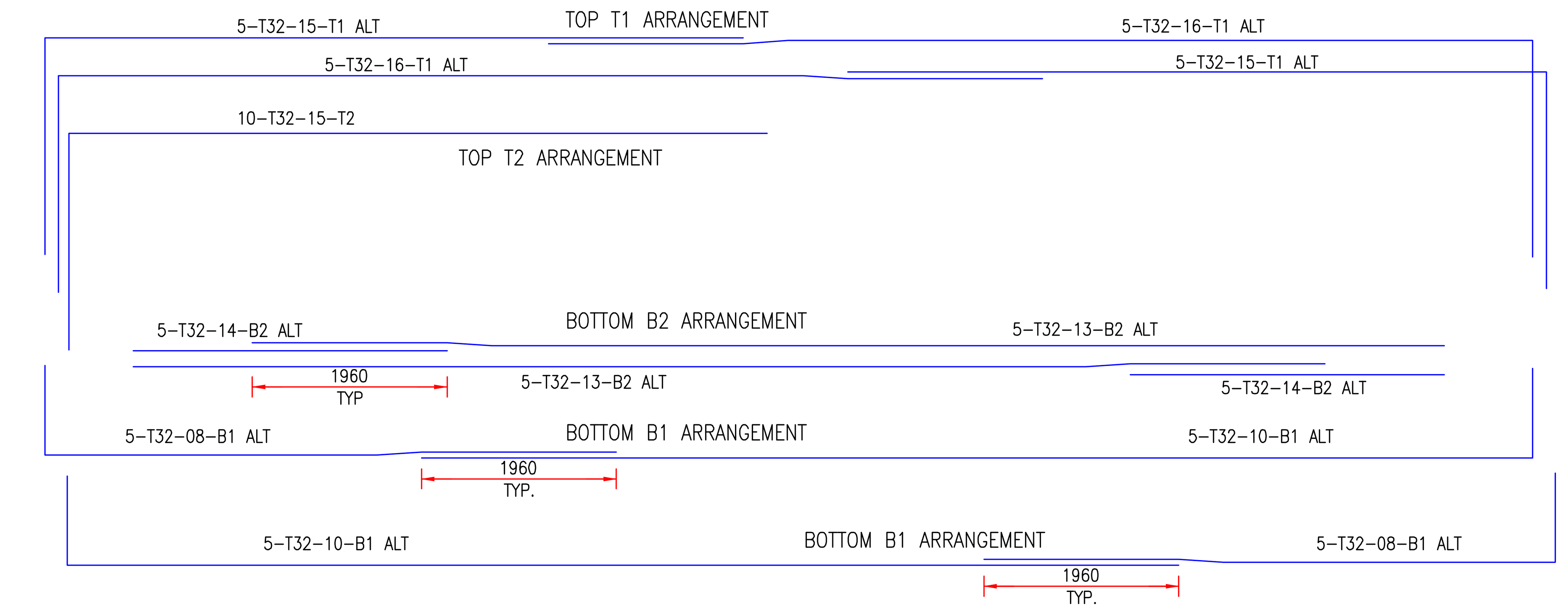
Drawing Number: EXW-P023-0004-SE-DEC-DG-15101-004
Revision: S02

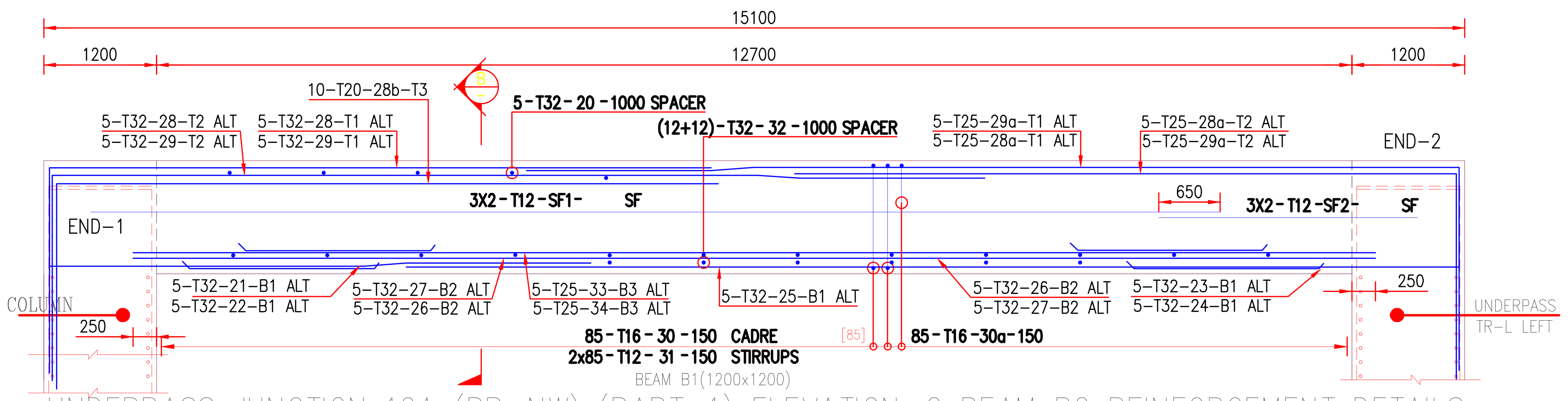


UNDERPASS JUNCTION 12A (BR-NW) (PART-1) ELEVATION-B BEAM B1 REINFORCEMENT DETAILS

SCALE 1:50

4 NOS

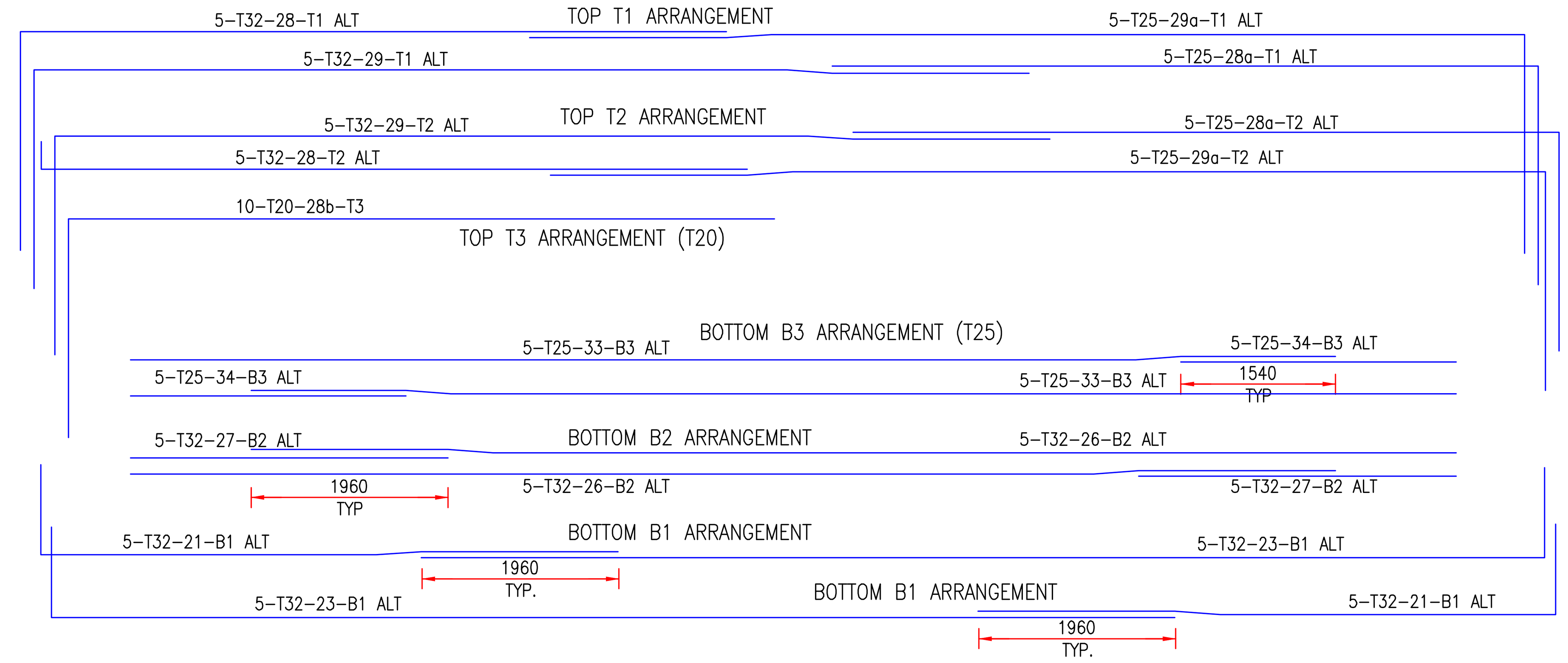


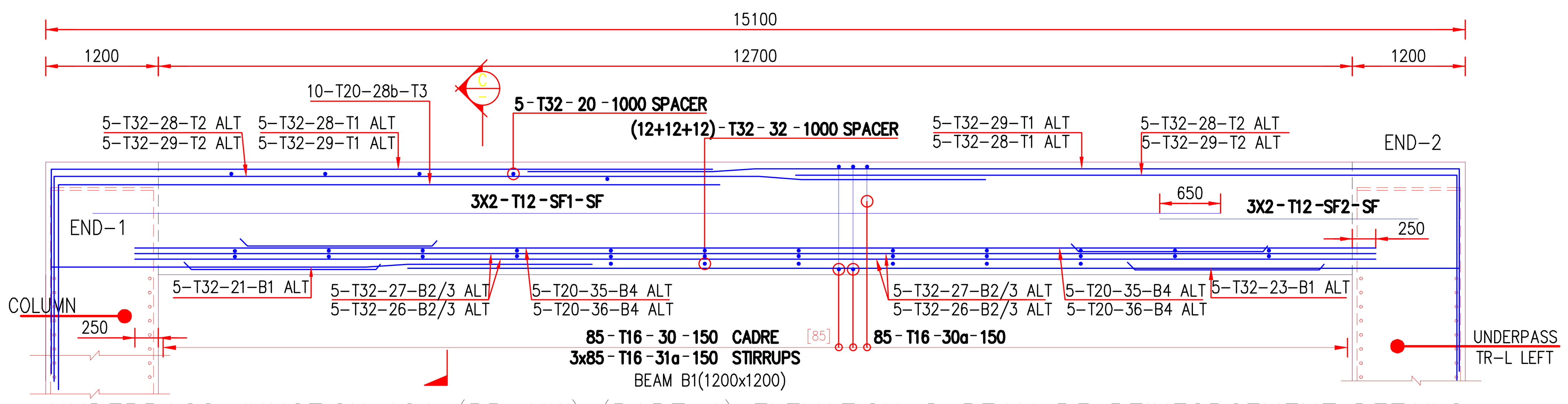


UNDERPASS JUNCTION 12A (BR-NW) (PART-1) ELEVATION-C BEAM B2 REINFORCEMENT DETAILS

SCALE 1:50

4 NOS

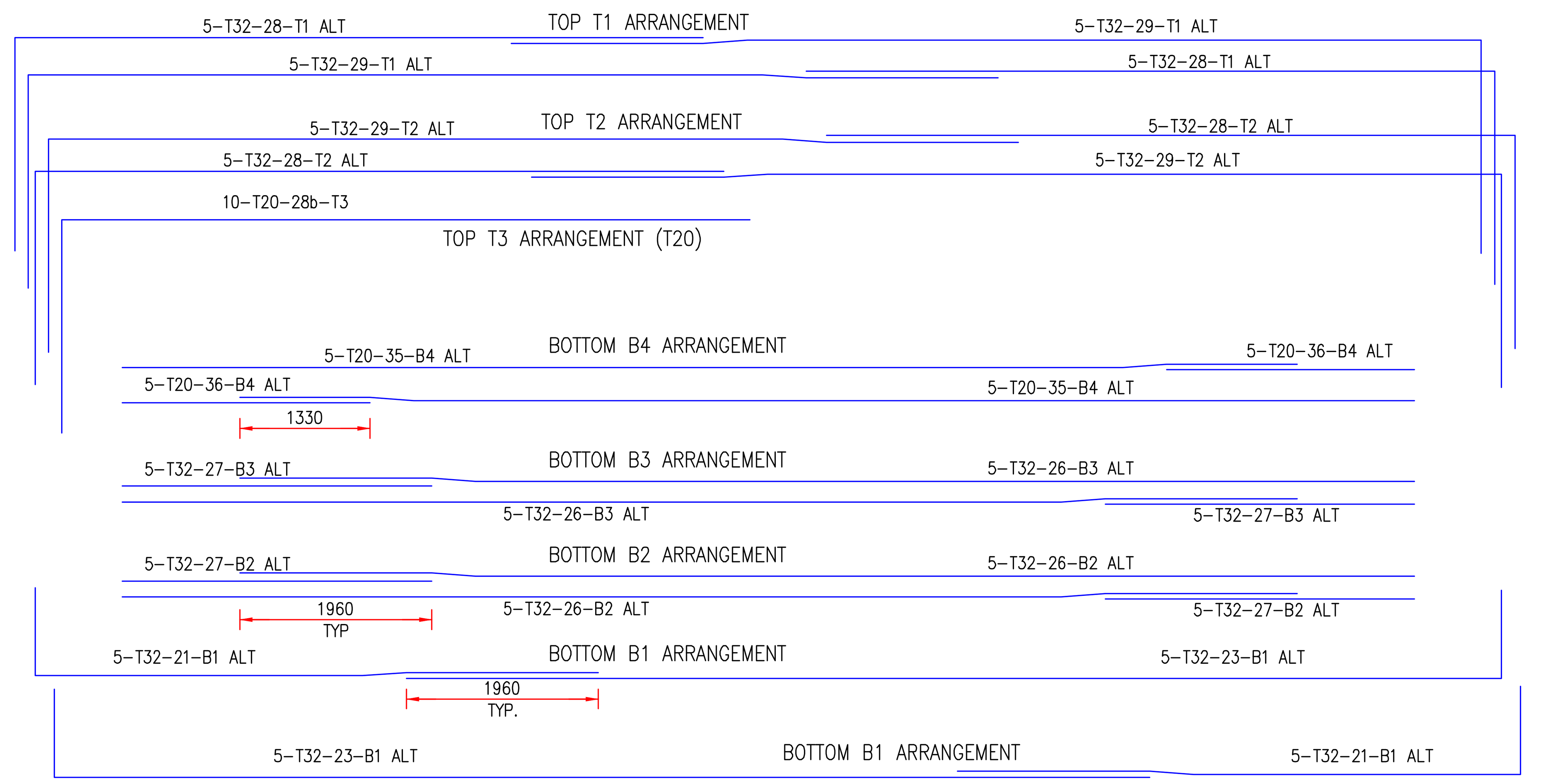




UNDERPASS JUNCTION 12A (BR-NW) (PART-1) ELEVATION-D BEAM B3 REINFORCEMENT DETAILS

SCALE 1:50

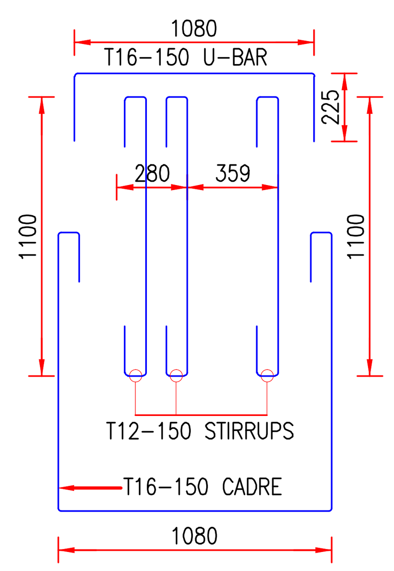
2 NOS



BEAM B1 REINF. TABLE		
08	T32	800 450 1960 3340
10	T32	900 11185
13	T32	1960 450 9590
14	T32	3160
15	T32	7000 2000
16	T32	1960 450 7500 2000
17	T16	1100 210 1080
17a	T16	1080 225 225
18	T12	130 130 1100
20	T32	1080
SF1	T12	12000
SF2	T12	2800

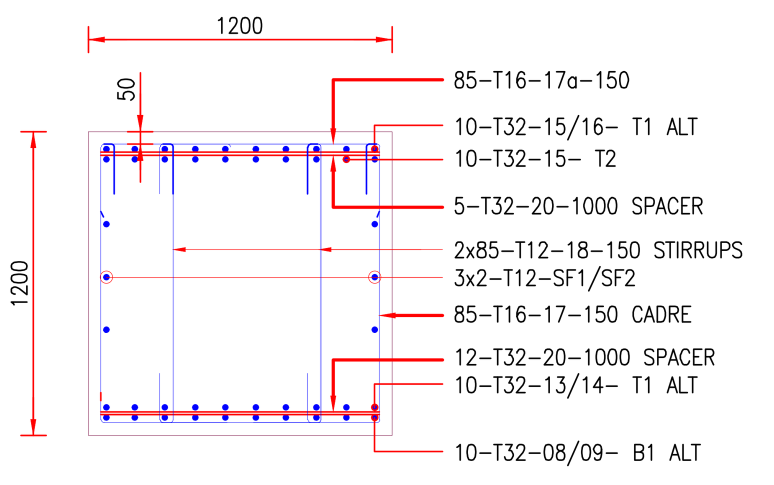
BEAM B2 REINF. TABLE		
21	T32	800 450 1960 3340
23	T32	900 11185
26	T32	1960 450 9590
27	T32	3160
28	T32	2000 7000
29	T32	1960 450 7500 2000
28a	T25	2000 7030
29a	T25	2000 450 7460 2000
28b	T20	2180 7030
30	T16	1100 210 1080
30a	T16	1080 225 225
31	T12	210 210 1100
32	T32	1080
33	T25	1540 350 10110
34	T25	2740
SF1	T12	12000
SF2	T12	2800

BEAM B3 REINF. TABLE		
21	T32	800 450 1960 3340
23	T32	900 11185
26	T32	1960 450 9590
27	T32	3160
28	T32	2000 7000
29	T32	1960 450 7500 2000
28b	T20	2000 7030
30	T16	1100 130 1080
30a	T16	1080 225 225
31a	T16	130 130 1100
32	T32	1080
35	T20	1330 280 10390
36	T20	2530
SF1	T12	12000
SF2	T12	2800



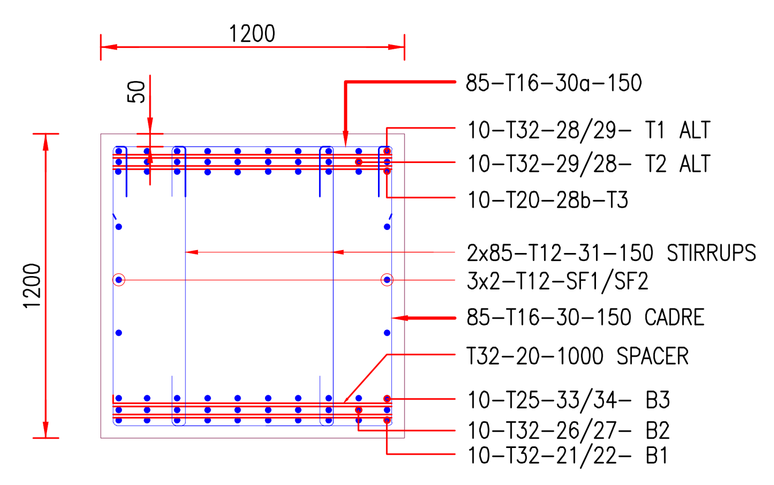
LINKS DETAIL

SCALE 1:25



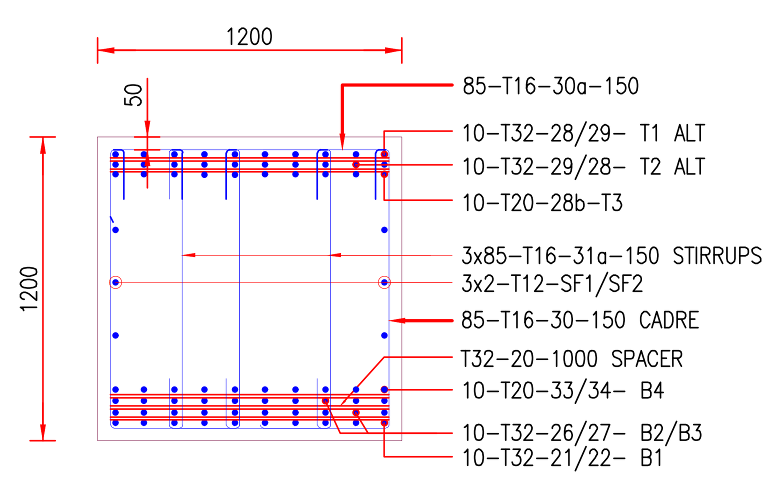
SECTION (B1)-A

SCALE 1:25



SECTION (B2)-B

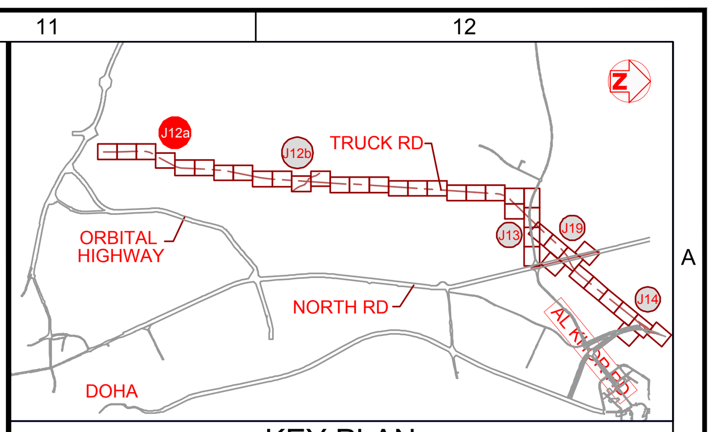
SCALE 1:25



SECTION (B3)-C

SCALE 1:25

NOTE:
FOR KEY PLAN & BEAM B4 & B5 REINFORCEMENT DETAILS
REFER DRAWING NO:EXW-P023-0004-SE-DEC-DG-15101-005



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
DG-00010	GENERAL NOTES	D03
DG-01043-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) WALL ELEVATIONS	D03
DG-01044-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 1 OF 3	D03
DG-01045-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 2 OF 3	D04

CONCRETE PROTECTIVE COVER

UNDERPASS / TUNNELS.	BOTTOM	: 100MM
	EARTH FACE	: 75MM
	EXPOSED FACE	: 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH			
Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S02	10-12-2015	SECOND ISSUE	PDU	M.M.	C.K.
S01	15-10-2015	FIRST ISSUE	ARS	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code:

Status: DETAIL DESIGN

Drawing Title: JUNCTION 12A
UNDER PASS "J12A (BR-NW) PART-1
BEAMS (B1, B2 & B3)
REINFORCEMENT DETAIL

Drawn: PDU
Checked: M. MOKHTAR
Designed: -
Approved: CK
Date: 10/12/2015
Scale: AS SHOWN

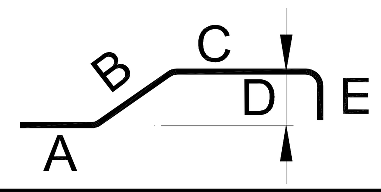
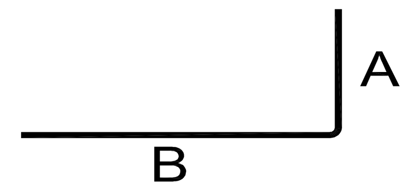
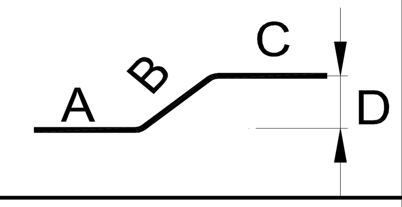
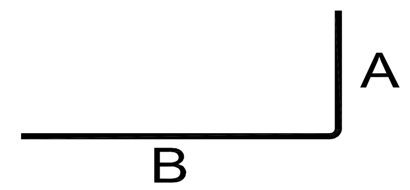
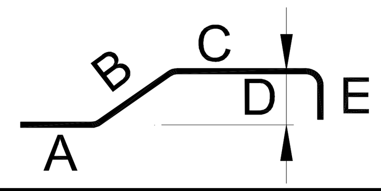
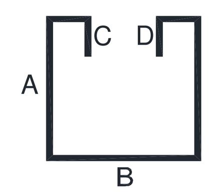
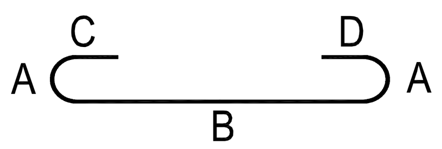
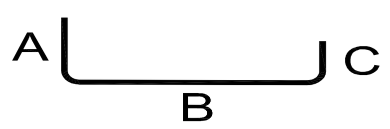
Drawing Number: EXW-P023-0004-SE-DEC-DG-15101-004
Revision: S02

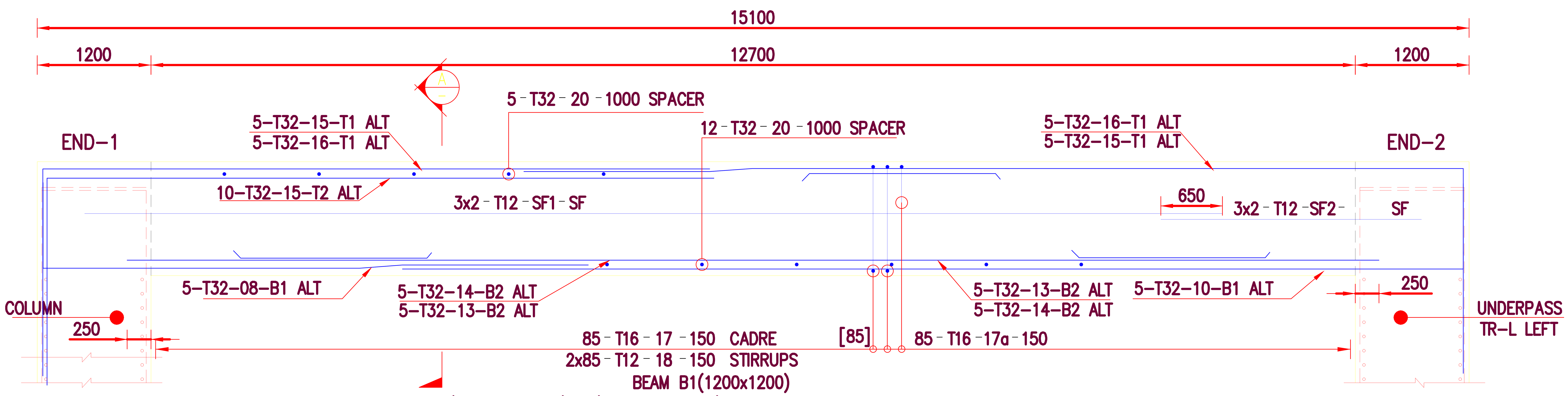
Job No: 095-147
Dwg. Ref: EXW-P023-0004-SE-DEC-DG-15101-004
Location JUNCTION-12A
Item: UNDERPASS "J12A (BR-NW) (PART-1) BEAM B1,B2,B3 REINFORCEMENT DETAILS
Revision: CB

Date: 09-12-2015

Ref. Page No.:

Document No: EXW-P023-0004-SE-DEC-BS-15101-003

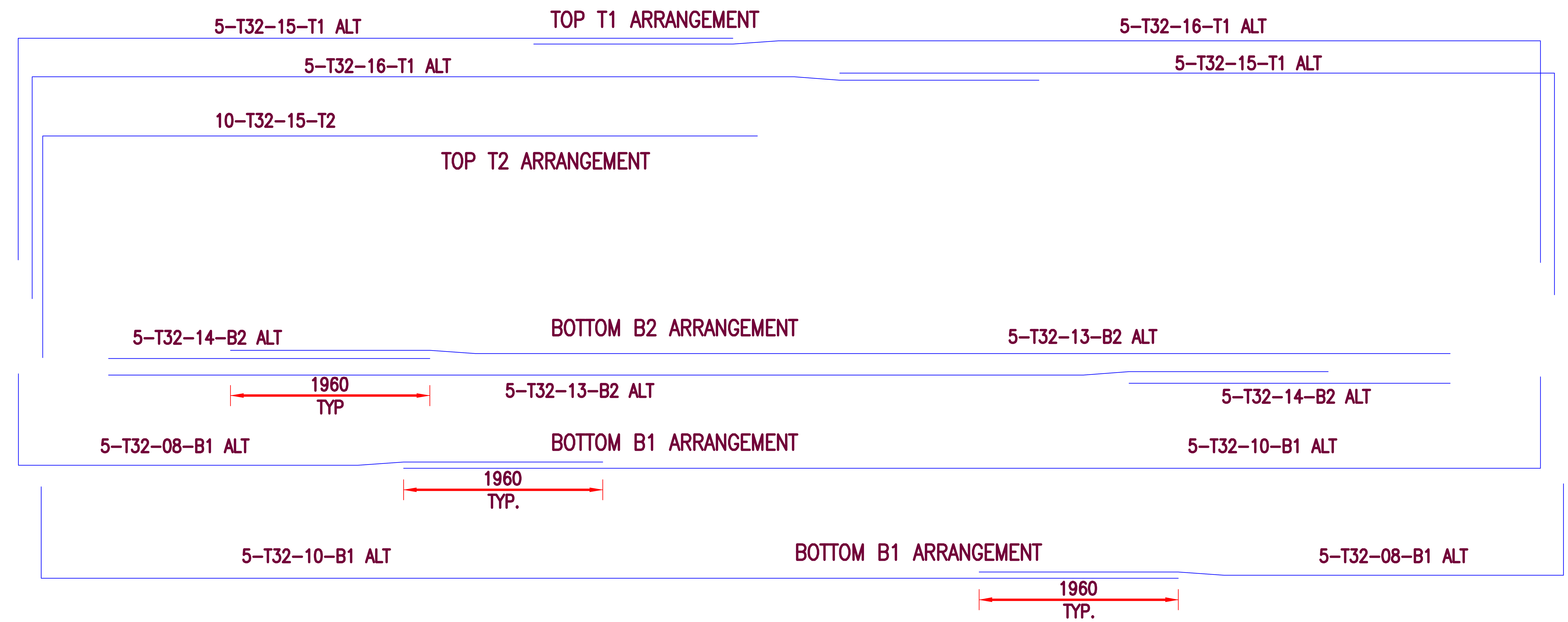
Location	Bar Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
BEAM-1 (B1)	EQ	8	32	6.313	4	10	40		34	1960	450	3340	35	800			6550	6462	1631.83
BEAM-1 (B1)	EQ	10	32	6.313	4	10	40		11	900	11185						12085	11997	3029.58
BEAM-1 (B2)	EQ	13	32	6.313	4	10	40		26	1960	450	9590	35				12000	12000	3030.33
BEAM-1 (B2)	EQ	14	32	6.313	4	10	40		00	3160							3160	3160	797.99
BEAM-1 (T1&T2)	EQ	15	32	6.313	4	20	80		11	2000	7000						9000	8912	4501.05
BEAM-1 (T1)	EQ	16	32	6.313	4	10	40		34	1960	450	7500	35	2000			11910	11822	2985.38
BEAM-1 (CADRE)	150	17	16	1.578	4	85	340		47	1100	1080	210	210				2600	2504	1343.70
BEAM-1 (STIRRUPS)	150	18	12	0.888	4	170	680		47	40	1100	130	130				1400	1328	801.71
BEAM-1	150	17 a	16	1.578	4	85	340		21	225	1080	225					1530	1466	786.69
BEAM-1 (SPACER)	1000	20	32	6.313	4	17	68		00	1080							1080	1080	463.64
BEAM-1 (SF)	EQ	SF1	12	0.888	4	6	24		00	12000							12000	12000	255.68
BEAM-1 (SF)	EQ	SF2	12	0.888	4	6	24		00	2800							2800	2800	59.66



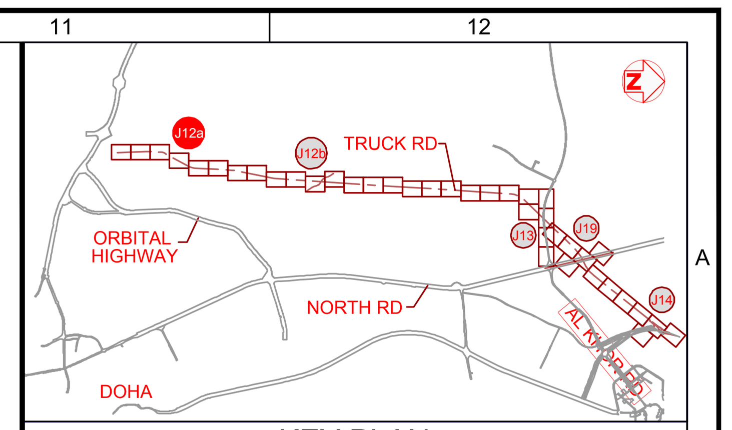
UNDERPASS JUNCTION 12A (BR-NW) (PART-1) ELEVATION-B BEAM B1 REINFORCEMENT DETAILS

SCALE 1:25

4 NOS



FOR KEY PLAN & BEAM B4 & B5 REINFORCEMENT DETAILS
REFER DRAWING NO:EXW-P023-0004-SE-DEC-DG-15101-005



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT -	VERTICAL	T -	TOP REINF.,
HORI -	HORIZONTAL	B -	BOTTOM REINF.,
SSL -	STRUCTURAL SLAB LEVEL	SF -	SIDE FACE BARS
EF -	EACH FACE	STAGG -	STAGGERD
NF -	NEAR FACE	FT -	FULL THREAD
FF -	FAR FACE	C -	COUPLER
ALT -	ALTERNATING	-	BOTTOM BARS
ABR -	ALTERNATING BARS REVERSED	-	TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
DG-00010	GENERAL NOTES	D03
DG-01043-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) WALL ELEVATIONS	D03
DG-01044-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 1 OF 3	D03
DG-01045-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 2 OF 3	D04

CONCRETE PROTECTIVE COVER

UNDERPASS / TUNNELS.	BOTTOM	: 100MM
	EARTH FACE	: 75MM
*	EXPOSED FACE	: 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S02	10-12-2015	SECOND ISSUE	PDU	M.M.	C.K.
S01	15-10-2015	FIRST ISSUE	ARS	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code:

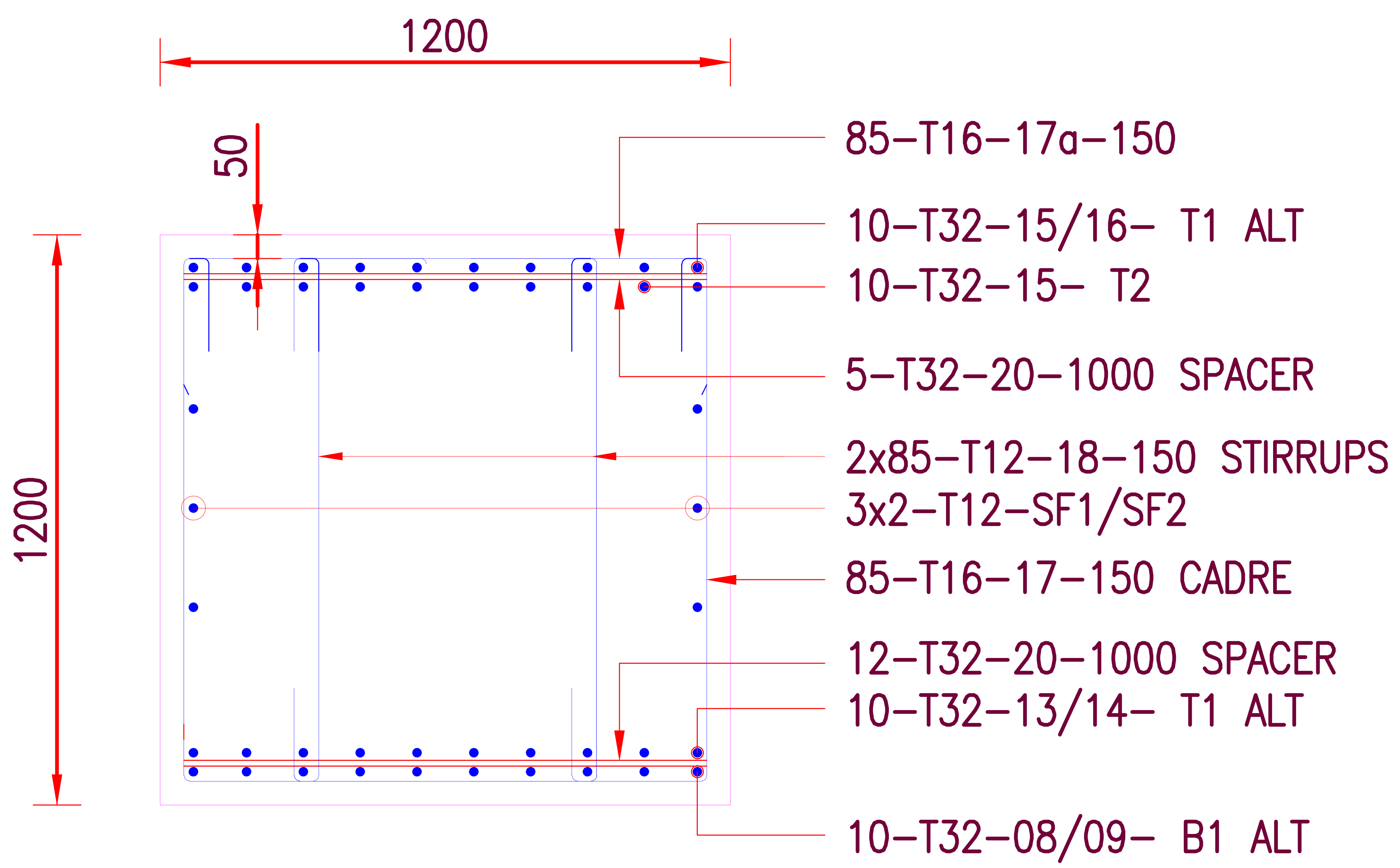
Status: DETAIL DESIGN

Drawing Title: JUNCTION 12A
UNDER PASS "J12A (BR-NW) PART-1
BEAMS (B1, B2 & B3)
REINFORCEMENT DETAIL

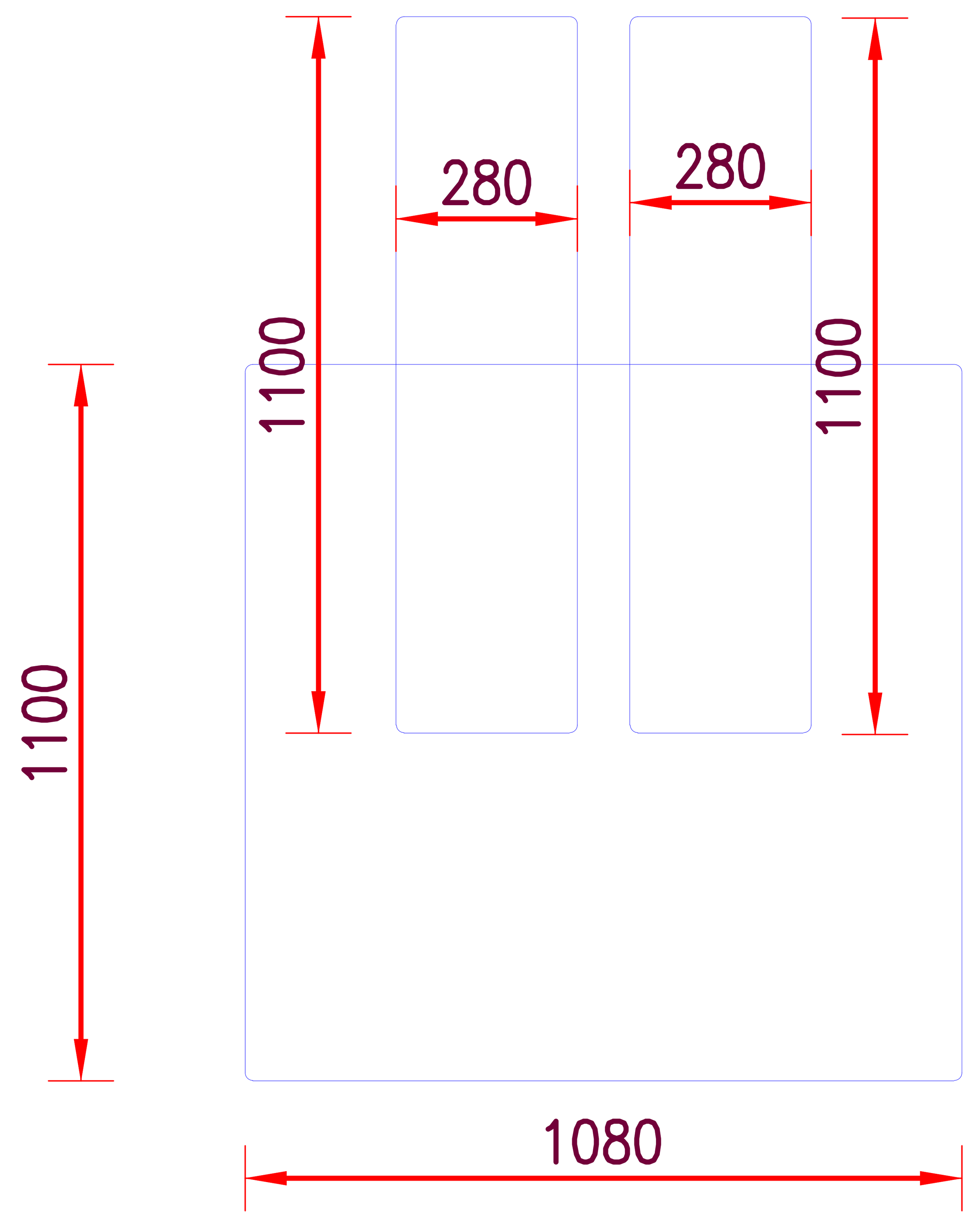
Drawn: PDU		Checked: M. MOKHTAR	
Designed: -		Approved: CK	
Date: 10/12/2015		Scale: AS SHOWN	

Drawing Number: EXW-P023-0004-SE-DEC-DG-15101-004

Revision: S02



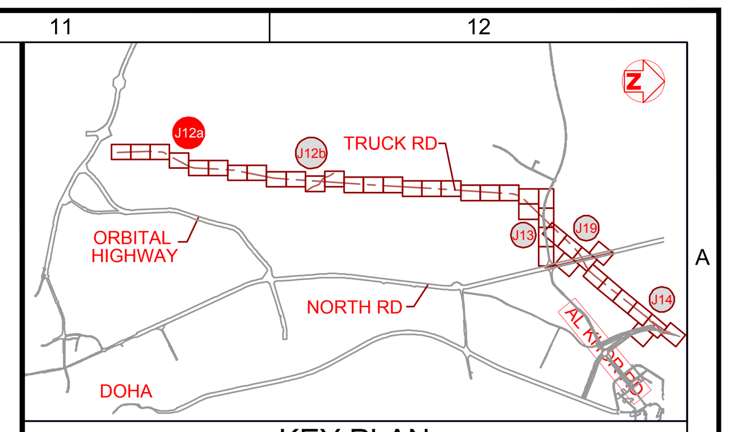
SECTION (B1)-A
SCALE 1:25



LINKS DETAIL
SCALE 1:25

BEAM B1 REINF. TABLE

08	T32	800 450 1960 3340
10	T32	900 11185
13	T32	1960 450 9590
14	T32	3160
15	T32	7000 2000
16	T32	1960 450 7500 2000
17	T16	1100 210 1080
17a	T16	1080 225 225
18	T12	130 130 1100
20	T32	1080
SF1	T12	12000
SF2	T12	2800



KEY PLAN

NOTES:
1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	- VERTICAL	T	-	TOP REINF.,
HORI	- HORIZONTAL	B	-	BOTTOM REINF.,
SSL	- STRUCTURAL SLAB LEVEL	SF	-	SIDE FACE BARS
EF	- EACH FACE	STAGG	-	STAGGERD
NF	- NEAR FACE	FT	-	FULL THREAD
FF	- FAR FACE	C	-	COUPLER
ALT	- ALTERNATING		-	BOTTOM BARS
ABR	- ALTERNATING BARS REVERSED		-	TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
DG-00010	GENERAL NOTES	D03
DG-01043-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) WALL ELEVATIONS	D03
DG-01044-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 1 OF 3	D03
DG-01045-001	JUNCTION 12A UNDERPASS "J12A (BR-NW) R.C. DETAILS 2 OF 3	D04

CONCRETE PROTECTIVE COVER

UNDERPASS / TUNNELS.	BOTTOM	: 100MM
	EARTH FACE	: 75MM
	EXPOSED FACE	: 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S02	10-12-2015	SECOND ISSUE	PDU	M.M.	C.K.
S01	15-10-2015	FIRST ISSUE	ARS	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code:

Status: DETAIL DESIGN

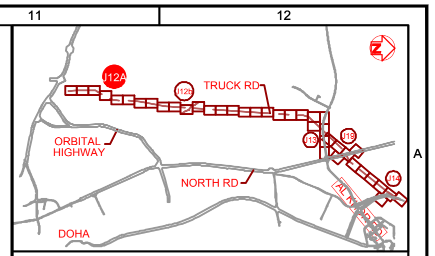
Drawing Title: JUNCTION 12A
UNDER PASS "J12A (BR-NW) PART-1
BEAMS (B1, B2 & B3)
REINFORCEMENT DETAIL

Drawn: PDU		Checked: M. MOKHTAR	
Designed: -		Approved: CK	
Date: 10/12/2015		Scale: AS SHOWN	

Drawing Number: EXW-P023-0004-SE-DEC-DG-15101-004
Revision: S02

	Date
Job No: **097-124** Dwg. Ref: **EXW-P023-0004-SE-DEC-DG-12001-07** Location **JUNCTION 12B BRAIDING PASS (BR-SE PART-1)** Item: **COLUMN REINFORCEMENT DETAILS** Revision: **CA**	9/3/2016
	Ref. Page No.
Document No: **EXW-P023-0004-SE-DEC-DG-12001-07**	1 of 1

Location	Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
COLUMN C1	EQ	1	32	6.313	4	7	28	A B	11	800	6980						7780	7692	1359.71
COLUMN C1	EQ	1a	32	6.313	4	7	28	A B	11	800	6890						7690	7602	1343.80
COLUMN C1	EQ	2	32	6.313	4	7	28	A B	11	800	4980						5780	5692	1006.17
COLUMN C1	EQ	2a	32	6.313	4	7	28	A B	11	800	4890						5690	5602	990.26
COLUMN C1	150	5	12	0.888	4	41	164	C A D B	51	1075	1100	125	125				4600	4552	662.76
COLUMN C1	150	5a	12	0.888	4	2	8	C A D B	51	755	1100	125	125				3960	3912	27.78
COLUMN C1	150	6	10	0.617	4	86	344	C A D B	51	345	1100	120	120				3130	3090	655.34
COLUMN C1	150	7	10	0.617	4	82	328	C A D B	51	345	1075	120	120				3080	3040	614.75
COLUMN C1	150	7a	10	0.617	4	4	16	C A D B	51	345	755	130	130				2460	2420	23.87



KEY PLAN

NOTES:
1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	-	VERTICAL	T	-	TOP REINF.,
HORI	-	HORIZONTAL	B	-	BOTTOM REINF.,
SSL	-	STRUCTURAL SLAB LEVEL	SF	-	SIDE FACE BARS
EF	-	EACH FACE	STAGG	-	STAGGERD
NF	-	NEAR FACE	FT	-	FULL THREAD
FF	-	FAR FACE	C	-	COUPLER
ALT	-	ALTERNATING		-	BOTTOM BARS
ABR	-	ALTERNATING BARS REVERSED		-	TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-02040-001	"J12B (BR-SE)" PLAN AND ELEVATION	D01
SE-DEC-DG-02042-001	"J12B (BR-SE)" G.A. SECTIONS (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALLS ELEVATIONS	D01
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (3/3)	D01

CONCRETE PROTECTIVE COVER
UNDERPASS / TUNNELS.
BOTTOM : 100MM
EARTH FACE : 75MM
EXPOSED FACE : 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990
A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH			
Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

S01	09-03-2016	FIRST ISSUE	NS	HP	CK
REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.

Project Manager :

Design Review Consultant :

Contractor :

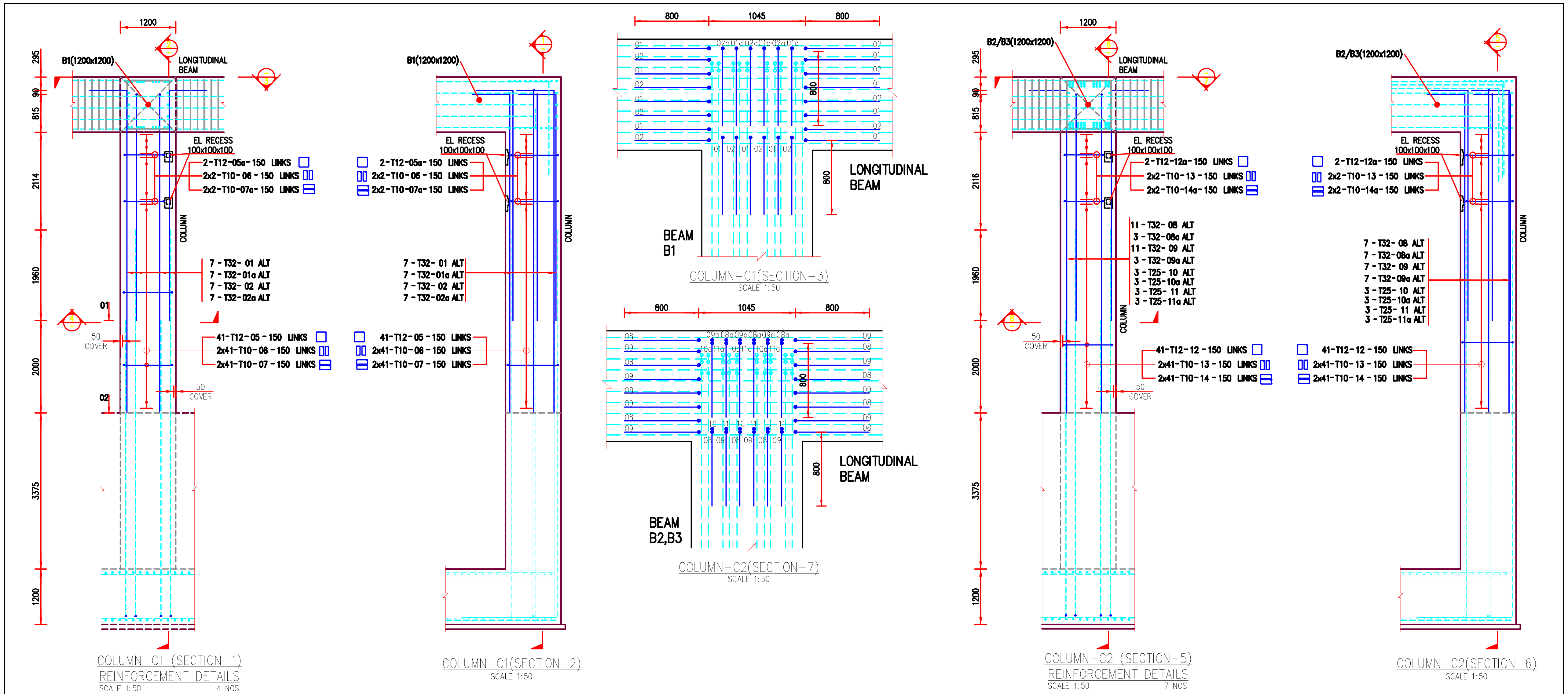
Project :

Project Code: IA 12/13 C 063 ST

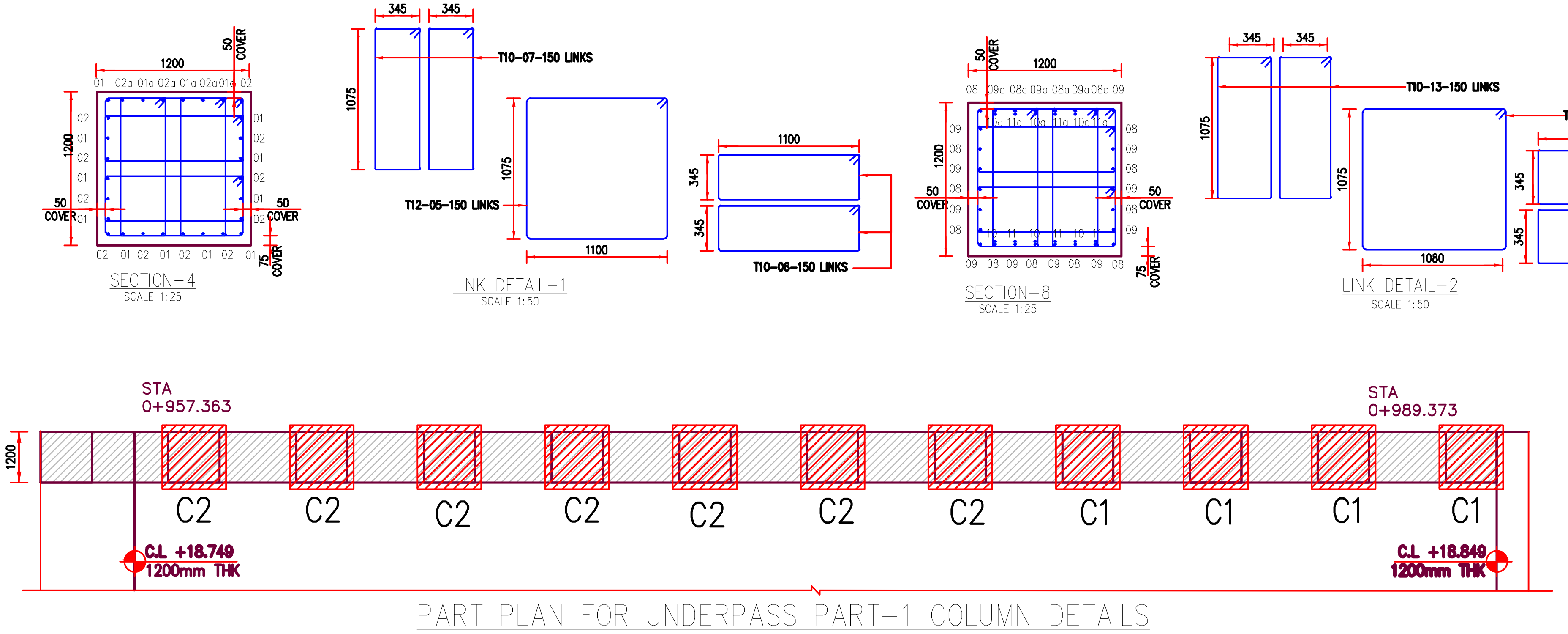
Status: PDU

Drawing Title: JUNCTION 12B BRAIDING PASS (BR-SE) COLUMN STARTER BAR REINF'T DETAILS (PART-1)

Drawn: NS	Checked: HP
Designed: -	Approved: -
Date: 09-03-2016	Scale: AS SHOWN
Drawing Number: EXW-P023-0004-SE-DEC-DG-12001-07	Revision: S01

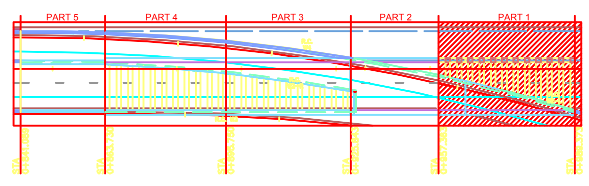


COLUMN-C1 (SECTION-1) REINFORCEMENT DETAILS
SCALE 1:50 4 NOS
COLUMN-C1(SECTION-2)
SCALE 1:50
COLUMN-C1(SECTION-3)
SCALE 1:50
COLUMN-C2(SECTION-7)
SCALE 1:50
COLUMN-C2 (SECTION-5) REINFORCEMENT DETAILS
SCALE 1:50 7 NOS
COLUMN-C2(SECTION-6)
SCALE 1:50

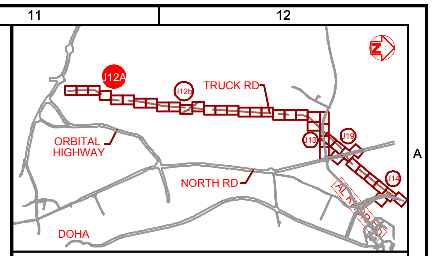


SECTION-4
SCALE 1:25
LINK DETAIL-1
SCALE 1:50
SECTION-8
SCALE 1:25
LINK DETAIL-2
SCALE 1:50
PART PLAN FOR UNDERPASS PART-1 COLUMN DETAILS
SCALE 1:150

REINFORCEMENT TABLE		
01/08	T32	800 / 6980
01a/08a	T32	800 / 6890
02/09	T32	800 / 4980
02a/09a	T32	800 / 4890
05/12	T12	125 / 1075 / 1100
05a/12a	T12	160 / 755 / 1100
06/13	T10	130 / 345 / 1100
07/14	T10	120 / 345 / 1075
07a/14a	T10	130 / 345 / 755
10	T25	800 / 6980
10a	T25	800 / 6890
11	T25	800 / 4980
11a	T25	800 / 4890



SCHEMATIC KEY PLAN



KEY PLAN

NOTES:
1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-02040-001	"J12B (BR-SE)" PLAN AND ELEVATION	D01
SE-DEC-DG-02042-001	"J12B (BR-SE)" G.A. SECTIONS (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALLS ELEVATIONS	D01
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (3/3)	D01

CONCRETE PROTECTIVE COVER
UNDERPASS / TUNNELS. BOTTOM : 100MM
EARTH FACE : 75MM
EXPOSED FACE : 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990
A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH			
Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	09-03-2016	FIRST ISSUE	NS	HP	CK

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code: IA 12/13 C 063 ST

Status: PDU

Drawing Title: JUNCTION 12B BRAIDING PASS (BR-SE) COLUMN STARTER BAR REINF'T DETAILS (PART-1)

Drawn: NS
Checked: HP
Designed: -
Approved: -
Date: 09-03-2016
Scale: AS SHOWN
Drawing Number: EXW-P023-0004-SE-DEC-DG-12001-07
Revision: S01

Job No:	097-124
Dwg. Ref:	EXW-P023-0004-SE-DEC-DG-12001-07
Location	JUNCTION 12B BRAIDING PASS (BR-SE PART-1)
Item:	COLUMN REINFORCEMENT DETAILS
Revision:	CA

Date: 9/3/2016

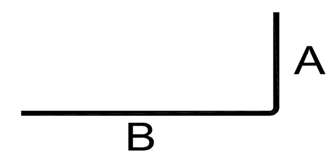
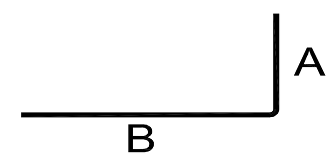
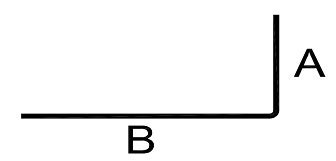
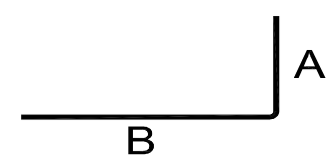
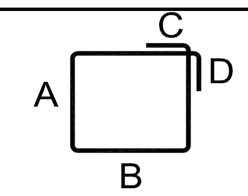
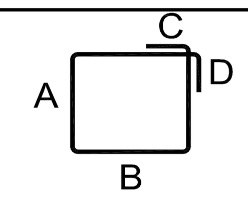
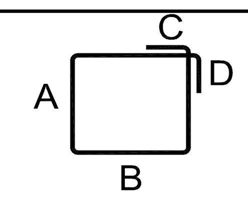
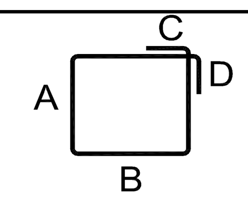
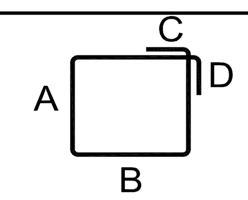
Ref. Page No.: 1 of 1

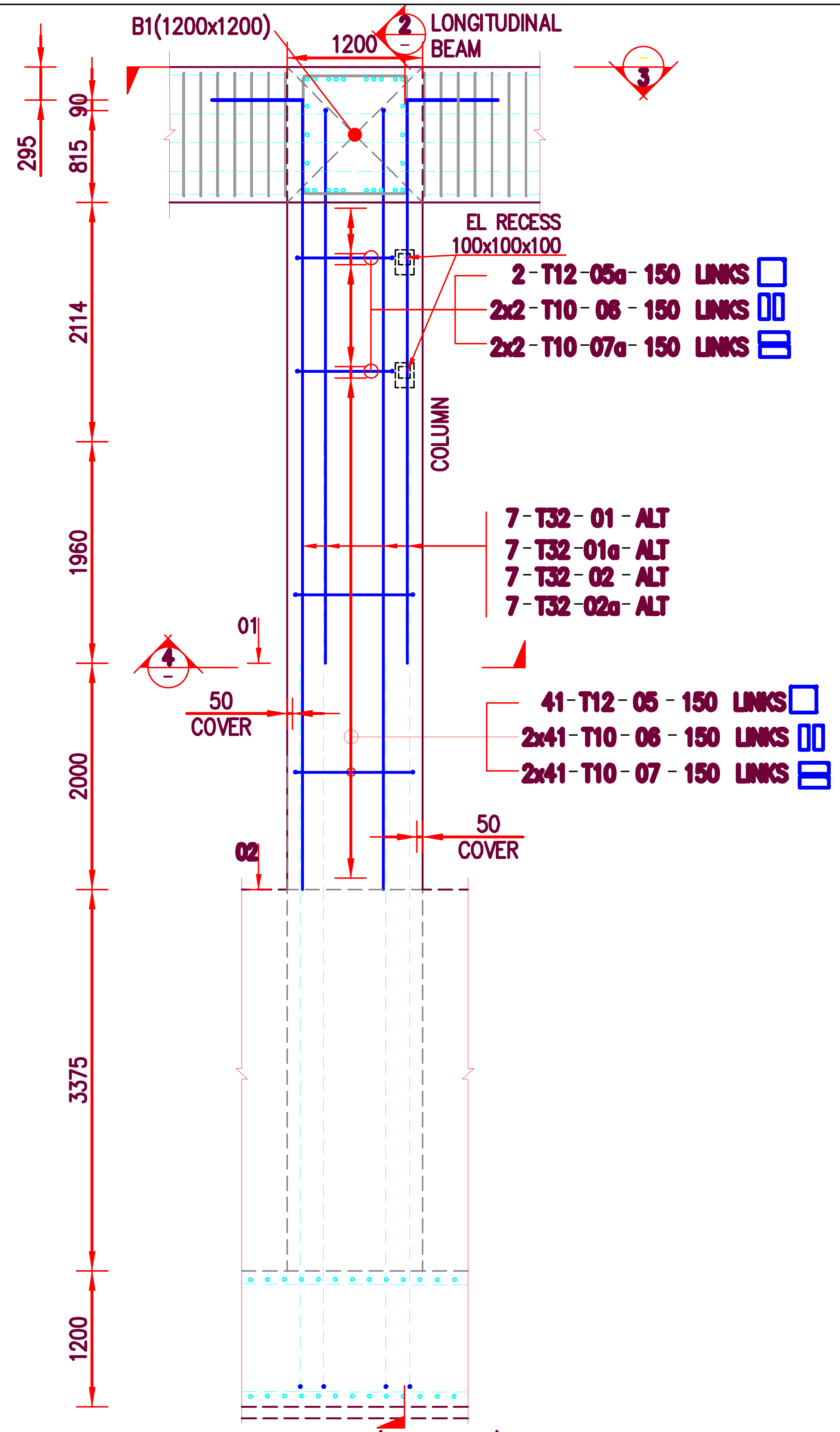
Document No: EXW-P023-0004-SE-DEC-DG-12001-07

Location	Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
COLUMN C1	EQ	1	32	6.313	4	7	28	A B	11	800	6980						7780	7692	1359.71
COLUMN C1	EQ	1a	32	6.313	4	7	28	A B	11	800	6890						7690	7602	1343.80
COLUMN C1	EQ	2	32	6.313	4	7	28	A B	11	800	4980						5780	5692	1006.17
COLUMN C1	EQ	2a	32	6.313	4	7	28	A B	11	800	4890						5690	5602	990.26
COLUMN C1	150	5	12	0.888	4	41	164	C D A B	51	1075	1100	125	125				4600	4552	662.76
COLUMN C1	150	5a	12	0.888	4	2	8	C D A B	51	755	1100	125	125				3960	3912	27.78
COLUMN C1	150	6	10	0.617	4	86	344	C D A B	51	345	1100	120	120				3130	3090	655.34
COLUMN C1	150	7	10	0.617	4	82	328	C D A B	51	345	1075	120	120				3080	3040	614.75
COLUMN C1	150	7a	10	0.617	4	4	16	C D A B	51	345	755	130	130				2460	2420	23.87
COLUMN-C2	EQ	8	32	6.313	7	11	77	A B	11	800	6980						7780	7692	3739.20
COLUMN-C2	EQ	8a	32	6.313	7	3	21	A B	11	800	6890						7690	7602	1007.85
COLUMN-C2	EQ	9	32	6.313	7	11	77	A B	11	800	4980						5780	5692	2766.97
COLUMN-C2	EQ	9a	32	6.313	7	3	21	A B	11	800	4890						5690	5602	742.70

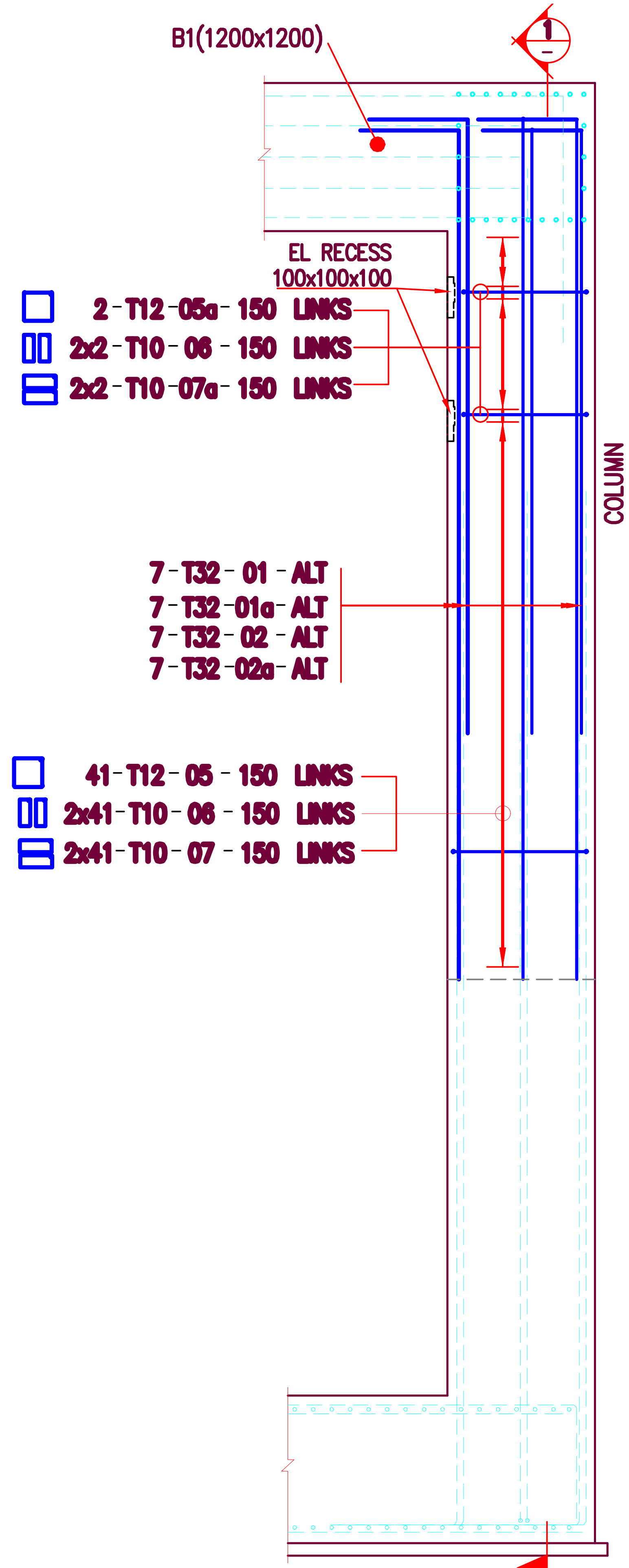
Job No: 097-124
Dwg. Ref: EXW-P023-0004-SE-DEC-DG-12001-07
Location JUNCTION 12B BRAIDING PASS (BR-SE PART-1)
Item: COLUMN REINFORCEMENT DETAILS
Revision: CA

Date
9/3/2016

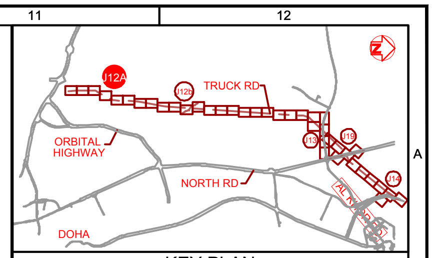
COLUMN-C2	EQ	10	25	3.853	7	3	21		11	800	6980						7780	7711	623.98
COLUMN-C2	EQ	10a	25	3.853	7	3	21		11	800	6890						7690	7621	616.70
COLUMN-C2	EQ	11	25	3.853	7	3	21		11	800	4980						5780	5711	462.15
COLUMN-C2	EQ	11a	25	3.853	7	3	21		11	800	4890						5690	5621	454.86
COLUMN-C2	150	12	12	0.888	7	41	287		51	1075	1100	125	125				4600	4552	1159.83
COLUMN-C2	150	12a	12	0.888	7	2	14		51	755	1100	125	125				3960	3912	48.62
COLUMN-C2	150	13	10	0.617	7	86	602		51	345	1100	120	120				3130	3090	1146.84
COLUMN-C2	150	14	10	0.617	7	82	574		51	345	1075	120	120				3080	3040	1075.81
COLUMN-C2	150	14a	10	0.617	7	4	28		51	345	755	120	120				2440	2400	41.43
																	Total Weight kgs		20572
									Prepared: MMM					Checked: IRK			Total Weight Tons		20.572



COLUMN–C1 (SECTION–1)
REINFORCEMENT DETAILS
SCALE 1:50 4 NOS



COLUMN–C1(SECTION–2)
SCALE 1:50



KEY PLAN

NOTES:
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2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT - VERTICAL
HORI - HORIZONTAL
SSL - STRUCTURAL SLAB LEVEL
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
ALT - ALTERNATING
ABR - ALTERNATING BARS REVERSED

T - TOP REINF.,
B - BOTTOM REINF.,
SF - SIDE FACE BARS
STAGG - STAGGERD
FT - FULL THREAD
C - COUPLER
— - BOTTOM BARS
- - - TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-02040-001	"J12B (BR-SE)" PLAN AND ELEVATION	D01
SE-DEC-DG-02042-001	"J12B (BR-SE)" G.A. SECTIONS (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALLS ELEVATIONS	D01
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (3/3)	D01

CONCRETE PROTECTIVE COVER
UNDERPASS / TUNNELS.
BOTTOM : 100MM
EARTH FACE : 75MM
EXPOSED FACE : 50MM

* LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990
A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	09-03-2016	FIRST ISSUE	NS	HP	CK

Project Manager :

Design Review Consultant :

Contractor :

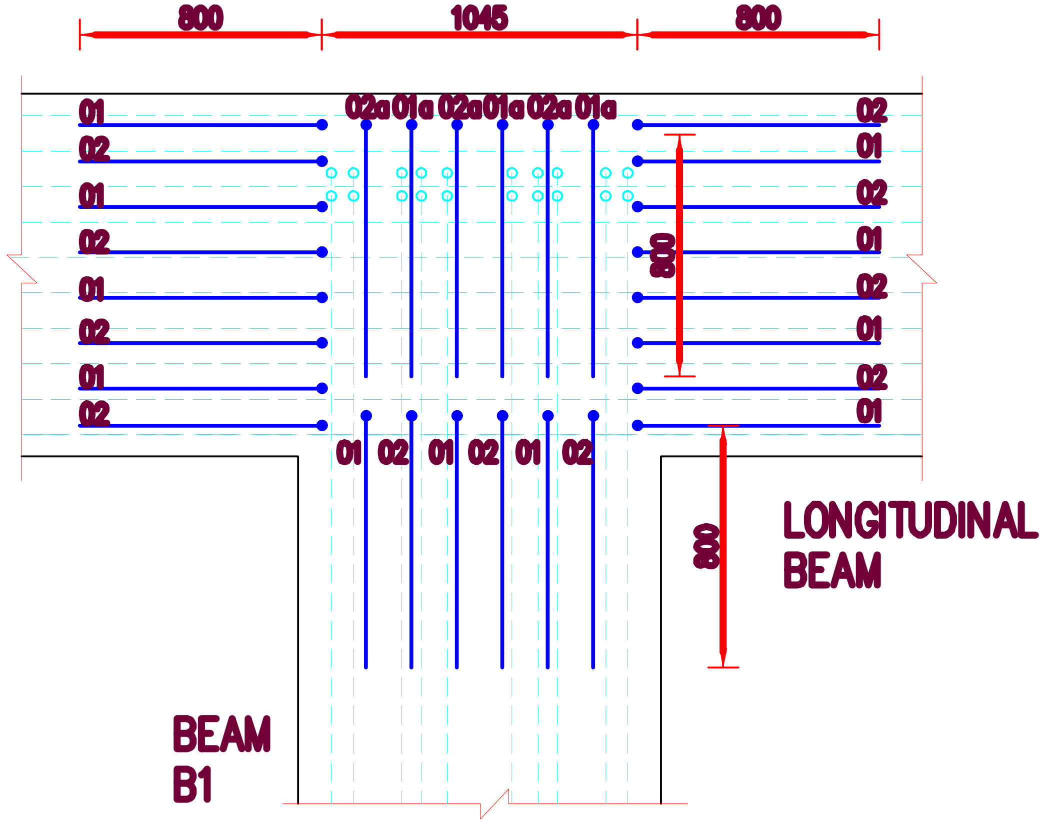
Project :

Project Code: IA 12/13 C 063 ST

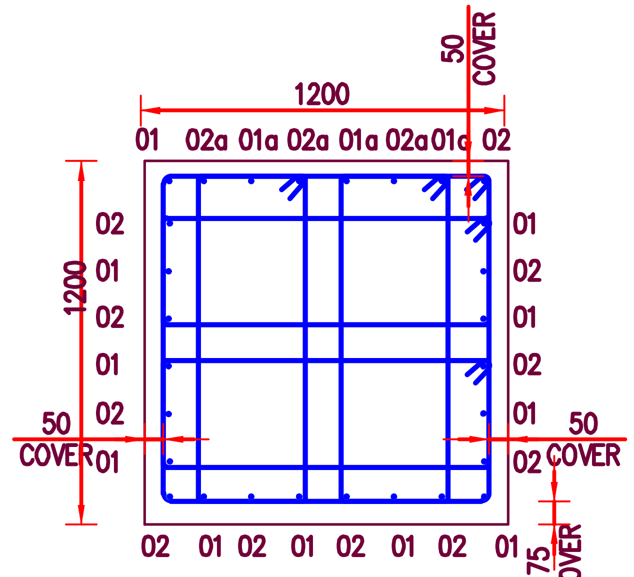
Status: PDU

Drawing Title: JUNCTION 12B
BRAIDING PASS (BR-SE)
COLUMN STARTER BAR
REINF'T DETAILS (PART-1)

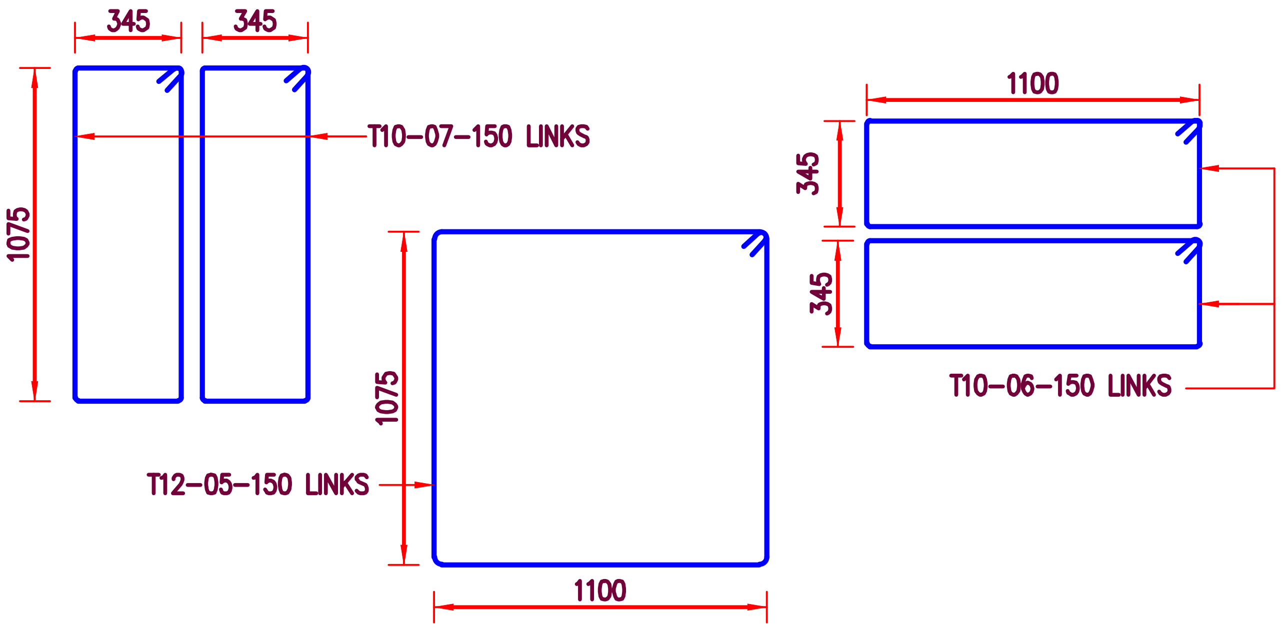
Drawn: NS
Checked: HP
Designed: -
Approved: -
Date: 09-03-2016
Scale: AS SHOWN
Drawing Number: EXW-P023-0004-SE-DEC-DG-12001-07
Revision: S01



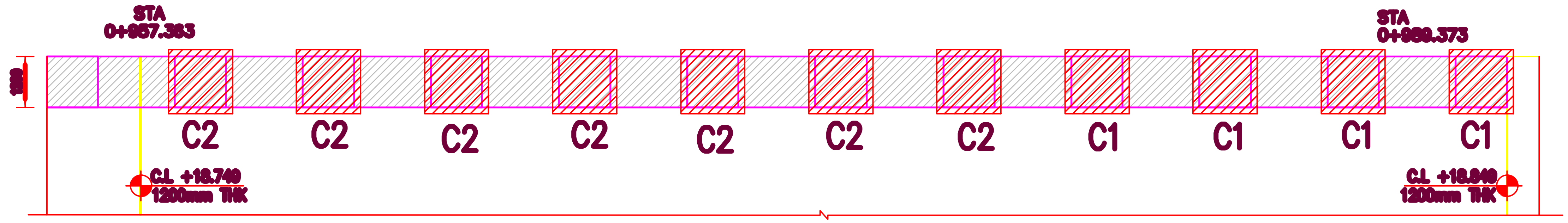
COLUMN-C1(SECTION-3)
SCALE 1:25



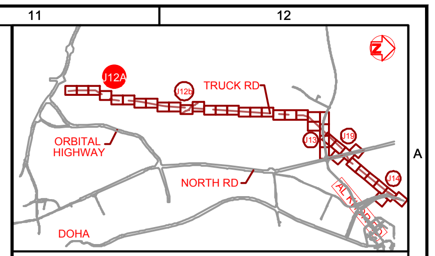
SECTION-4
SCALE 1:25



LINK DETAIL-1
SCALE 1:50



PART PLAN FOR UNDERPASS PART-1 COLUMN DETAILS
SCALE 1:125



KEY PLAN

NOTES:
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LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-02040-001	"J12B (BR-SE)" PLAN AND ELEVATION	D01
SE-DEC-DG-02042-001	"J12B (BR-SE)" G.A. SECTIONS (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALLS ELEVATIONS	D01
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (3/3)	D01

CONCRETE PROTECTIVE COVER
UNDERPASS / TUNNELS.
BOTTOM : 100MM
EARTH FACE : 75MM
EXPOSED FACE : 50MM

*
LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990
A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	09-03-2016	FIRST ISSUE	NS	HP	CK

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code: IA 12/13 C 063 ST

Status: PDU

Drawing Title: JUNCTION 12B BRAIDING PASS (BR-SE) COLUMN STARTER BAR REINF'T DETAILS (PART-1)

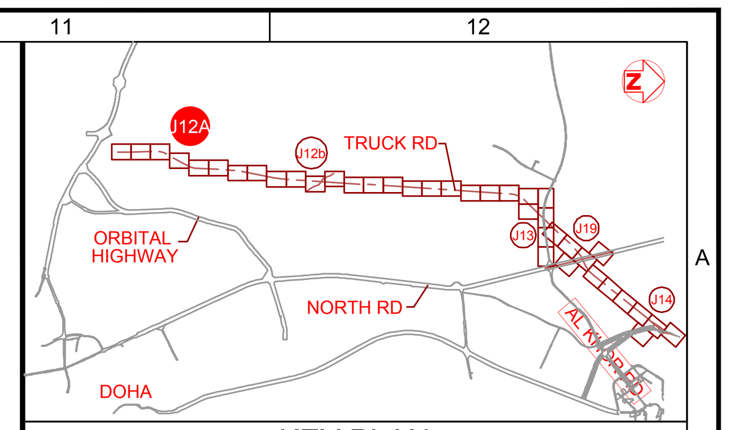
Drawn: NS | Checked: HP
Designed: - | Approved: -
Date: 09-03-2016 | Scale: AS SHOWN
Drawing Number: EXW-P023-0004-SE-DEC-DG-12001-07 | Revision: S01

Job No: 096-117
Dwg. Ref: EXW-P023-0004-SE-DEC-DG-11101-021
Location: JUNCTION 12A BRAIDING PASS (BR-NW) PART-5
Item: RETAINING WALL RC W1-R REINFORCEMENT DETAILS
Document No: EXW-P023-0004-SE-DEC-BS-11101-027
Revision: CC

Ref. Page of: 1 of 5

Date: 21-10-2015

Location	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
ELEVATION-B	8a	20	2.466	1	38	38	A, B	11	400	6275						6675	6620	620.37
ELEVATION-B	8b	20	2.466	1	38	38	A, B	11	400	6170						6570	6515	610.53
ELEVATION-B	9a	20	2.466	1	38	38	A, B	11	400	8610						9010	8955	839.19
ELEVATION-B	9b	20	2.466	1	38	38	A, B	11	400	8505						8905	8850	829.35
ELEVATION-B	10a	32	6.313	1	8	8	B, A, One End Threaded	9916	6955	400						7355	7267	367.02
ELEVATION-B	11a	32	6.313	1	8	8	B, A, One End Threaded	9916	4240	400						4640	4552	229.90
ELEVATION-B	12a	32	6.313	1	8	8	B, A, One End Threaded	9916	6695	400						7095	7007	353.89
ELEVATION-B	13a	32	6.313	1	8	8	B, A, One End Threaded	9916	4195	400						4595	4507	227.63
ELEVATION-B	14a	20	2.466	1	19	19	A, B	11	400	5930						6330	6275	294.02
ELEVATION-B	15a	20	2.466	1	19	19	A, B	11	400	8260						8660	8605	403.19
ELEVATION-B	16a	32	6.313	2	6	12	A, B	11	1040	10800						11840	11752	890.31



KEY PLAN

NOTES:
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LEGEND:

VERT - VERTICAL
HORI - HORIZONTAL
SSL - STRUCTURAL SLAB LEVEL
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
ALT - ALTERNATING
ABR - ALTERNATING BARS REVERSED
T - TOP REINF.,
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SF - SIDE FACE BARS
STAGG - STAGGERD
FT - FULL THREAD
C - COUPLER
- BOTTOM BARS
- TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-01044-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 1/3)	D02
SE-DEC-DG-01045-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03
SE-DEC-DG-01046-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03

CONCRETE PROTECTIVE COVER
FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990
A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	03-08-2015	FIRST ISSUE	F.L.	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

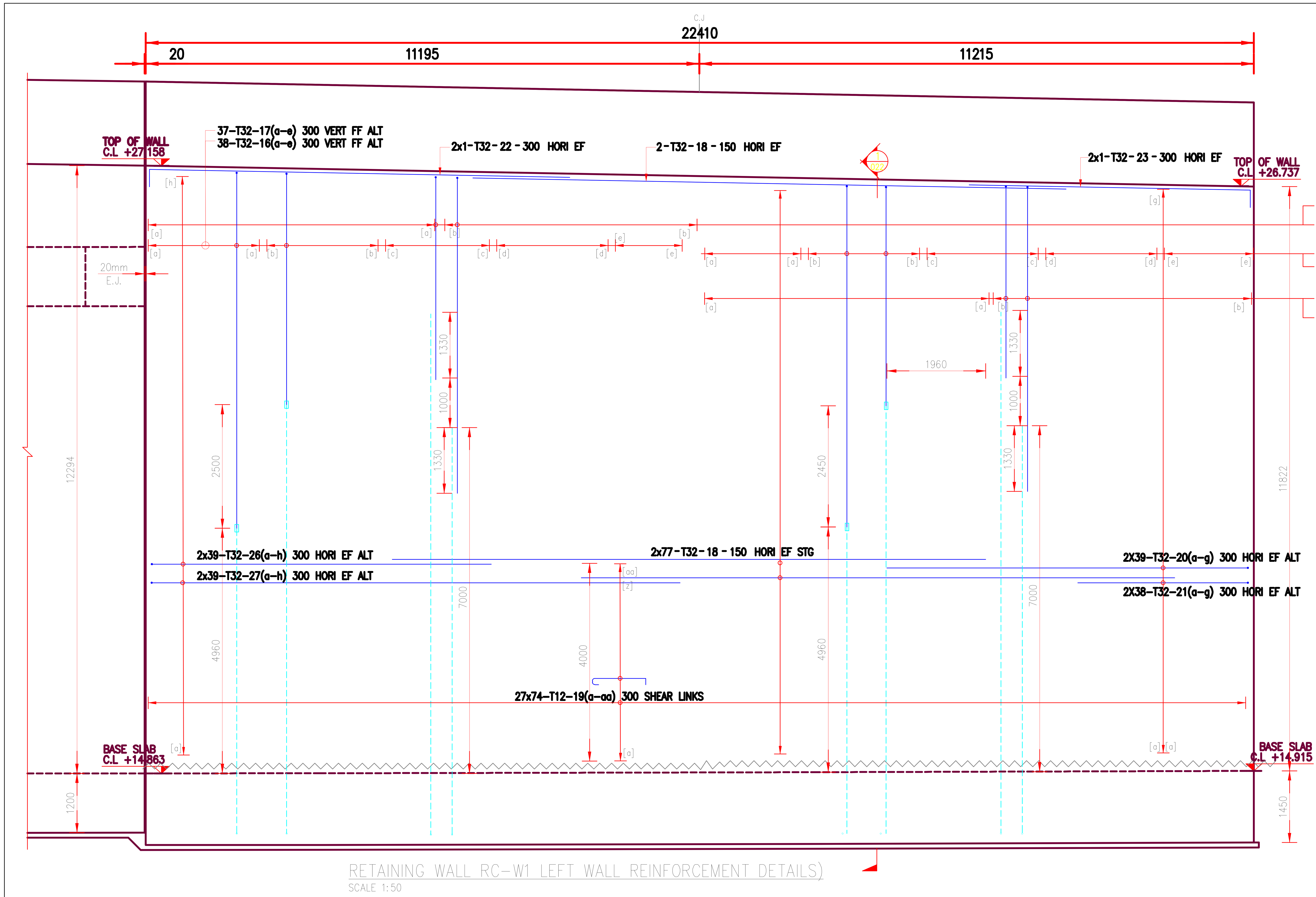
Project :

Project Code: IA 12/13 C 063 ST

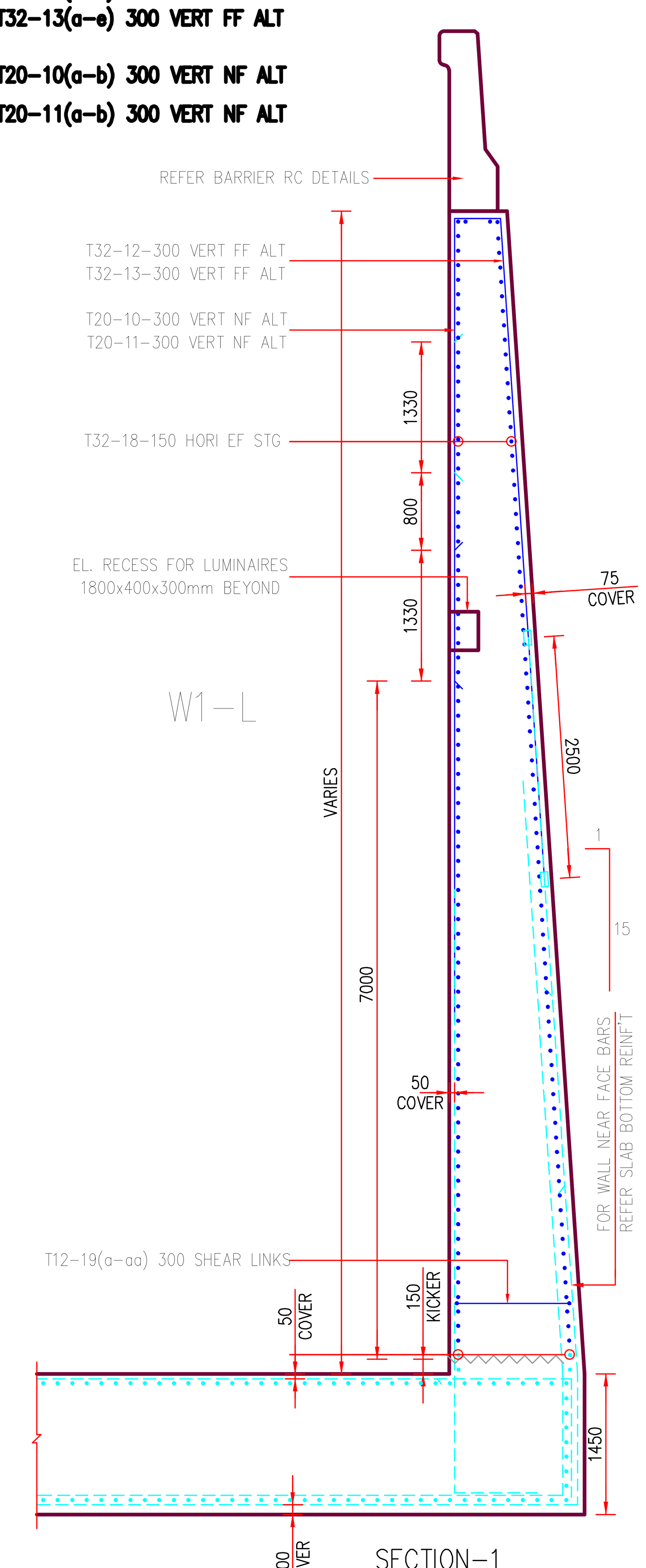
Status: SHOP DRAWING

Drawing Title: JUNCTION 12A BRAIDING UNDERPASS (BR-NW) RETAINING WALL RC W1-R RIGHT REINF'T DETAILS (PART-5)

Drawn: F.D.L. | Checked: M. MOKHTAR (DAR)
Designed: - | Approved: C.K.
Date: 03/08/2015 | Scale: AS SHOWN
Drawing Number: EXW-P023-0004-SE-DEC-DG-11101-021 | Revision: S01



RETAINING WALL RC-W1 LEFT WALL REINFORCEMENT DETAILS)
SCALE 1:50



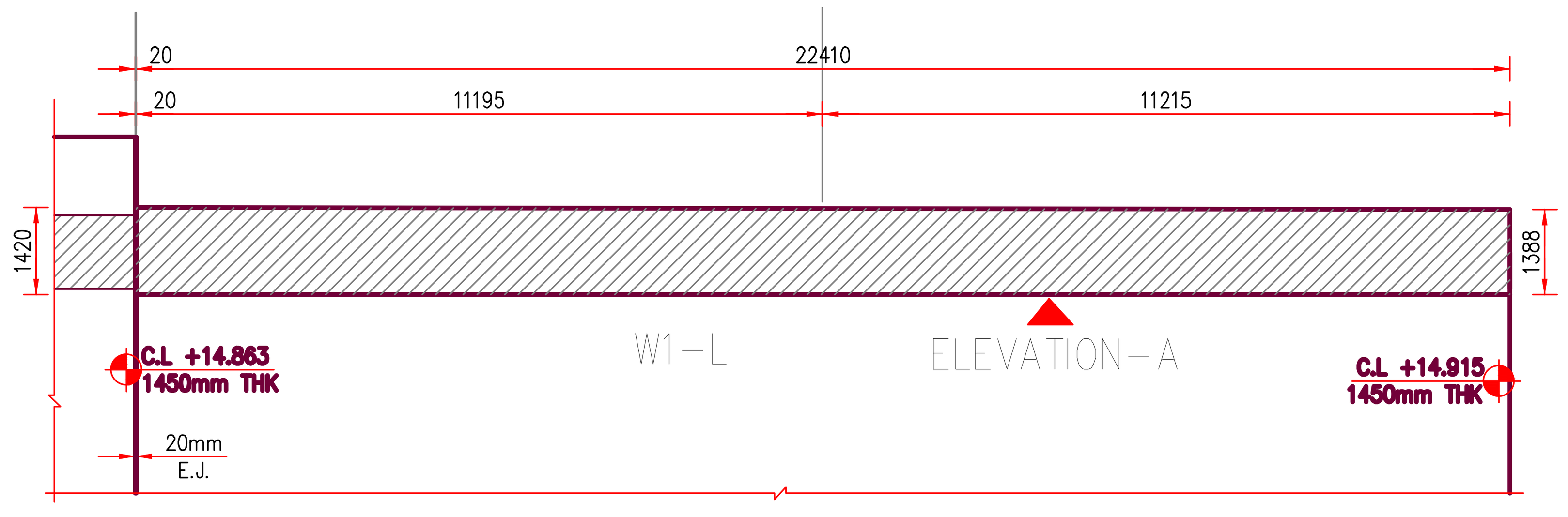
SECTION-1
SCALE 1:40

REINFORCEMENT TABLE

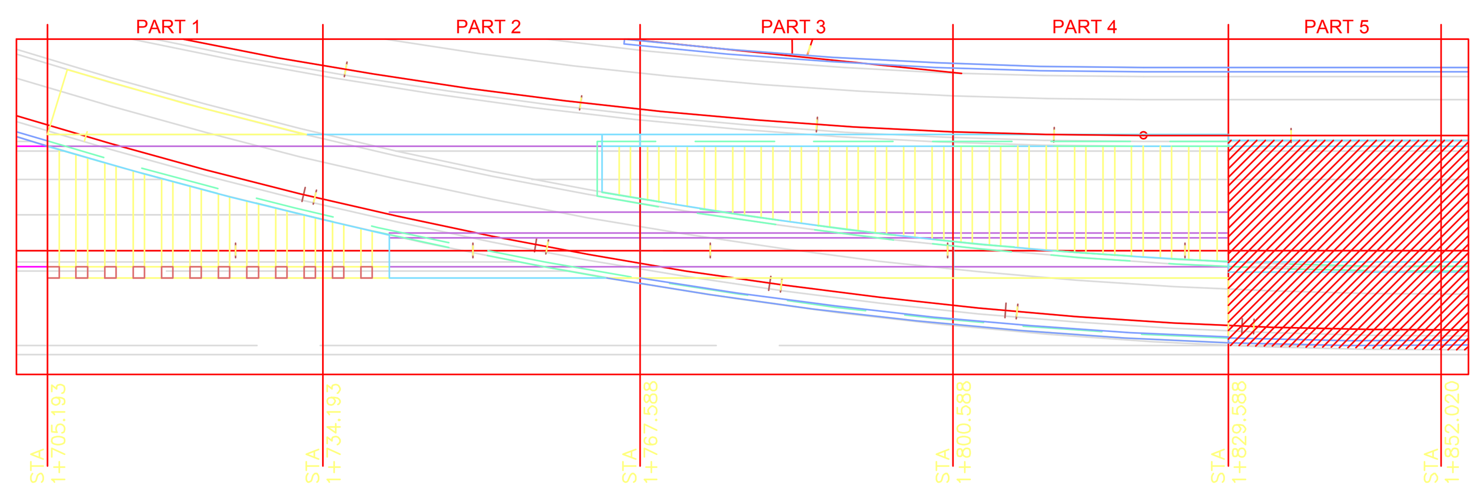
10(a-b)	T20	420 / 3880~4000
11(a-b)	T20	420 / 6375~6260
12(a-e)	T32	400 / 6975~6795
13(a-e)	T32	400 / 4525~4345
14(a-b)	T20	420 / 6620~6500
15(a-b)	T20	420 / 4300~4170
16(a-e)	T32	400 / 4700~4520
17(a-e)	T32	400 / 7200~7020
18	T32	12000

REINFORCEMENT TABLE

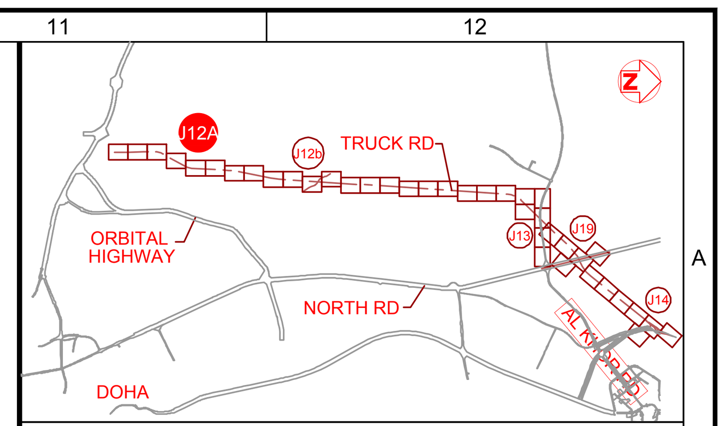
19(a-aa)	T12	120 / 120 / 60 / 1235~975
20(a-aa)	T32	7325 / 1020~360
21(a-g)	T32	3400 / 350~1010
22	T32	350 / 6900
23	T32	400 / 7325
26(a-h)	T32	6900 / 1080~390
27(a-h)	T32	10800 / 1070~380



KEY PLAN FOR PART-5 WALL
SCALE 1:100



SCHEMATIC KEY PLAN
SCALE: NTS



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-01044-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 1/3)	D02
SE-DEC-DG-01045-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03
SE-DEC-DG-01046-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03

CONCRETE PROTECTIVE COVER
FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S02	09-09-2015	SECOND ISSUE	PDU	M.M.	C.K.
S01	03-08-2015	FIRST ISSUE	F.L.	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code: IA 12/13 C 063 ST

Status: SHOP DRAWING

Drawing Title: JUNCTION 12A
BRAIDING UNDERPASS (BR-NW)
RETAINING WALL RC W1-L LEFT
REINF'T DETAILS (PART-5)

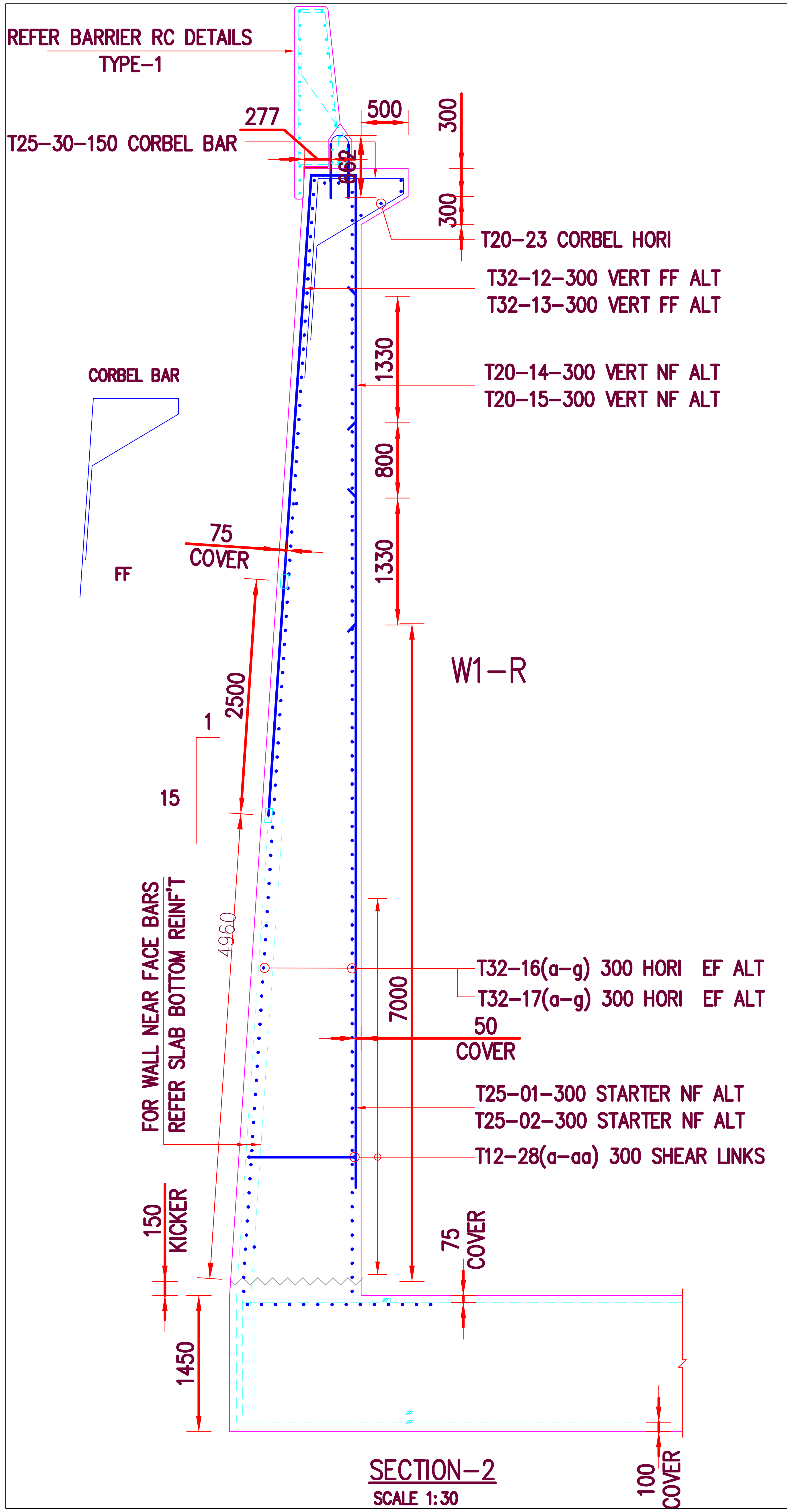
Drawn:	PDU	Checked:	M. MOKHTAR (DAR)
Designed:	-	Approved:	C.K.
Date:	09/09/2015	Scale:	AS SHOWN

Drawing Number: EXW-P023-0004-SE-DEC-DG-11101-020
Revision: S02

Form 21.8

	Job No: 096-117 Dwg. Ref: EXW-P023-0004-SE-DEC-DG-11101-018 Location JUNCTION 12A BRAIDING PASS (BR-NW) PART-5 Item: RETAINING WALL STARTER RC W1-L REINFORCEMENT DETAILS Document No: EXW-P023-0004-SE-DEC-BS-11101-020 Revision: CC	Ref. Page of: 1 of 1 Date 23/9/2015

Location	SPACING	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
(W1-L) WALL STARTER	300	1	25	3.853	1	75	75	A B	11	400	6130						6530	6443	1861.85
(W1-L) WALL STARTER	300	2	25	3.853	1	75	75	A B	11	400	8470						8870	8783	2538.10
(W1-L) WALL STARTER	150	3	32	6.313	1	2	2	A B	11	1000	4750						5750	5638	71.19
(W1-L) WALL STARTER	150	4	32	6.313	1	2	2	A B	11	1000	8600						9600	9488	119.80
(W1-L) WALL STARTER	150	5	32	6.313	1	2	2	A B	11	1000	5730						6730	6618	83.56
(W1-L) WALL STARTER	150	6	32	6.313	1	2	2	A B	11	1000	9580						10580	10468	132.17
(W1-L) WALL STARTER	150	7	32	6.313	1	4	4	A	00	12000							12000	12000	303.03
																	Total Weight kgs		5110
									Prepared: MMM				Checked: IRK				Total Weight Tons		5.11



SECTION-2

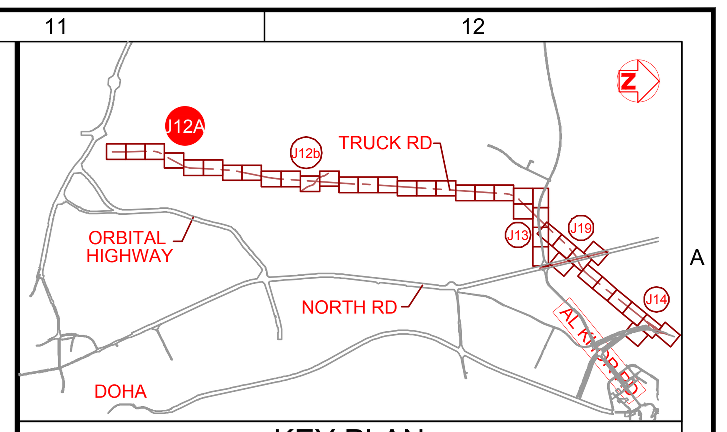
SCALE 1:30

REINFORCEMENT TABLE

08(a-b)	T20	400 / 6275~6170
09(a-b)	T20	400 / 3950~3845
10(a-e)	T32	400 / 6955~6740
11(a-e)	T32	400 / 4455~4240
12(a-e)	T32	450 / 6695~6475
13(a-e)	T32	450 / 4195~3975
14(a-b)	T20	400 / 5930~5820
15(a-b)	T20	400 / 3600~3490
16(a-g)	T32	10800 / 1040~375
17(a-g)	T32	6900 / 1040~375
18	T32	12000

REINFORCEMENT TABLE

19(a-g)	T32	3525 / 1020~370
20(a-g)	T32	7425 / 1020~370
22(a-c)	T32	400 / 775~2075
23	T20	250 / 9550
24	T32	350 / 6900
25	T20	12000
26	T32	350 / 7450
27	T20	250 / 3450
28	T10	varies
29	T16	600 / 160 / 600
30	T25	145 / 1025 / 890 / 1000 / 2125



KEY PLAN

NOTES:
1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	-	VERTICAL	T	-	TOP REINF.,
HORI	-	HORIZONTAL	B	-	BOTTOM REINF.,
SSL	-	STRUCTURAL SLAB LEVEL	SF	-	SIDE FACE BARS
EF	-	EACH FACE	STAGG	-	STAGGERD
NF	-	NEAR FACE	FT	-	FULL THREAD
FF	-	FAR FACE	C	-	COUPLER
ALT	-	ALTERNATING		-	BOTTOM BARS
ABR	-	ALTERNATING BARS REVERSED		-	TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-01044-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 1/3)	D02
SE-DEC-DG-01045-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03
SE-DEC-DG-01046-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03

CONCRETE PROTECTIVE COVER
FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH			
Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	03-08-2015	FIRST ISSUE	F.L.	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code: IA 12/13 C 063 ST

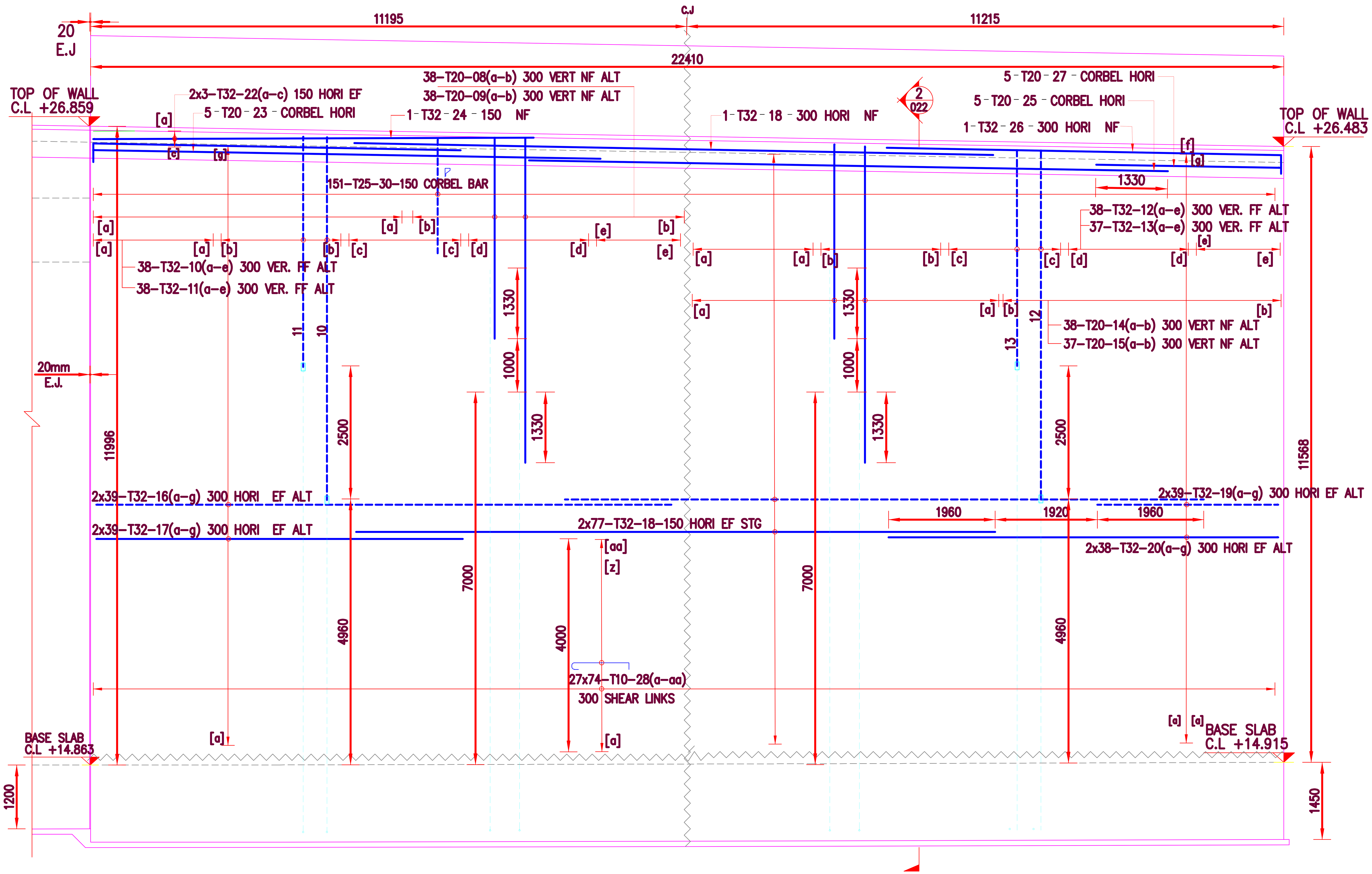
Status: SHOP DRAWING

Drawing Title:
JUNCTION 12A
BRAIDING UNDERPASS (BR-NW)
RETAINING WALL RC W1-R RIGHT
REINF'T DETAILS (PART-5)

Drawn:	F.D.L.	Checked:	M. MOKHTAR (DAR)
Designed:	-	Approved:	C.K.
Date:	03/08/2015	Scale:	AS SHOWN

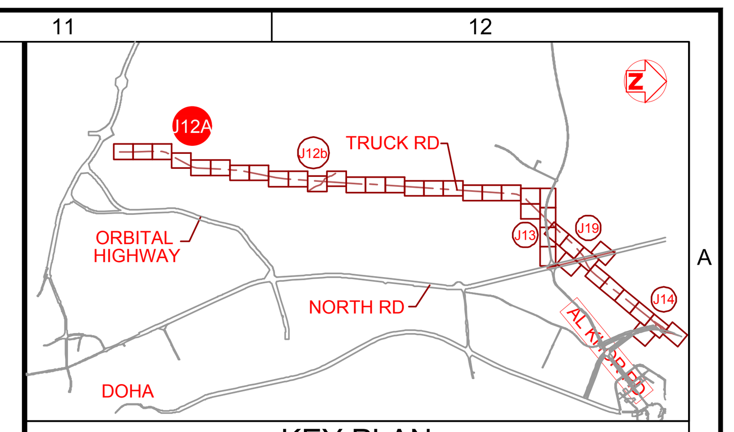
Drawing Number: EXW-P023-0004-SE-DEC-DG-11101-021

Revision: S01



RETAINING WALL RC-W1 RIGHT WALL REINFORCEMENT DETAILS)

SCALE 1:40



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT - VERTICAL
HORI - HORIZONTAL
SSL - STRUCTURAL SLAB LEVEL
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
ALT - ALTERNATING
ABR - ALTERNATING BARS REVERSED
T - TOP REINF.,
B - BOTTOM REINF.,
SF - SIDE FACE BARS
STAGG - STAGGERD
FT - FULL THREAD
C - COUPLER
\- BOTTOM BARS
\- TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D03
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-01044-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 1/3)	D02
SE-DEC-DG-01045-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03
SE-DEC-DG-01046-001	"J12A (BR-NW)" R.C. DETAILS (SHT. 2/3)	D03

CONCRETE PROTECTIVE COVER
FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH			
Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	03-08-2015	FIRST ISSUE	F.L.	M.M.	C.K.

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code: IA 12/13 C 063 ST

Status: SHOP DRAWING

Drawing Title: JUNCTION 12A BRAIDING UNDERPASS (BR-NW) RETAINING WALL RC W1-R RIGHT REINF'T DETAILS (PART-5)

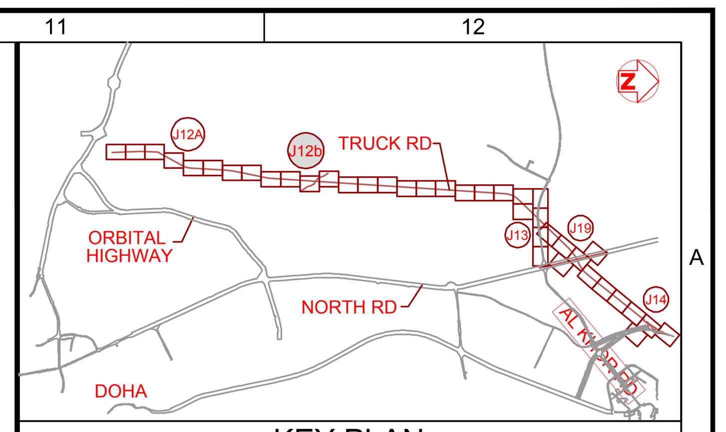
Drawn: F.D.L. | Checked: M. MOKHTAR (DAR)
Designed: - | Approved: C.K.
Date: 03/08/2015 | Scale: AS SHOWN

Drawing Number: EXW-P023-0004-SE-DEC-DG-11101-021
Revision: S01

Job No:	097-030
Dwg. Ref:	EXW-P023-0004-SE-DEC-DG-11401-013
Location	JUNCTION 12B BRAIDING PASS (BR-SE) PART-3
Item:	BASE SLAB B1 & B2 LAYER REINFORCEMENT DETAILS
Revision:	S01
Document No:	EXW-P023-0004-SE-DEC-BS-11401-013

Date: 23/11/2015

Location	Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
SLAB B1 LAYER	300	1	32	6.313	1	100	100	A B	11	975	10500						11475	11387	7188.83
SLAB B1 LAYER	300	2	32	6.313	1	100	100	A B	11	975	7260						8235	8147	5143.36
SLAB B1 LAYER	300	3	32	6.313	1	100	100	A	00	7160							7160	7160	4520.25
SLAB B1 LAYER	300	4	32	6.313	1	100	100	A	00	10400							10400	10400	6565.72
SLAB B1 LAYER	300	5	32	6.313	1	100	100	A B C D	26	350	2140	3400	1515				5890	5890	3718.47
SLAB B1 LAYER	300	6	32	6.313	1	100	100	A B C D	26	350	2140	6640	1515				9130	9130	5763.95
SLAB B1 LAYER	300	07a	32	6.313	1	13	13	A B	11	1450	9165						10615	10527	863.97
SLAB B1 LAYER	300	07b	32	6.313	1	12	12	A B	11	1450	8725						10175	10087	764.17



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT - VERTICAL		T -	TOP REINF.,
HORI - HORIZONTAL		B -	BOTTOM REINF.,
SSL - STRUCTURAL SLAB LEVEL		SF -	SIDE FACE BARS
EF - EACH FACE		STAGG -	STAGGERD
NF - NEAR FACE		FT -	FULL THREAD
FF - FAR FACE		C -	COUPLER
ALT - ALTERNATING		-	BOTTOM BARS
ABR - ALTERNATING BARS REVERSED		-	TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D02
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALL ELEVATIONS	DAA
SE-DEC-DG-02044-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 1/3)	DBB
SE-DEC-DG-02045-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 2/3)	DBB
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 3/3)	DBB

CONCRETE PROTECTIVE COVER

FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	23-11-2015	FIRST ISSUE	SAA	M.M	C.K

Project Manager :

Design Review Consultant :

Contractor :

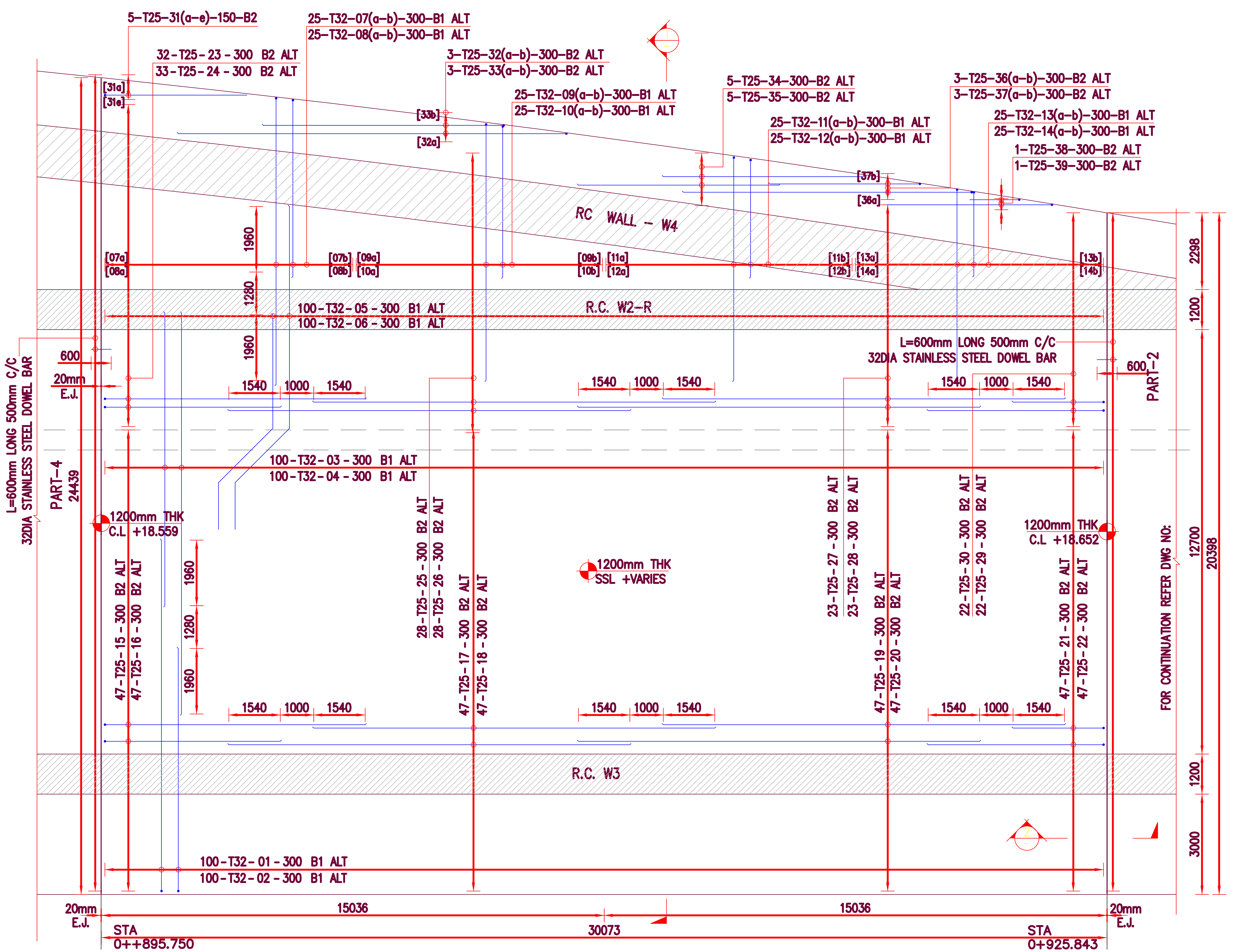
Project :

Project Code:

Status: SHOP DRAWING

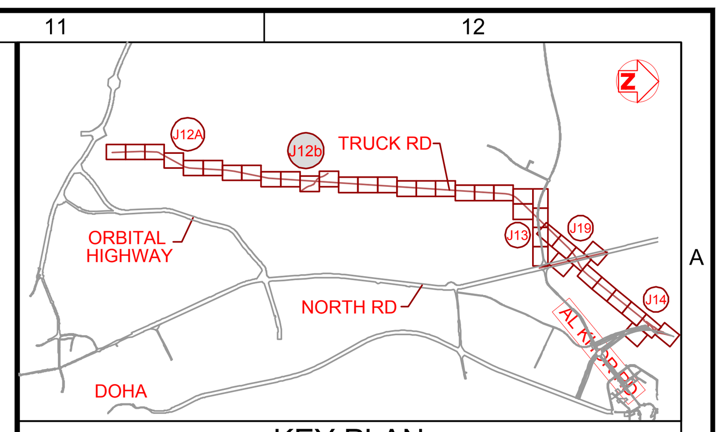
Drawing Title: JUNCTION 12B BRAIDING PASS (BR-SE) BASE SLAB B1 & B2 LAYER REINF'T DETAILS (PART-3)

Drawn: SAA		Checked: M. MOKHTAR (DAR)	
Designed: -		Approved: C.K.	
Date: 23/11/2015		Scale: AS SHOWN	
Drawing Number: EXW-P023-0004-SE-DEC-DG-11401-013		Revision: S01	



BASE SLAB B1 & B2 LAYER REINFORCEMENT DETAILS

SCALE 1:60



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	- VERTICAL	T	- TOP REINF.,
HORI	- HORIZONTAL	B	- BOTTOM REINF.,
SSL	- STRUCTURAL SLAB LEVEL	SF	- SIDE FACE BARS
EF	- EACH FACE	STAGG	- STAGGERD
NF	- NEAR FACE	FT	- FULL THREAD
FF	- FAR FACE	C	- COUPLER
ALT	- ALTERNATING		- BOTTOM BARS
ABR	- ALTERNATING BARS REVERSED		- TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
REMARKS
SPACING
BAR MARK
BAR TYPE & DIA
NUMBER OF BARS
MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D02
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALL ELEVATIONS	DAA
SE-DEC-DG-02044-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 1/3)	DBB
SE-DEC-DG-02045-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 2/3)	DBB
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 3/3)	DBB

CONCRETE PROTECTIVE COVER

FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

LAP LENGTHS ARE CALCULATED IN ACCORDANCE WITH CLAUSES 5.8.6.3 TO 5.8.6.7 OF BS 5400:PART 4:1990

A. COVER TO LAPPED BARS FROM TOP OF THE SECTION<2XBAR DIA
B. GAP BETWEEN BARS BEING LAPPED<150 mm

LAP LENGTH

Ø	NORMAL	CONDITION-A/B	CONDITION-A&B
12	650	910	1300
16	800	1120	1600
20	950	1330	1900
25	1100	1540	2200
32	1400	1960	2800
40	1700	2380	3400

REV	DATE	REVISION DETAILS	DRAWN.	CHKD.	APPR.
S01	23-11-2015	FIRST ISSUE	SAA	M.M	C.K

Project Manager :

Design Review Consultant :

Contractor :

Project :

Project Code:

Status: SHOP DRAWING

Drawing Title: JUNCTION 12B
BRAIDING PASS (BR-SE)
BASE SLAB B1 & B2 LAYER
REINF'T DETAILS (PART-3)

Drawn: SAA		Checked: M. MOKHTAR (DAR)	
Designed: -		Approved: C.K.	
Date: 23/11/2015		Scale: AS SHOWN	

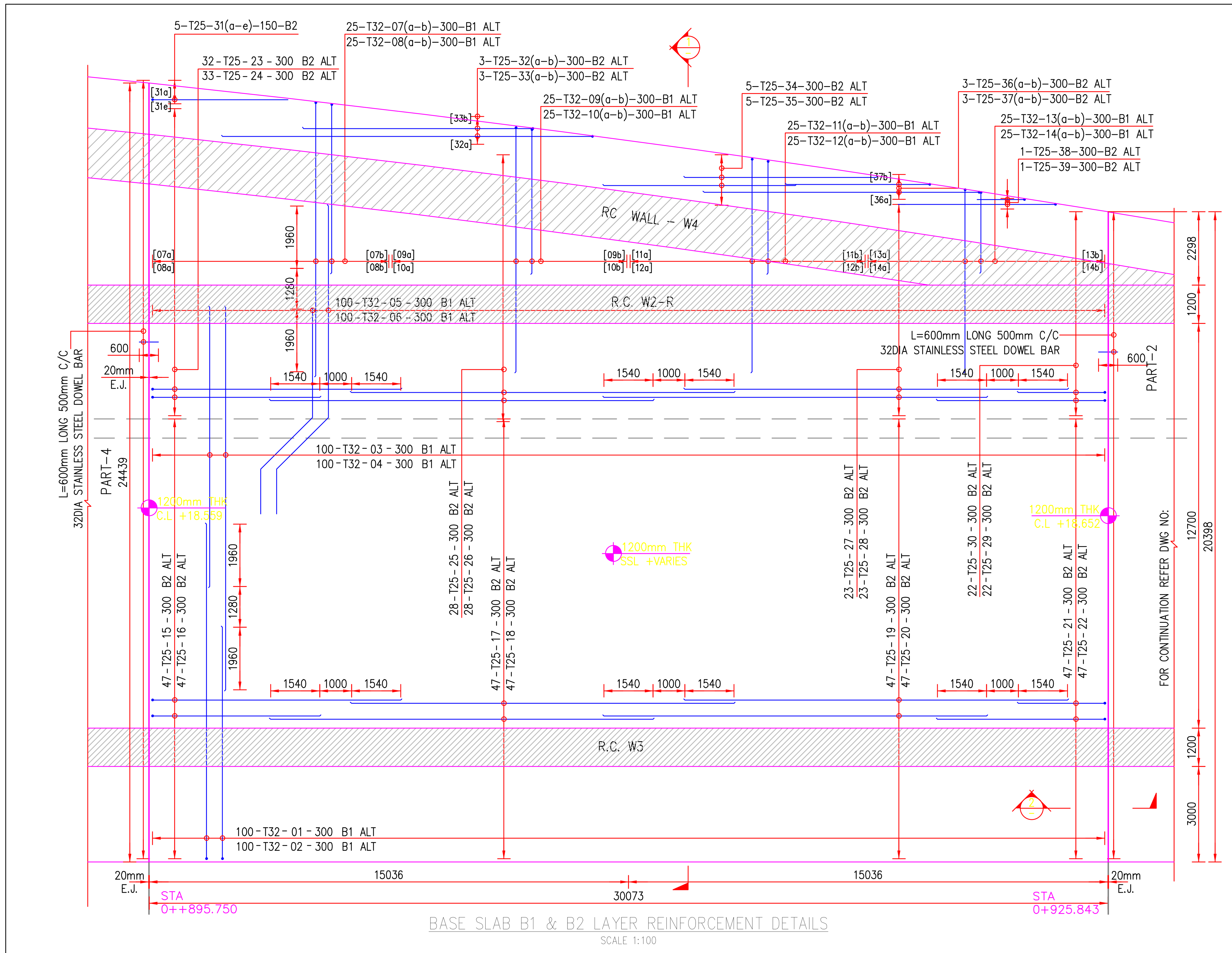
Drawing Number: EXW-P023-0004-SE-DEC-DG-11401-013
Revision: S01

Job No: 097-030
Dwg. Ref: EXW-P023-0004-SE-DEC-DG-11401-013
Location JUNCTION 12B BRAIDING PASS (BR-SE) PART-3
Item: BASE SLAB B1 & B2 LAYER REINFORCEMENT DETAILS
Revision: S01

Date: 23/11/2015

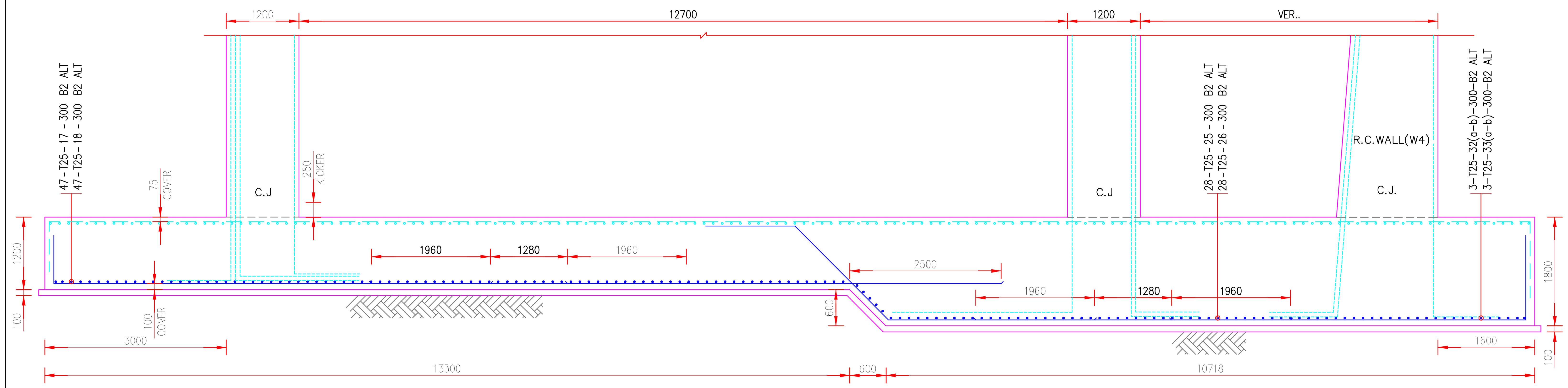
Document No: EXW-P023-0004-SE-DEC-BS-11401-013

Location	Spacing	Bar Mark	Bar Diam. (mm)	Unit Wt. (kg/m)	No Off	No in Each	Total No. of Bars	Shape	Shape code	Bar Dimensions a* (mm)	b* (mm)	c* (mm)	d* (mm)	e* (mm)	f* (mm)	g* (mm)	Total Length (mm)	Cut Length (mm)	Weight (kg)
SLAB B1 LAYER	300	1	32	6.313	1	100	100	A B	11	975	10500						11475	11387	7188.83
SLAB B1 LAYER	300	2	32	6.313	1	100	100	A B	11	975	7260						8235	8147	5143.36
SLAB B1 LAYER	300	3	32	6.313	1	100	100	A	00	7160							7160	7160	4520.25
SLAB B1 LAYER	300	4	32	6.313	1	100	100	A	00	10400							10400	10400	6565.72
SLAB B1 LAYER	300	5	32	6.313	1	100	100	A B C D	26	350	2140	3400	1515				5890	5890	3718.47
SLAB B1 LAYER	300	6	32	6.313	1	100	100	A B C D	26	350	2140	6640	1515				9130	9130	5763.95
SLAB B1 LAYER	300	07a	32	6.313	1	13	13	A B	11	1450	9165						10615	10527	863.97
SLAB B1 LAYER	300	08a	32	6.313	1	13	13	A B	11	1450	5900						7350	7262	596.00
SLAB B1 LAYER	300	09a	32	6.313	1	13	13	A B	11	1450	8000						9450	9362	768.35
SLAB B1 LAYER	300	10a	32	6.313	1	13	13	A B	11	1450	5050						6500	6412	526.24
SLAB B1 LAYER	300	11a	32	6.313	1	13	13	A B	11	1450	7050						8500	8412	690.39
SLAB B1 LAYER	300	12a	32	6.313	1	13	13	A B	11	1450	4100						5550	5462	448.27
SLAB B1 LAYER	300	12b	32	6.313	1	12	12	A B	11	1450	3600						5050	4962	375.91
SLAB B1 LAYER	300	13a	32	6.313	1	13	13	A B	11	1450	6000						7450	7362	604.21
SLAB B1 LAYER	300	13b	32	6.313	1	12	12	A B	11	1450	5450						6900	6812	516.07
SLAB B1 LAYER	300	14a	32	6.313	1	13	13	A B	11	1450	3050						4500	4412	362.10
SLAB B1 LAYER	300	14b	32	6.313	1	12	12	A B	11	1450	2475						3925	3837	290.68



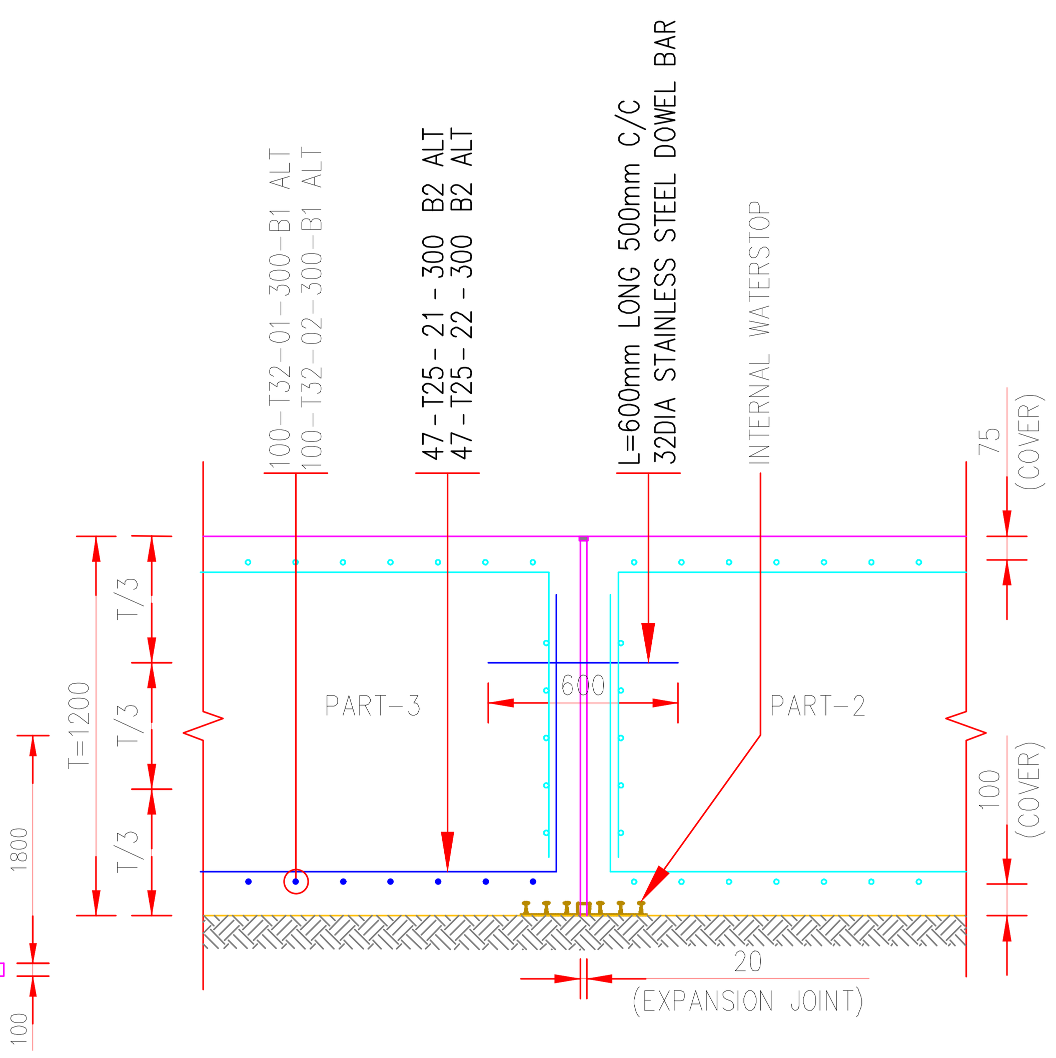
BASE SLAB B1 & B2 LAYER REINFORCEMENT DETAILS

SCALE 1:100



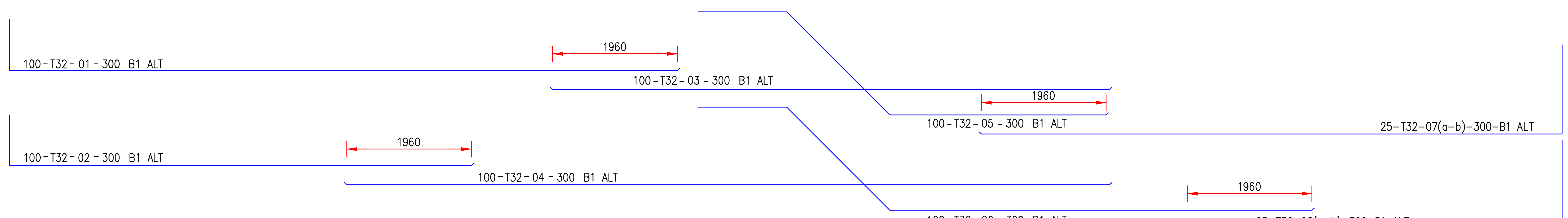
SECTION-1

SCALE 1:50



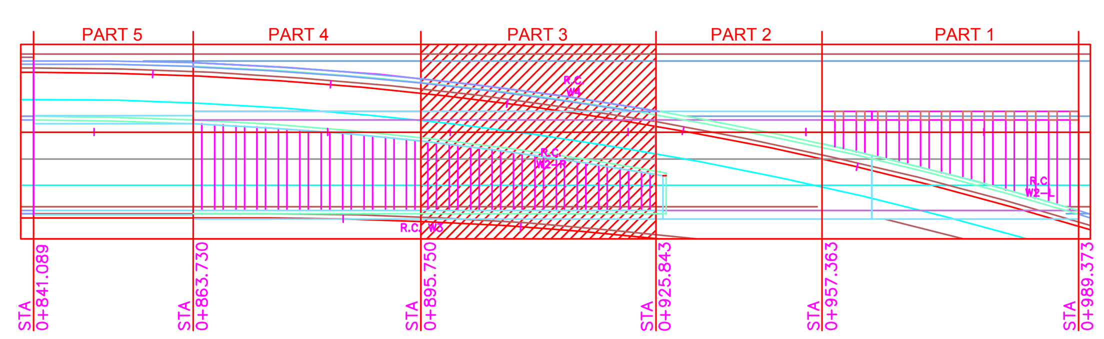
SECTION-2

SCALE 1:20



BOTTOM LAYER B1 ARRANGEMENT

SCALE: NTS



SCHEMATIC KEY PLAN

N.T.S

REINFORCEMENT TABLE

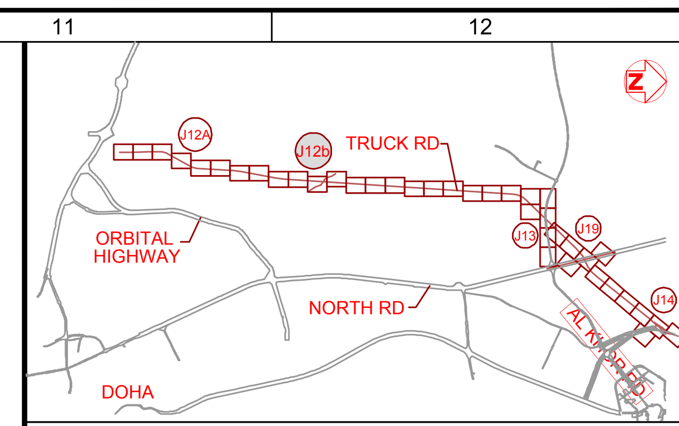
01	T32	975 / 10500
02	T32	975 / 7260
03	T32	7160
04	T32	10400
05	T32	350 / 1515 / 2140 / 3400
06	T32	350 / 1515 / 2140 / 6640
07	T32	1450 / 9150 & 8725
08	T32	1450 / 5900 & 5500
09	T32	1450 / 8000 & 7550
10	T32	1450 / 5050 & 4500
11	T32	1450 / 7050 & 6550
12	T32	1450 / 4100 & 3600
13	T32	1450 / 6000 & 5450
14	T32	1450 / 3050 & 2475

REINFORCEMENT TABLE

15	T25	900 / 7800
16	T25	900 / 5250
17	T25	12000
18	T25	12000
19	T25	12000
20	T25	12000
21	T25	900 / 2750
22	T25	900 / 5300
23	T25	900 / 7800
24	T25	900 / 5250
25	T25	12000
26	T25	12000
27	T25	12000
28	T25	12000

REINFORCEMENT TABLE

29	T25	900 / 2750
30	T25	900 / 5300
31	T25	900 / 1220~6860
32	T25	1500 / 11100 & 10150
33	T25	1500 / 10850 & 7600
34	T25	6000
35	T25	6000
36	T25	1500 / 10000 & 7550
37	T25	1500 / 7450 & 5000
38	T25	1500 / 4900
39	T25	1500 / 1500



KEY PLAN

NOTES:

1. DRAWINGS SHALL NOT BE SCALED.ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THE MEASUREMENTS USED HERE IS IN MILLIMETERS AND LEVELS ARE IN METERS.UNLESS OTHER WISE STATED.

LEGEND:

VERT	VERTICAL	T	TOP REINF.,
HORI	HORIZONTAL	B	BOTTOM REINF.,
SSL	STRUCTURAL SLAB LEVEL	SF	SIDE FACE BARS
EF	EACH FACE	STAGG	STAGGERD
NF	NEAR FACE	FT	FULL THREAD
FF	FAR FACE	C	COUPLER
ALT	ALTERNATING		BOTTOM BARS
ABR	ALTERNATING BARS REVERSED		TOP BARS

3 x 10 - T20 - 01 - 100 LINKS
- REMARKS
- SPACING
- BAR MARK
- BAR TYPE & DIA
- NUMBER OF BARS
- MULTIPLES

REF. DRAWING NO.	DRAWING TITLE	REV
SE-DEC-DG-00010-000	GENERAL NOTES	D02
SE-DEC-DG-00015-001	UNDERPASS MISCELLANEOUS DTLS. (1/2)	D01
SE-DEC-DG-00016-001	UNDERPASS MISCELLANEOUS DTLS. (2/2)	D01
SE-DEC-DG-02043-001	"J12B (BR-SE)" WALL ELEVATIONS	DAA
SE-DEC-DG-02044-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 1/3)	DBB
SE-DEC-DG-02045-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 2/3)	DBB
SE-DEC-DG-02046-001	"J12B (BR-SE)" R.C. DETAILS (SHT. 3/3)	DBB

CONCRETE PROTECTIVE COVER

FOOTING BOTTOM : 100MM
WALL EARTH FACE : 75MM
WALL INTERNAL FACE : 50MM

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Project Manager :

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Project :

Project Code: IA 12/13 C 063 ST

Status: SHOP DRAWING

Drawing Title: JUNCTION 12B BRAIDING PASS (BR-SE) BASE SLAB B1 & B2 LAYER REINF'T DETAILS (PART-3)

Drawn:	SAA	Checked:	M. MOKHTAR (DAR)
Designed:	-	Approved:	C.K.
Date:	23/11/2015	Scale:	AS SHOWN

Drawing Number: EXW-P023-0004-SE-DEC-DG-11401-013

Revision: S01

THANK YOU