CONCRETE BEAM SCHEDULE

MARK	SIZE (in)		TOP ELEVATION	LONGITUDINAL REINFORCING						STIRRUPS			REMARKS
	W	D		BOT.	TOP	"C"	"D"	"E"	"S" EA. FACE	SIZE	TYPE	SPACING	
TB–1	8	12	SEE PLAN	2#5	2#5					#3	A	4 @ 12"O.C. E.E. BALANCE @ 24"O.C.	TYP. TIE BEAM
TB–2	8	24	SEE PLAN	2#7	2#7				2#7	#3	A	4@ 6"O.C.	
2B–1	20	36	+13'–0"	4#6	4#6					#3	A	@ 12"O.C	
2B–2	8	36	+13'–0"	2#7	2#7				2#7	#3	A	@ 6"O.C	
2B–3	8	36	+11'–0"	2#6	2#6				2#5	#3	A	@ 8"O.C	
2B–4	8	30	+11'–0"	2#6	2#6				1#5	#3	A	@ 8"O.C	
2B–5	12	34	+13'–0"	2#6	2#6				2#7	#3	A	@ 6"O.C	
2B–6	8	20	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–7	8	20	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–8	10	20	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–9	8	20	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–10	8	20	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–11	16	20	+13'–0"	4#7 4#7	4#7 4#7					#3	A	@ 8"O.C	
2B–12	8	36	+13'–0"	2#7	2#7				2#5	#3	A	@ 12"O.C	
2B–13	8	36	+13'–0"	2#7	2#7				2#5	#3	A	@ 12"O.C	
2B–14	12	24	+13'–0"	3#8 3#8	3#8 3#8					#3	A	@ 10"O.C	
2B–15	8	24	+13'–0"	2#7	2#7					#3	A	@ 10"O.C	
2B–16	12	36	+13'–0"	3#7	3#7				2#5	#3	A	@ 10"O.C	
2B–17	8	12	+13'–0"	2#6	2#6					#3	A	@ 4"O.C	
2B–18	12	12	+11'–0"	3#6	3#6					#3	A	@ 4"O.C	
2B–19	8	12	+11'–0"	2#6	2#6					#3	A	@ 4"O.C	
2B–20	12	16	+11'–0"	3#6	3#6					#3	A	@ 6"O.C	
2B–21	8	16	+11'–0"	2#6	2#6					#3	A	@ 6"O.C	
2B–22	12	12	+11'–0"	3#6	3#6					#3	A	@ 4"O.C	
2B–23	8	36	+13'–0"	2#7	2#7				2#5	#3	A	@ 6"O.C	
2B–24	12	36	+13'–0"	3#7	3#7				2#5	#3	A	@ 12"O.C	
2B–25	12	36	+13'–0"	3#7	3#7				2#5	#3	A	@ 12"O.C	
2B–26	8	36	+13'–0"	2#7	2#7				2#5	#3	A	@ 12"O.C	
2B–27	12	18	+11'–0"	3#6	3#6					#3	A	@ 6"O.C	
2B–28	8	24	+13'–0"	2#7	2#7					#3	A	@ 8"O.C	
2B–29	8	16	+11'–0"	2#7	2#7					#3	A	@ 6"O.C	
2B–30	36	22	+13'–0"	4#6	4#6					#3	A	@ 10"O.C	
RB–1	8	22	+23'–0"	2#6	2#6					#3	A	@ 10"O.C	
RB–2	8	22	+23'–0"	2#6	2#6					#3	A	@ 10"O.C	
RB–3	8	22	+23'–0"	2#6	2#6					#3	A	@ 10"O.C	
RB–4	36	22	+23'–0"	4#6	4#6					#3	A	@ 10"O.C	
RB–5	20	22	+23'–0"	4#6	4#6					#3	A	@ 10"O.C	
RB–6	12	22	+23'–0"	3#6	3#6					#3	A	@ 10"O.C	

NOTES:
1. DATUM ELEVATION, +0'–0"= +13.0' NGVD.
2. PROVIDE 135° HOOKS FOR ALL BEAM STIRRUPS, U.O.N.
3. BEAM REINFORCING SHALL BE CONTINUOUS AND SPLICES (WHEN NEEDED) FOR TOP AND BOTTOM REINFORCING SHALL BE STAGGERED.
4. PROVIDE MINIMUM 30"x30" CORNER BARS AT CORNERS AND INTERSECTIONS.
5. WHERE TIE–BEAM OCCURS ADJACENT TO A DESIGNED BEAM, TIE–BEAM REINFORCING SHALL BE EXTENDED A MINIMUM OF 36" INTO THE DESIGNED BEAM.
6. TIE–BEAM/BEAM DEPTH SHOWN IS MINIMUM AND CAN BE INCREASED AS REQUIRED TO MATCH BLOCK COURSING, TO FOLLOW A SLOPE, TO FORM ARCHES, OR TO BE USED AS A LINTEL FOR WINDOW/DOOR OPENINGS. REFER TO TYPICAL CONCRETE LINTEL DETAIL.
7. "S" BARS AS SCHEDULED SHALL BE PLACED AT EACH FACE OF BEAM.

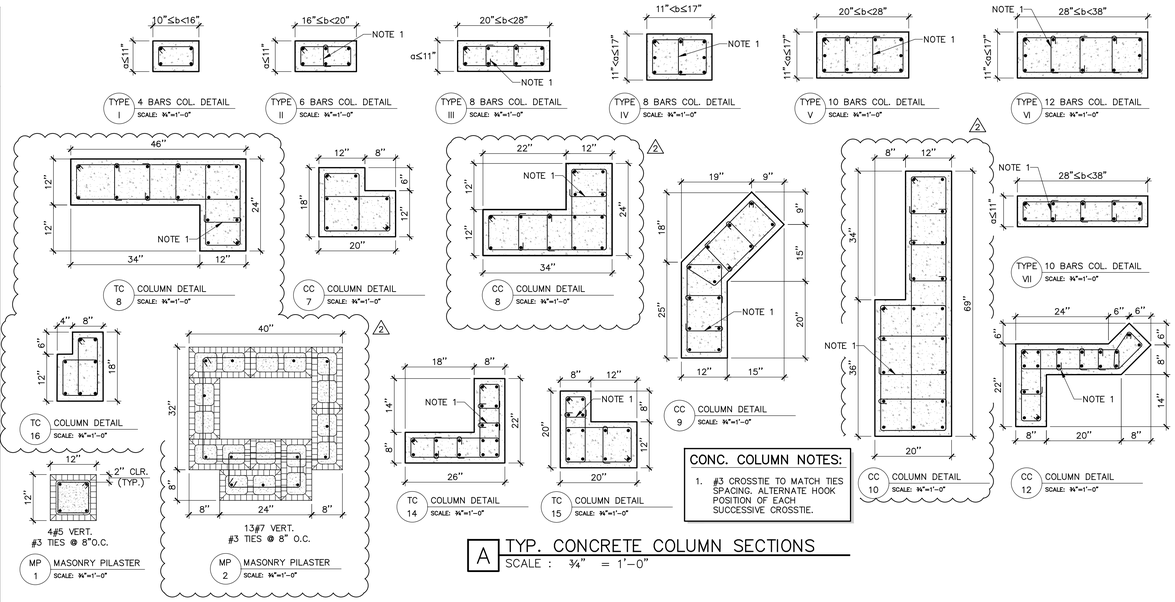
NOTES:
1. PLACE A MAXIMUM OF 2 BARS PER LAYER IN 8"–WIDE BEAMS.
2. AT LEAST ¼ OF BOTTOM REINFORCEMENT TERMINATED WITH STANDARD HOOK
3. CONTINUOUS OR SPLICED AT MIDSPAN BY ANY OF THE FOLLOWING METHODS: MECHANICAL, WELDED OR "CLASS B" TENSION LAP SPLICE.
4. CONTINUOUS OR SPLICED AT SUPPORT BY ANY OF THE FOLLOWING METHODS: MECHANICAL, WELDED OR "CLASS B" TENSION LAP SPLICE.
5. "S" BARS AS SCHEDULED SHALL BE PLACED AT EACH FACE OF BEAM.
6. FIRST STIRRUP PLACED AT HALF SPACING FROM FACE OF SUPPORT, TYPICAL U.O.N.

D CONCRETE BEAM BAR PLACEMENT DIAGRAM
SCALE : NTS

STEEL COLUMNS SCHEDULE

MARK	DESCRIPTION	BASE PLATE			CAP PLATE			REMARKS
		SIZE (in)	ANCHORS	TYPE	SIZE (in)	ANCHORS	TYPE	
SC 1	HSS5x5x3/8	¾"x10'x0"–10"	(4)–⅝"ø HEADED STUDS, 6" LONG	A	¾"x7'x0"–10"	(2)–⅝"ø HEADED STUDS, 6" LONG	B	
SC 2	HSS6x6x3/8	¾"x10'x0"–10"	(4)–⅝"ø HEADED STUDS, 8" LONG	A	¾"x7'x0"–10"	(2)–⅝"ø HEADED STUDS, 8" LONG	B	
SC 3	HSS5x5x1/4	½"x9'x0"–10"	(4)–½"ø SCREW BOLT+, COUNTERSUNK FLAT HEAD BY DEWALT , 5" LONG	A	½"x9'x0"–10"	(4)–½"ø SCREW BOLT+, COUNTERSUNK FLAT HEAD BY DEWALT , 5" LONG	A	

NOTES:
1. ALL STEEL COLUMNS SHALL BE GROUT FILLED (3000 PSI MIN.) ALLOW A 2"x2" OPENING ON CAP PLATE FOR GROUTING.
2. PROVIDE PRESSURE RELIEF HOLES AT BOTTOM, TOP AND AT MID–HEIGHT.
3. SHOP WELD BASE AND CAP PLATES.
4. ASTM A500 GRADE B WITH Fy = 46 KSI FOR RECTANGULAR SECTIONS AND Fy = 42 KSI FOR ROUND SECTIONS.



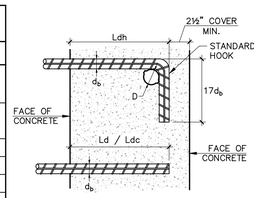
CONC. COLUMN NOTES:
1. #3 CROSSTIE TO MATCH TIES SPACING. ALTERNATE HOOK POSITION OF EACH SUCCESSIVE CROSSTIE.

A TYP. CONCRETE COLUMN SECTIONS
SCALE : ¾" = 1'–0"

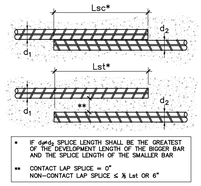
TENSION & COMPRESSION DEVELOPMENT LENGTH SCHEDULE

CONCRETE f'c		3000 psi				4000 psi				5000 psi			
		Ld		Ldc	Ldh	Ld		Ldc	Ldh	Ld		Ldc	Ldh
		TOP° BARS	OTHER BARS			TOP° BARS	OTHER BARS			TOP° BARS	OTHER BARS		
BAR SIZE	≤ #6	$57d_b$	$44d_b$	$22d_b$		$50d_b$	$38d_b$	$19d_b$		$44d_b$	$34d_b$	$18d_b$	$17d_b$
	≥ #7	$72d_b$	$55d_b$			$62d_b$	$48d_b$			$55d_b$	$43d_b$		
	#3	22	17	9		19	15	8		17	13	8	7
	#4	29	22	11		25	19	10		22	17	9	9
	#5	36	28	14		31	24	12		28	22	12	11
	#6	43	33	17		37	29	15		33	26	14	13
	#7	63	48	20		54	42	17		49	37	16	15
	#8	72	55	22		62	48	19		56	43	18	17
	#9	81	62	25		70	54	22		62	48	21	19
	#10	91	70	28		78	60	24		70	54	23	22
	#11	101	78	31		87	67	27		78	60	26	24
	#14	121	93	37		105	80	32		94	72	31	29
	#18	161	124	50		140	107	43		125	96	41	39

NOTES:
a. TABULATED VALUES ARE BASED ON UNCOATED OR ZINC–COATED BARS WITH MINIMUM YIELD STRENGTH OF 60,000 psi & NORMAL–WEIGHT CONCRETE.
b. TENSION & COMPRESSION DEVELOPMENT LENGTHS ARE CALCULATED PER ACI 318–14 SECTION 25.4.
c. APPLICABLE TO TOP BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE PLACED UNDERNEATH, CONFORMING ACI 318–14 SECTION 25.4.2.4.
d. Ld: DEVELOPMENT LENGTH OF STRAIGHT BARS IN TENSION
e. Ldc: DEVELOPMENT LENGTH OF STRAIGHT BARS IN COMPRESSION
f. Ldh: DEVELOPMENT LENGTH OF HOOKED BARS IN TENSION



DEVELOPMENT LENGTH DIAGRAM



* IF d_2≠d_1 SPLICE LENGTH SHALL BE THE GREATEST OF THE DEVELOPMENT LENGTH OF THE BIGGER BAR AND THE SPLICE LENGTH OF THE SMALLER BAR

** CONTACT LAP SPLICE = 0"
NON–CONTACT LAP SPLICE ≥ ⅔ Lst OR 6"

LAP SPLICE LENGTH DIAGRAM

TENSION LAP SPLICE LENGTH SCHEDULE

CONCRETE f'c		3000 psi		4000 psi		5000 psi	
		Lst		Lst		Lst	
		TOP° BARS	OTHER BARS	TOP° BARS	OTHER BARS	TOP° BARS	OTHER BARS
BAR SIZE	≤ #6	$74d_b$	$57d_b$	$64d_b$	$50d_b$	$58d_b$	$44d_b$
	≥ #7	$93d_b$	$71d_b$	$80d_b$	$62d_b$	$72d_b$	$55d_b$
	#3	28	22	24	19	22	17
	#4	37	29	32	25	29	22
	#5	47	36	40	31	36	28
	#6	56	43	48	37	43	33
	#7	81	63	70	54	63	49
	#8	93	72	80	62	72	53
	#9	105	81	91	70	81	62
	#10	118	91	102	79	91	70
	#11	131	101	113	87	101	78

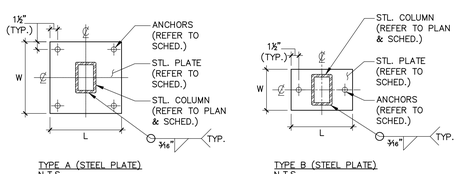
NOTES:
a. TABULATED VALUES ARE BASED ON UNCOATED OR ZINC–COATED BARS WITH MINIMUM YIELD STRENGTH OF 60,000 psi AND NORMAL–WEIGHT CONCRETE.
b. TENSION LAP SPLICE LENGTHS ARE CALCULATED PER ACI 318–14 SECTION 25.5. AND REPRESENT "CLASS B" SPLICE TYPE. FOR "CLASS A" SPLICE DIVIDE BY A FACTOR OF 1.3
c. APPLICABLE TO TOP BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE PLACED UNDERNEATH, CONFORMING TO ACI 318–14 SECTION 25.4.2.4.
d. Lst: TENSION LAP SPLICE LENGTH

B TYPICAL DEVELOPMENT & SPLICE LENGTH SCHEDULES
SCALE : NTS

CONCRETE FOOTING SCHEDULE

MARK	ELEV. TOP OF FOOTING U.O.N.	WIDTH	LENGTH	THICK	REINFORCEMENT				REMARKS
					BOTTOM BARS		TOP BARS		
					LONGITUDINAL	TRANSVERSAL	LONGITUDINAL	TRANSVERSAL	
WF–16	–3'–0"	16"	CONT.	12"	2#5 CONT.	#5 @ 12" O.C.			WALL FOOTING
WF–24	–3'–0"	24"	CONT.	12"	3#5 CONT.	#5 @ 12" O.C.			WALL FOOTING
WF–36	–3'–0"	36"	CONT.	12"	5#5 CONT.	#5 @ 12" O.C.			WALL FOOTING
WF–48	–3'–0"	48"	CONT.	12"	6#5 CONT.	#5 @ 12" O.C.			WALL FOOTING
TE–12	SEE PLAN	12"	CONT.	12"	2 #5	#4 @ 12" O.C.			THICKENED EDGE
TE–8	SEE PLAN	12"	CONT.	8"	2 #5	#4 @ 12" O.C.			THICKENED EDGE
F–3	–3'–0"	3'–0"	3'–0"	12"	4 #5	4 #5			ISOLATED FOOTING
F–4	–3'–0"	4'–0"	4'–0"	12"	5 #5	5 #5			ISOLATED FOOTING
F–5	–3'–0"	5'–0"	5'–0"	12"	6 #5	6 #5			ISOLATED FOOTING
F–6	–3'–0"	6'–0"	6'–0"	12"	7 #5	7 #5			ISOLATED FOOTING
F–7	–3'–0"	7'–0"	7'–0"	16"	8 #5	8 #5			ISOLATED FOOTING
F–4x9	–3'–0"	4'–0"	9'–0"	16"	5 #5	10 #5			ISOLATED FOOTING
F–4x8	–3'–0"	4'–0"	8'–0"	16"	5 #5	9 #5			ISOLATED FOOTING
F–4x10	–3'–0"	4'–0"	10'–0"	16"	5 #5	10 #5			ISOLATED FOOTING
F–5x10	–3'–0"	5'–0"	10'–0"	16"	6 #5	10 #5			ISOLATED FOOTING

NOTE: DATUM ELEVATION = +0'–0" = +13.0' N.G.V.D

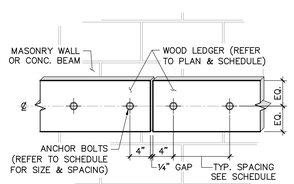


F STEEL COLUMN PLATE DETAILS
SCALE : 1" = 1'–0"

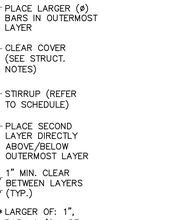
WOOD LEDGER SCHEDULE

MARK	LEDGER		FASTENERS		
	QTY	SECTION	DIA.	SPACING	EMB. LENGTH
L–1	2	2x10	¾"	@ 16"O.C.	4"

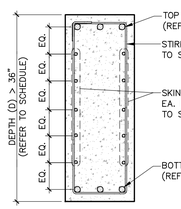
NOTES:
1. ALL BOLTS SHALL BE "SIMPSON STRONG–TIE" STRONG–BOLT 2 EXPANSION ANCHORS
2. WHERE BOLTS OCCUR IN HOLLOW MASONRY UNITS, THE CELL SHALL BE GROUTED 8" ABOVE AND BELOW PLACEMENT OF BOLT.
3. ALL LEDGER SHALL BE PRESSURE TREATED (P.T.) LUMBER.



E WOOD LEDGER FASTENER PLACEMENT DETAIL
SCALE : NTS



G BAR PLACEMENT IN TWO OR MORE LAYERS DETAIL
SCALE : NTS



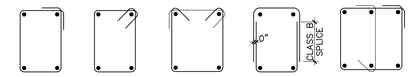
H DEEP BEAM SKIN "S" REINF. PLACEMENT DETAIL
SCALE : NTS

CONCRETE COLUMN SCHEDULE

MARK	SIZE (in)		REINFORCING		REMARKS
	a	b	VERTICAL	CLOSED TIES	
TC 1	8	12	4#5	#3 @ 8"O.C.	TYPE I
TC 2	8	18	6#5	#3 @ 8"O.C.	TYPE II
TC 3	8	20	8#5	#3 @ 8"O.C.	TYPE III
TC 4	12	24	10#5	#3 @ 10"O.C.	TYPE V
TC 5	12	20	10#5	#3 @ 10"O.C.	TYPE V
TC 6	12	12	8#5	#3 @ 10"O.C.	TYPE IV
TC 7	12	15	8#5	#3 @ 10"O.C.	TYPE IV
TC 8	SEE DETAIL		16#6	#3 @ 10"O.C.	
TC 9	8	14	4#5	#3 @ 8"O.C.	TYPE I
TC 10	8	21	8#5	#3 @ 8"O.C.	TYPE III
TC 11	8	34	10#5	#3 @ 8"O.C.	TYPE VII
TC 12	8	35	10#5	#3 @ 8"O.C.	TYPE VII
TC 13	8	24	8#5	#3 @ 8"O.C.	TYPE III
TC 14	SEE DETAIL		16#5	#3 @ 8"O.C.	
TC 15	SEE DETAIL		12#5	#3 @ 8"O.C.	
TC 16	SEE DETAIL		7#5	#3 @ 8"O.C.	
CC 1	8	18	6#5	#3 @ 8"O.C.	TYPE II
CC 2	8	12	4#5	#3 @ 8"O.C.	TYPE I
CC 3	8	15	4#5	#3 @ 8"O.C.	TYPE I
CC 4	12	12	8#5	#3 @ 10"O.C.	TYPE IV
CC 5	12	24	10#5	#3 @ 10"O.C.	TYPE V
CC 6	12	31	12#5	#3 @ 10"O.C.	TYPE VI
CC 7	SEE DETAIL		8#6	#3 @ 10"O.C.	
CC 8	SEE DETAIL		14#6	#3 @ 10"O.C.	
CC 9	SEE DETAIL		15#5	#3 @ 10"O.C.	
CC 10	SEE DETAIL		20#7	#3 @ 10"O.C.	
CC 11	8	15	4#5	#3 @ 8"O.C.	TYPE I
CC 12	SEE DETAIL		18#5	#3 @ 8"O.C.	

COMPRESSION SPLICE LENGTH SCHEDULE (Lsc)

#3 THRU #11 BARS	GREATER OF 30 BAR DIAMETER AND 12" FOR ALL CONCRETE STRENGTHS. WHEN SPLICING BARS OF DIFFERENT SIZE L_{sc} SHALL BE THE GREATER OF L_{dc} OF THE LARGER BAR AND L_{sc} OF THE SMALLER BAR
#14 AND #18 BARS	LAP SPLICE NOT PERMITED; USE MECHANICAL OR WELDED SPLICE PER ACI 318 SECTION 25.5.7



NOTES:
1. STANDARD HOOK LENGTH SHALL BE THE GREATER OF 6 BAR DIA. AND 3".
2. ALTERNATE HOOK POSITION OF EACH SUCCESSIVE CROSSTIE.

C STIRRUPS & TIES CONFIGURATION DETAIL
SCALE : NTS

PACHECO ARCHITECTURE
PACHECO ARCHITECTURE, PLLC.
AA26002619
4990 SW 72ND AVE, SUITE 101, MIAMI, FL 33155
O: 305.666.2573 F: 305.666.3871
www.pachecoarchitecture.com

NEW RESIDENCE FOR:

U.C.M.S. RESIDENCE

9601 S.W. 67th AVENUE - PINECREST, FLORIDA 33156

revisions	date
4 OWNER 03-28-2025	
2 REV. 01-03-2023	
	11-01-2021
issued	
drawn	DM, NP
checked	JJ
project no.	2143/KE-21036

sheet no.

S-4.0