



**KEY LEGEND :-**

#1 - 1" - 1 - 01 - B

DIA OF BAR

SPACING

NO OF BARS

BAR MARK

BAR MEMBER

**LEGEND :-**

(\*) - UNIQUE BEAM MARK

HOR - HORIZONTAL

TYP - TYPICAL

ADD - ADDITIONAL

1 - TOP

B1 - BOTTOM 1st LAYER

T1 - TOP 1st LAYER

FB - FACE BAR

ALL MATERIAL ON THIS DRAWING  
**ASTM A615**  
**GRADE 60 BLACK U.N.O.**

#6 and smaller bars - A615/Grade 60  
 #7 and larger bars - A706/Grade 75

LAP SCHEDULE FOR BEAM (8 KSI)

Size	Ld	1.3 Ld
#3	16"	17"
#4	17"	23"
#5	22"	28"
#6	26"	34"
#7	48"	62"
#8	54"	71"
#9	62"	80"
#10	69"	89"
#11	76"	100"

**CONSULTANTS:**

NO.	DATE	REVISION
1	03/25/14	FOR APPROVAL
DESIGNER: M.Y.		
DRAWN BY: V.P.		
CHECKED BY: M.Y.		
Date: 03/25/14		

CLIENT: **42-31 UNION STREET**

PROJECT: **FIFTH FLOOR BEAM REINFORCEMENT DETAILS (BBS)**

DRAWING NO.: **S5-03**

SHEET NO.:

Member	Bar	Bar Size	No. of Bars in Member	TOTAL No. of Bars	Shape	Shape code	A	B	C	D	E	H	G	J	TOTAL LENGTH OF BAR (FT.)	TOTAL WEIGHT OF BAR (LB)
<b>5B5(1)</b>																
BI	101	# 11	1	4	A	STR	399								33.25	706.65
TI	102	# 11	1	3		02	18	388							31.33	499.42
TI	103	# 11	1	3		6	76	17	159						21.00	331.72
FB	105A	# 4	1	2	A	STR	399								33.25	44.42
LINNS	104	# 4	1	30		TI	3	15	27	15	27				7.50	150.50
<b>5B1(12)</b>																
BI	105	# 11	1	4	A	STR	264								22.00	467.54
BI	106	# 11	1	4	A	STR	322								26.83	570.26
TI	107	# 11	1	4	A	STR	383								31.92	678.29
TI	108	# 11	1	4	A	6	76	17	288						31.75	671.75
FB	108A	# 4	1	2	A	STR	395								32.75	43.75
LINNS	109	# 4	1	38		TI	3	21	27	21	27				8.50	215.76
<b>5B11 (NO.2/13)</b>																
BI	110	# 11	2	4	A	STR	399								33.25	1413.28
TI	111	# 11	2	4		02	18	303							26.75	1136.98
TI	112	# 11	2	4		6	76	17	213						25.50	1083.85
FB	112A	# 4	2	2	A	STR	399								33.25	88.84
LINNS	113	# 4	2	30		TI	3	21	27	21	27				8.50	310.68
<b>5B1(24)</b>																
BI	114	# 11	1	3	A	STR	404								33.67	536.61
TI	115	# 11	1	3		02	18	303							26.92	429.02
TI	116	# 11	1	3		6	76	17	158						22.42	357.30
FB	116A	# 4	1	2	A	STR	404								33.67	44.98
LINNS	117	# 4	1	30		TI	3	17	27	17	27				7.83	156.98
<b>5B2(6)</b>																
BI	121	# 11	1	3	A	STR	214								17.83	284.25
TI	122	# 10	1	3		TI	18	256							24.33	314.12
FB	122A	# 4	1	2	A	STR	214								17.83	23.83
LINNS	123	# 4	1	15		TI	3	11	27	11	27				6.83	68.47
<b>5B2(6)</b>																
BI	124	# 11	1	3	A	STR	129								10.75	171.34
TI	125	# 11	1	3		02	18	222							20.00	318.78
FB	125A	# 4	1	2	A	STR	129								10.75	14.36
LINNS	126	# 4	1	10		TI	3	11	27	11	27				6.83	45.65
<b>5B1(17)</b>																
BI	127	# 11	1	4	A	STR	239								19.92	423.27
TI	128	# 11	1	4		02	18	329							28.92	614.54
FB	128A	# 4	1	2	A	STR	239								19.92	26.61
T-ADD	128B	# 5	1	2	A	STR	60								5.00	10.43
LINNS	129	# 4	1	19		TI	3	21	27	21	27				8.50	107.88
<b>5B2(8)</b>																
BI	130	# 11	1	3	A	STR	129								10.75	171.34
TI	131	# 10	1	3		STR	279								23.25	300.13
FB	131A	# 4	1	2	A	STR	129								10.75	14.36
LINNS	132	# 4	1	10		TI	3	11	27	11	27				6.83	45.65

<b>5B8(9)</b>																
BI	133	# 9	1	4	A	STR	107								8.92	121.27
TI	134	# 9	1	4		STR	219								20.75	282.20
LINNS	135	# 4	1	8		TI	3	11	27	11	27				6.83	56.52
<b>5B6(10)</b>																
BI	142	# 10	1	3	A	STR	254								21.17	273.24
TI	143	# 10	1	3		STR	412								34.33	443.21
LINNS	144	# 4	1	16		TI	3	13	21	13	21				6.17	65.91
<b>5B3(11)</b>																
BI	145	# 9	1	3	A	STR	107								8.92	90.95
TI	146	# 9	1	3		STR	219								20.75	211.65
LINNS	147	# 1	1	8		TI	3	11	21	11	21				5.83	31.17
<b>5B1(12)</b>																
BI	144	# 11	1	3	A	STR	333								27.67	440.88
TI	145	# 10	1	3		STR	278								23.17	299.06
TI	146	# 10	1	3		6	69	16	195						23.17	299.06
FB	146A	# 4	1	2	A	STR	333								27.67	56.96
LINNS	147	# 4	1	26		TI	3	17	25	17	25				7.50	130.26
<b>5B1(13)</b>																
BI	138	# 11	1	2	A	STR	268								22.08	231.66
TI	139	# 11	1	2		STR	433								36.08	383.42
FB	139A	# 4	1	2	A	STR	268								22.08	29.50
LINNS	140	# 4	1	21		TI	3	17	25	17	25				7.50	105.21
<b>5TG1(14)</b>																
B	161	# 11	1	20	A	STR	324								27.00	2869.02
T	162	# 9	1	20		02	21	388							14.33	234.67
HOR	162A	# 9	1	4		STR	324								27.00	367.20
HOR	162B	# 11	1	4		STR	324								27.00	573.80
LINNS	163	# 4	1	23		TI	3	57	39	57	39				16.50	233.51
TIES	164	# 4	1	115		01	3	39							3.75	288.08
TIES	165	# 4	1	46		01	3	57							5.25	161.32
<b>5TG2(15)</b>																
BI	166	# 9	1	3	A	STR	421								35.08	357.85
FB	166A	# 9	1	16		STR	421								35.08	1908.53
BI	167	# 9	1	3	A	STR	231								19.25	196.35
FB	167A	# 9	1	16		STR	231								19.25	1047.20
TI	168	# 9	1	3		02	48	432							40.00	408.00
TI	169	# 9	1	3		6	62	14	125						20.75	211.65
DOWELS	170	# 11	2	6		02	9	151							13.33	850.08
DOWELS	170A	# 11	2	4		STR	90								7.50	318.78
LINNS	171	# 4	1	90		STR	17	41	21	41					8.58	516.05
BEHT	172	# 4	1	360		STR	72								6.00	1442.88