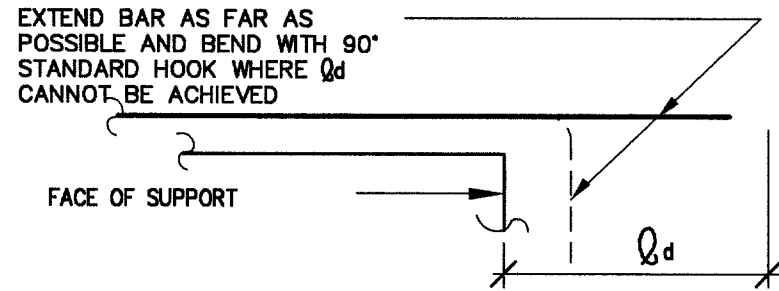


BAR SIZE	f'c = 4500 psi			
	TOP BARS		OTHER BARS	
	CASE 1	CASE 2	CASE 1	CASE 2
#3	18	27	14	21
#4	24	35	18	27
#5	29	44	23	34
#6	35	53	27	41
#7	51	77	40	59
#8	59	88	45	68
#9	66	99	51	76
#10	73	109	56	84
#11	80	120	62	93
#14	99	148	76	114
#18	132	197	101	152

- NOTES:
- Table for use with normal weight hardrock concrete and grade 60 uncoated reinforcing bars. For lightweight aggregate use 1.3 ϕ .
 - Top bars are horizontal bars with 12" or more of concrete cast in the member below the bar.
 - For bars enclosed in standard column spirals, use 0.75 ϕ or 12" min.
 - Development length of individual bars within a bundle shall be 1.2 ϕ d for that bar in a 3-bar bundle and 1.33 ϕ d for a 4-bar bundle.
 - Compression development length (only where indicated on drawings) For grade 60 bars use 22 bar diameters.
 - Case Selection:
 - For foundation reinforcement use Case 1 uno.
 - For column reinforcement and dowels use case 1 uno.
 - For beam reinforcement use Case 1 uno.
 - For structural slab reinforcement use Case 2 uno.
 - For slab on grade reinforcement use Case 1 uno.
 - For wall reinforcement and dowels use Case 1 (Except as noted below) uno.
 - For walls with a single mat of steel centered in the wall, use Case 1 for wall reinforcement and dowels uno.
 - For chord steel reinforcement use Case 2 uno.



C0041

1 TENSION DEVELOPMENT LENGTH (CONCRETE ONLY)

NOT TO SCALE

C6.02

Tension Development and Lap Splice Length (for Masonry only)													
CMU Thickness	Masonry Design Strength	f'm = 1500 psi		f'm = 2000 psi		f'm = 2500 psi		f'm = 3000 psi		f'm = 3500 psi		f'm = 4000 psi	
		Center	Edge	Center	Edge	Center	Edge	Center	Edge	Center	Edge	Center	Edge
8"	#3	19	19	17	17	15	15	15	15	15	15	15	15
	#4	26	30	22	26	20	23	18	21	17	20	16	19
	#5	32	48	28	42	25	37	23	34	21	32	20	30
	#6	58	100	50	86	45	77	41	71	38	65	36	61
	#7	80	124	70	107	62	96	57	88	53	81	49	76
16"	#8	114	152	99	131	89	117	81	107	75	99	70	93
	#9	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

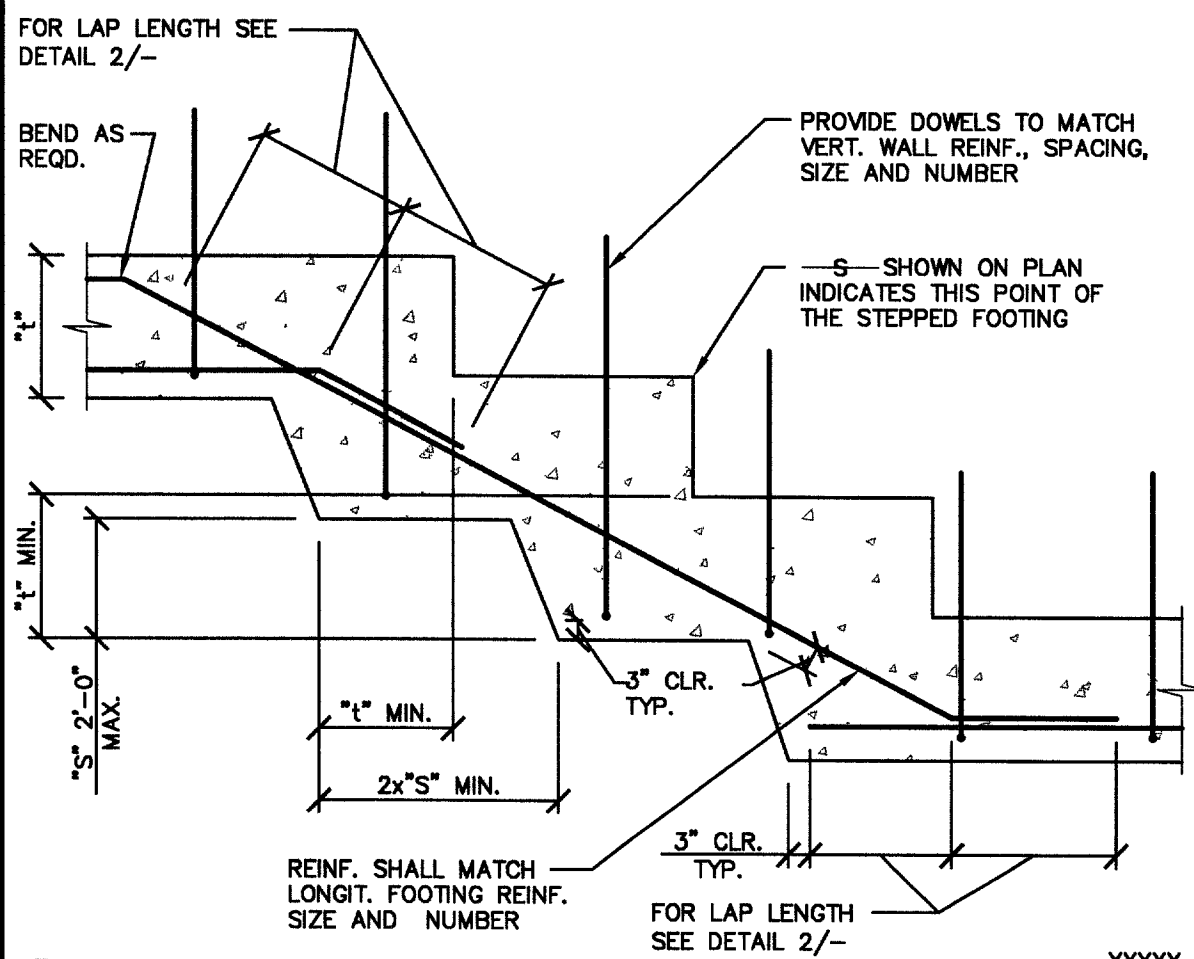
- NOTES:
- All lengths are in inches.
 - For bar placement, edge distance (d Dim.) see detail 5/-
 - Where 2 bars per cell occur they shall be placed per edge condition see note 2.
 - 6" CMU 2 bars per cell is not permitted.
8" CMU 2 bars per cell up to #5 are permitted.
10" CMU 2 bars per cell up to #7 are permitted.
 - NP Indicates Not Permitted.
 - #10 and #11 bars where shown on plans or details require a mechanical splice.

C0040

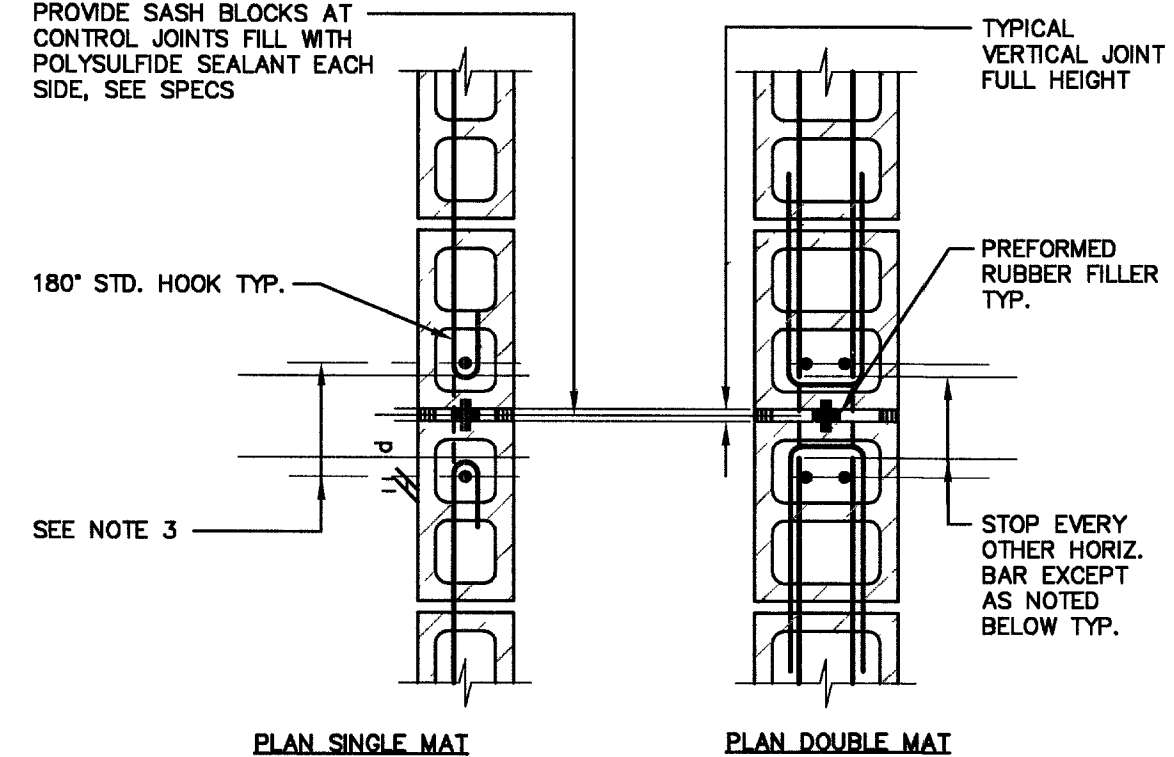
4 TENSION DEVELOPMENT AND LAP SPlice LENGTH (FOR MASONRY ONLY)

NOT TO SCALE

C6.02



XXXX



- Notes:
- Contractor shall obtain architect's approval of joint locations, which shall not exceed 24'-0" oc.
 - Horizontal reinf. At floor lines, roof lines, and lintel reinf. Shall be continuous through joint.
 - Provide vertical wall reinf. Each side of joint, #5 bars min.

CM007

8 PLAN DETAIL CMU WALL CONTROL JOINT NOT TO SCALE

C6.02

2 TENSION LAP SPLICE (CONCRETE ONLY) (IN INCHES) FOR GRADE 60 UNCOATED BARS

NOT TO SCALE

C6.02

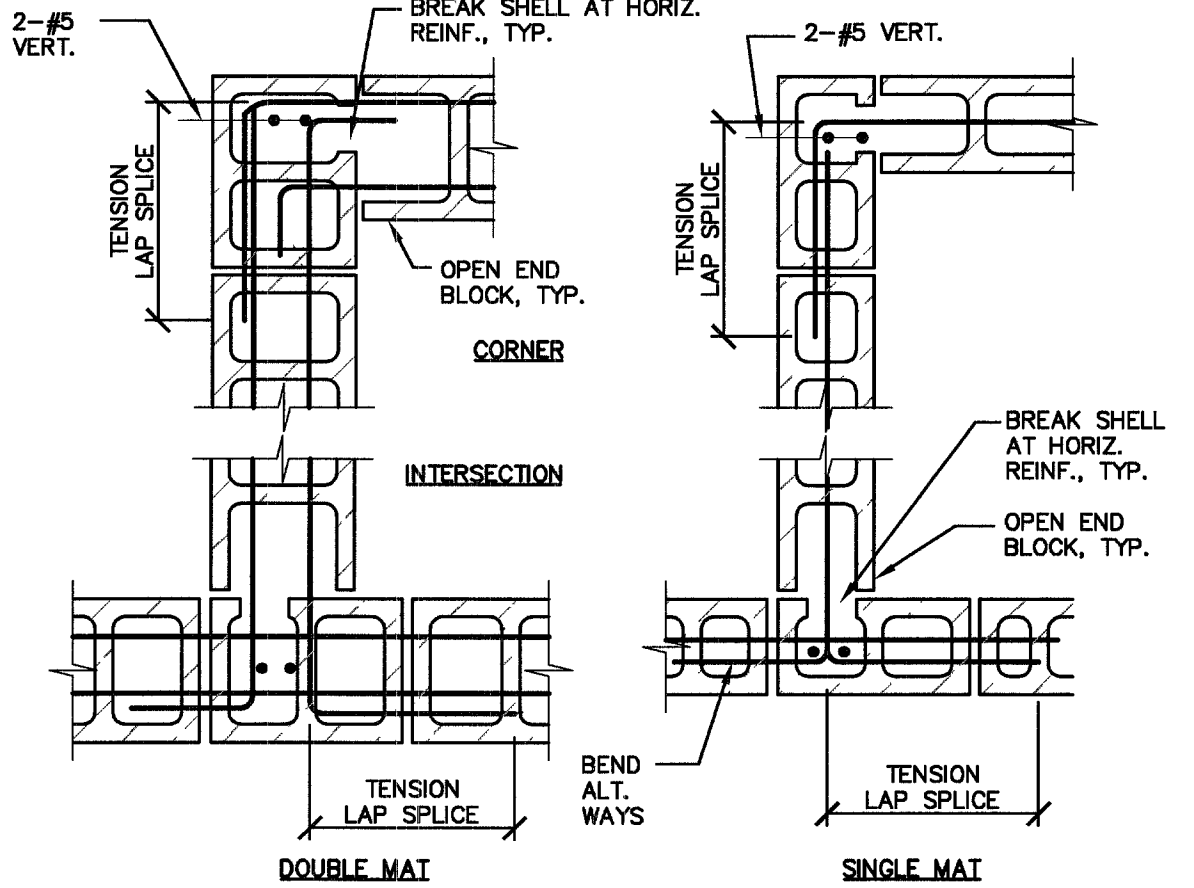
CMU (Concrete Masonry Units)									
NOMINAL THICKNESS	ACTUAL THICKNESS (t)	d (Inches)			Concrete Masonry Unit				
		#3-#6	#7	#8	NOMINAL THICKNESS	ACTUAL THICKNESS (t)	d (Inches)		
6" CMU	5 5/8"	3.25	NP	NP	6" CMU	5 5/8"	2.8		
8" CMU	7 5/8"	5.25	5	4.825	8" CMU	7 5/8"	3.8		
10" CMU	9 5/8"	7.25	7	6.825	10" CMU	9 5/8"	4.8		
12" CMU	11 5/8"	9.25	9	8.825	12" CMU	11 5/8"	5.8		
16" CMU	15 5/8"	13.25	13	12.625	16" CMU	15 5/8"	7.8		

- NOTES:
- Where vertical reinforcing bars occur in a cell, bars shall be secured in place by a bar positioner at the top and bottom, and at the intervals not exceeding 200 diameters.

5 PLAN DETAIL FOR REBAR PLACEMENT IN CMU

NOT TO SCALE

C6.02



CM006-1b-c

9 CMU WALL INTERSECTIONS

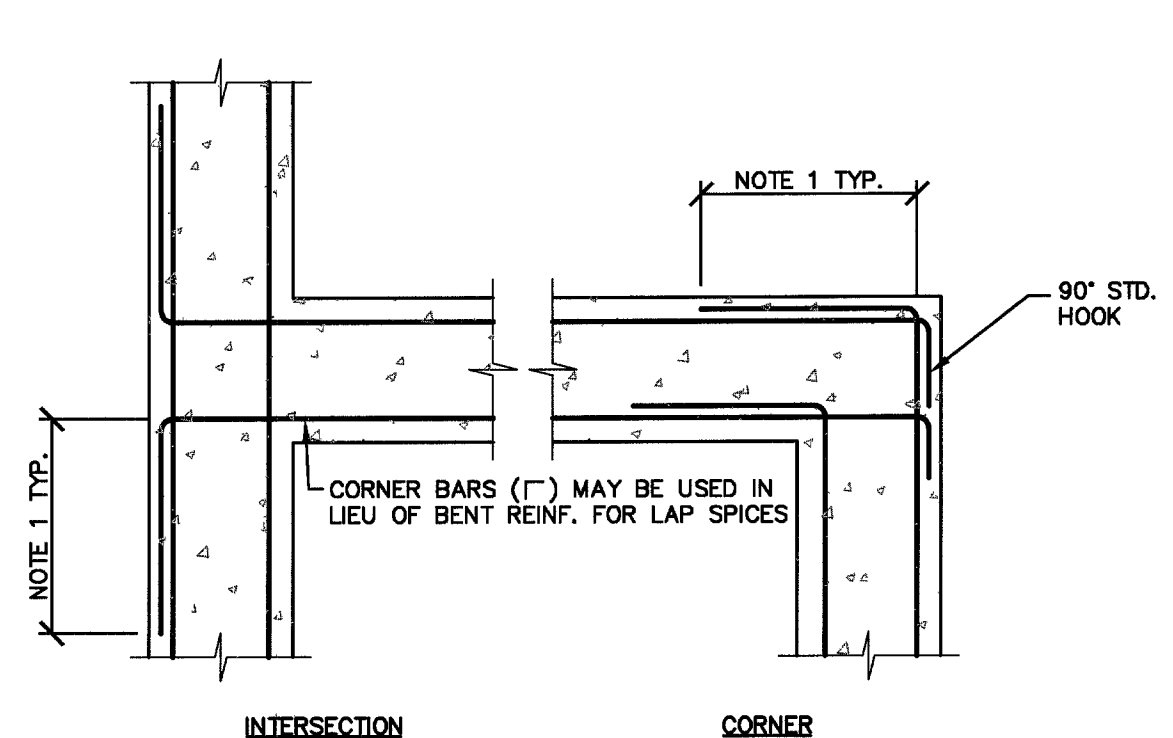
NOT TO SCALE

C6.02

3 BAR BENDS

NOT TO SCALE

C6.02

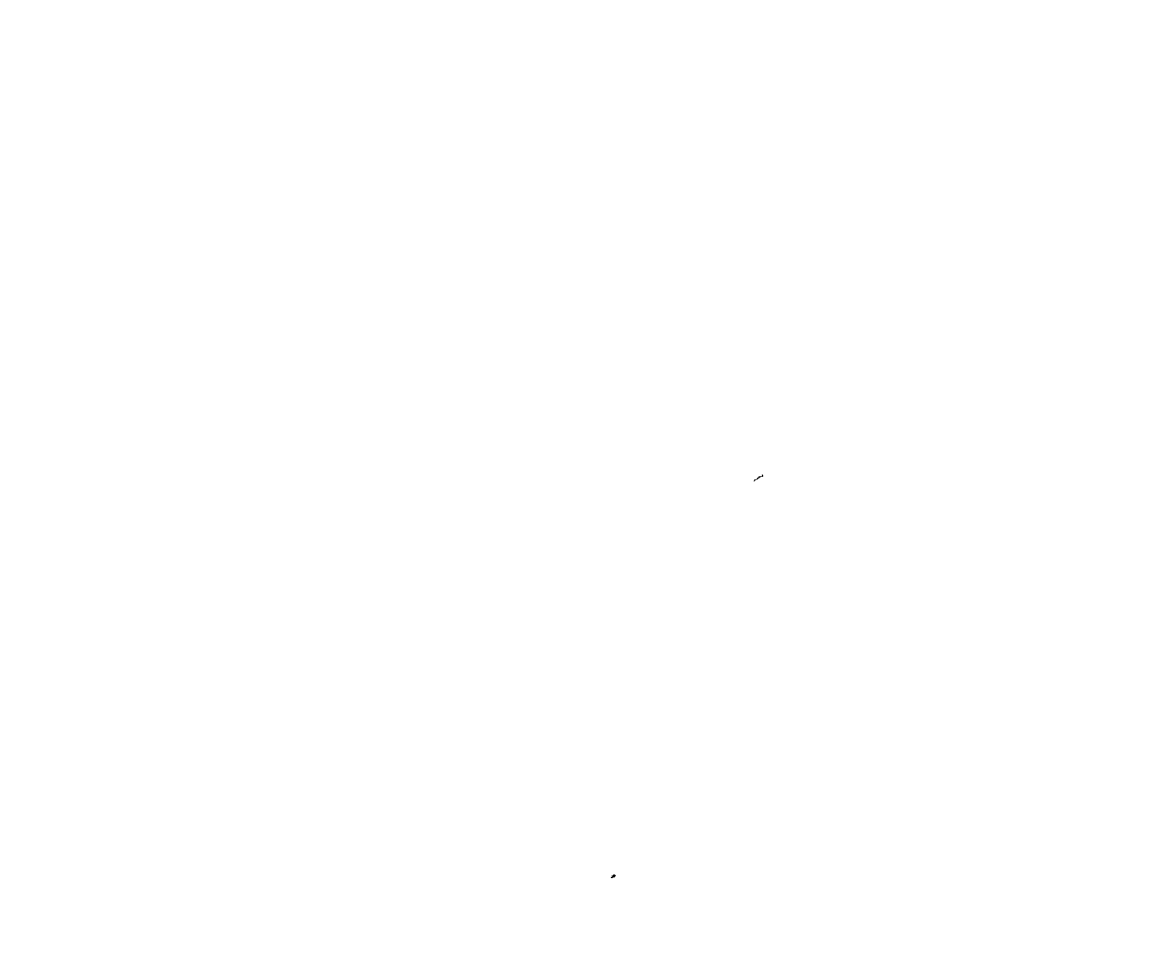


C0045

6 REINFORCING AT FOOTING INTERSECTIONS

NOT TO SCALE

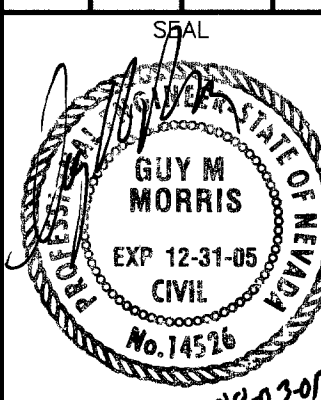
C6.02



STRUCTURAL SECTIONS AND TYPICAL DETAILS

EARLY CHILDHOOD DEVELOPMENT CENTER

DRAWN BY: WER
DESIGNED BY: BR
CHECKED BY: CM
PROJECT No.: 6741.04
SCALE: AS SHOWN



SHEET No. C6.02
SHEET 11 of 11
DRAWING No. 107V 4517