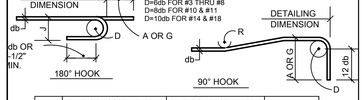
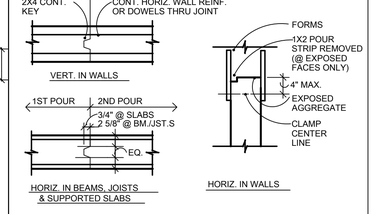
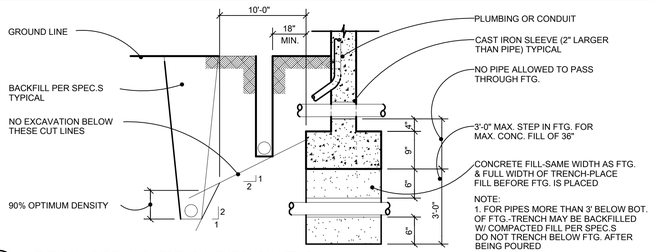


BAR SIZE	DIMENSION OF STANDARD 180° HOOKS, ALL GRADES		DIMENSION OF STANDARD 90° HOOKS, ALL GRADES	
	A OR G	J	A OR G	D
#3	5"	3"	6"	2 1/4"
#4	6"	4"	8"	3"
#5	7"	5"	10"	3 3/4"
#6	8"	6"	1'-0"	4 1/2"
#7	10"	7"	1'-2"	5 1/4"
#8	11"	8"	1'-4"	6"
#9	1'-3"	1'-1 3/4"	1'-7"	9 1/2"

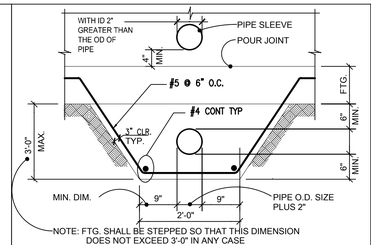
5 TYP. REBAR–STANDARD HOOK
NOT TO SCALE



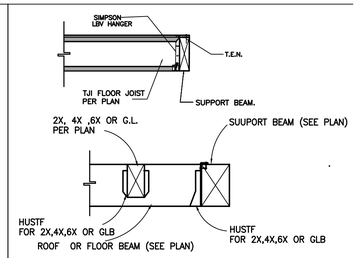
4 TYPICAL CONSTRUCTION JOINT
NOT TO SCALE



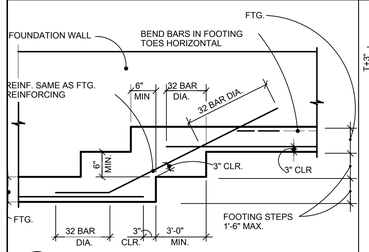
3 TYPICAL PIPE AND TRENCH THROUGH FTNG
NOT TO SCALE



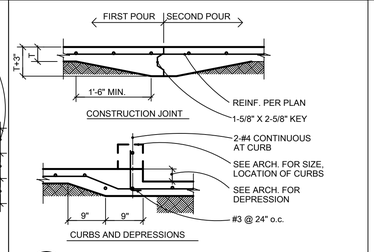
2 PIPE OR PIPE SLEEVE THROUGH FTG.–SECTION
NOT TO SCALE



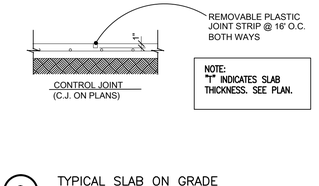
1 TYPICAL JOIST, BEAM TO BEAM CONNECTIONS U.N
NOT TO SCALE



11 TYPICAL STEPPED FOOTING
NOT TO SCALE

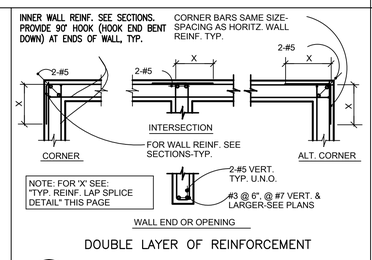


10 TYPICAL SLAB ON GRADE
NOT TO SCALE



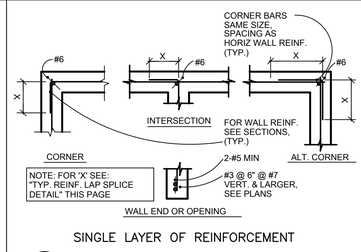
NOTE: "T" INDICATES SLAB THICKNESS. SEE PLAN.

9 TYPICAL SLAB ON GRADE
NOT TO SCALE



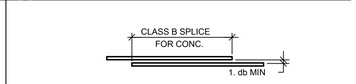
DOUBLE LAYER OF REINFORCEMENT

8 TYPICAL WALL REINFORCING
NOT TO SCALE



SINGLE LAYER OF REINFORCEMENT

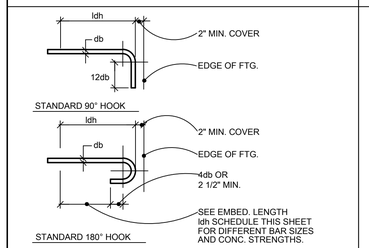
7 TYPICAL WALL REINFORCING
NOT TO SCALE



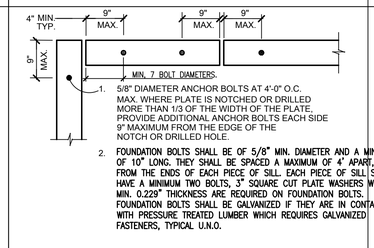
		REINFORCEMENT LAP SPLICES IN INCHES							
BAR SIZE		4	5	6	7	8	9		
	f'c PSI	GR. 40	GR. 60	GR. 60	GR. 60	GR. 60	GR. 60		
CLASS B	3000	19	29	36	46	63	82	104	TOP BARS
		14	20	26	33	45	59	74	BTM BARS

NOTES:
1. VERT. WALL REINF. SHALL BE SPLICED AS FOR TOP BARS, BUT NO LESS THAN 30 BAR DIAMETERS.
2. HORIZ. WALL REINF. SHALL BE SPLICED AS BOT. BARS BUT NO LESS THAN 30 BAR DIAMETERS.

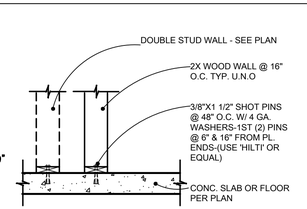
6 TYPICAL REINFORCING BAR LAP SPLICE
NOT TO SCALE



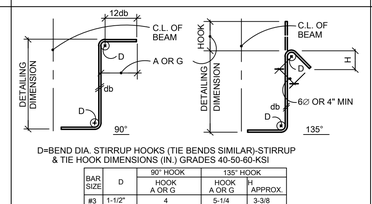
17 MIN. EMBED. LENGTH FOR STD. HOOKS
NOT TO SCALE



16 TYPICAL SILL ANCHOR BOLTS PLACING
NOT TO SCALE



15 TYP. INT.–NON–BEARING WALL @ CONC.
NOT TO SCALE



D=BEND DIA. STIRRUP HOOKS (TIE BENDS SIMILAR)-STIRRUP & TIE HOOK DIMENSIONS (IN.) GRADES 40-50-60-KSI

BAR SIZE	D	90° HOOK		135° HOOK	
		HOOK A OR G		HOOK A OR G	H APPROX.
#3	1-1/2"	4		5-1/4	3-3/8
#4	2	4-1/2		5-3/4	3-1/2
#5	2-1/2"	6		6	3-3/4

NOTE: 135° COLUMN TIE HOOKS MAY NOT BE BENT TO LESS THAN DIA. O.D. COLUMN VERTICAL BAR ENCLOSED IN HOOK.

14 TYPICAL STIRRUPS AND TIES DETAILS
NOT TO SCALE

BAR SIZE	GENERAL USE			SPECIAL CONFINEMENT HOOK IS WITHIN TIES OR STIRRUPS SPACED <3db		
	GR 60	GR 40		GR 60	GR 40	
#3	6	6		6	6	
4	8	6		7	6	
5	10	7		8	6	
6	12	8		10	7	
7	14	9		11	8	
8	16	11		13	9	
9	18	12		14	10	

NOTES: 1. WHERE NOTED-FOR 180° HOOKS NORMAL TO EXPOSED SURFACES, EXTEND ldh AS REQ'D TO PROVIDE 2" COVER TO TAIL OF HOOK.
2. SIDE COVER SHALL BE 2 1/2" MINIMUM.
3. 1dh SHALL BE INCREASED 30% (ldhx1.3) FOR DOWELS EMBEDDED IN LIGHTWEIGHT CONC.

13 MIN. EMBED. LENGTH ldh FOR STD. HOOKS
NOT TO SCALE

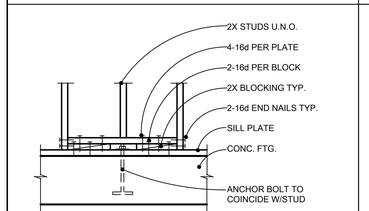
NOTE: 'N' TOP AND BTM BARS MEANS 'N' TOP AND 'N' BOTTOM BARS.

FOOTING SCHEDULE			
TYPE	SIZE	REINFORCEMENT	REFERENCE DETAIL(S)
①	4'–0" SQ. X 12" DP.	4#5 EA. WAY	3/S3.2
②	3'–0" SQ. X 12" DP.	4#5 EA. WAY	
③	6'–0" X 21'–0" X 30" DP	SEE NOTE NO. 1.	
④	4'–6" SQ. X 12" DP.	5#5 EA. WAY	
⑤	3'–0" SQ. X 36" DP.	5#5 EA. WAY, TOP AND BTM.	
⑥	5'–0" SQ. X 36" DP.	6#6 EA. WAY	
⑦	4'–0" X 16'–0" X 42" DP		
⑧	5'–0" SQ. X 12" DP.	6#5 EA. WAY	
⑨	NOT USED.		
⑩	10'–0" X 28'–0" X 30" DP	SEE NOTE NO. 2.	
⑪	8'–0" X 10'–7" X 12" DP.	#6 AT 12" o.c. EA. WAY, TOP AND BTM.	

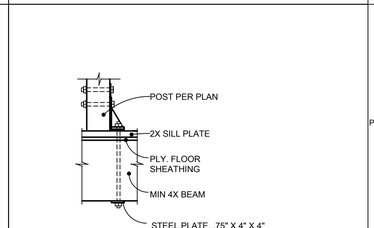
NOTES
1. PROVIDE 8#9 TOP AND BTM w/ #4 CLOSED STIRRUPS AT 12" o.c.
2. PROVIDE 16#9 TOP AND BTM w/ #4 CLOSED STIRRUPS AT 12" o.c.

12 FOOTING SCHEDULE
NOT TO SCALE

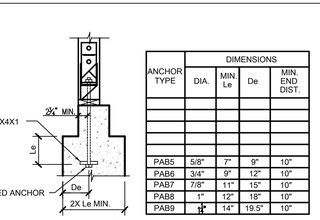
NOTE: BTM OF FTNG IS A MINIMUM 30" BELOW LOWEST ADJACENT GRADE.



21 TYPICAL STUD BLOCKOUT AT A.B.
NOT TO SCALE



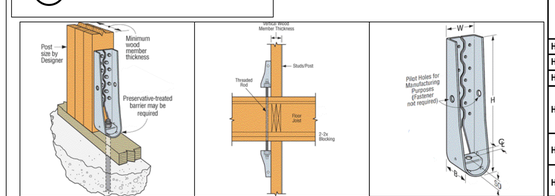
20 TYPICAL HOLDOWN BEAM ANCHOR BOLT
NOT TO SCALE



ANCHOR TYPE	DIMENSIONS			
	DIA.	MIN. Le	De	MIN. END DIST.
PAB5	5/8"	7"	9"	10"
PAB6	3/4"	9"	12"	10"
PAB7	7/8"	11"	15"	10"
PAB8	1"	12"	18"	10"
PAB9	1 1/8"	14"	19.5"	10"

19 HD ANCHOR BOLT SPECIFICATIONS (NEW CONSTRUCTION)
NOT TO SCALE

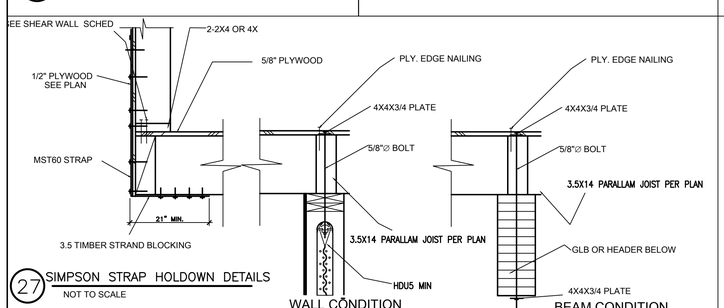
SEE 19 FOR ANCHOR BOLT EMBEDMENT INFORMATION.



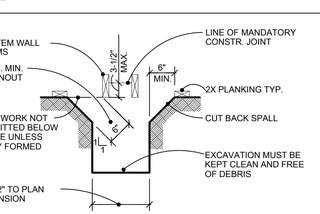
VERTICAL HDU INSTALLATION
NOTE: USE MIN. 4X6 POST.
TYPICAL HDU TIE BETWEEN FLOORS
HDU

MODEL NO.	GA	DIMENSIONS (IN.)					FASTENERS		MINIMUM WOOD MEMBER THICKNESS (IN.)
		W	H	B	C	S0	ANCHOR BOLT DIA. (IN.)	SDS SCREWS	
HDU2-SDS2.5	14	3 1/2	8-11/16	3-1/4	1-5/16	1-3/8	5/8	6-SDS1/4"X2-1/2"	3
HDU4-SDS2.5	14	3 1/2	10-15/16	3-1/4	1-5/16	1-3/8	5/8	10-SDS1/4"X2-1/2"	3
HDU5-SDS2.5	14	3 1/2	13-3/16	3-1/4	1-5/16	1-3/8	5/8	14-SDS1/4"X2-1/2"	3
HDU8-SDS2.5	10	3 1/2	16-5/8	3-1/2	1-3/8	1-1/2	7/8	20-SDS1/4"X2-1/2"	3 3-1/2
HDU11-SDS2.5	10	3 1/2	22-1/4	3-1/2	1-3/8	1-1/2	1	30-SDS1/4"X2-1/2"	4-1/2 5-1/2 7-1/4
HDU14-SDS2.5	7	3 1/2	25-11/16	3-1/2	1-9/16	1-9/16	1	36-SDS1/4"X2-1/2"	7-1/4 5-1/2

18 TYPICAL HOLD DOWN SCHEDULE
NOT TO SCALE

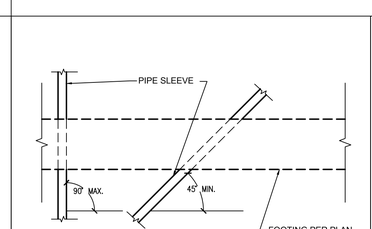


27 SIMPSON STRAP HOLDOWN DETAILS
NOT TO SCALE

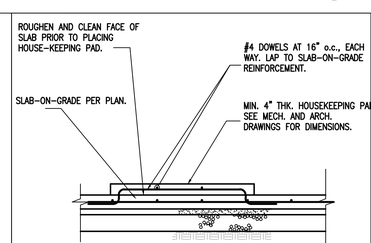


NOTE: FOUND. CONC. MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS, PROVIDED THE FOUND. TRENCH WALLS ARE STABLE AS DETERMINED BY THE ARCHITECT OR STRUCT. ENG. PER APPR. OF THE LOCAL BLDG. OFF.

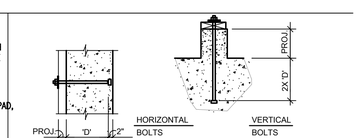
25 TYPICAL FOUNDATION FORMING
NOT TO SCALE



24 PIPE OR PIPE SLEEVE THROUGH FTG.–PLAN
NOT TO SCALE



23 TYPICAL HOUSEKEEPING PAD DETAILS
NOT TO SCALE



ANCHOR BOLT DIA.	EMBEDMENT LENGTH 'D'
1-1/8" DIA.	8"
1" DIA.	7"
7/8" DIA.	6"
3/4" DIA.	5"
1/2"-5/8" DIA.	4"

NOTE: 1. CONNECTION HAVING A GROUP OF ANCHOR BOLTS SHALL BE ACCURATELY PLACED USING A TEMPLATE.
2. MINIMUM OVERALL LENGTH OF BOLTS SHALL BE 12"

22 TYPICAL ANCHOR BOLT
NOT TO SCALE

RESIDENCE FOR MR. CARL ADAMS

OAKLEY & OAKLEY
ARCHITECTS & ENGINEERS
7700 EDGEWATER DRIVE, STE. 615
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CALIFORNIA GREEN CONSULTANT:
HASFRA BURT, AIA
2511 CASTRO VALLEY BLVD., SUITE 109
CASTRO VALLEY, CA 94546
510-830-4794

REGISTERED PROFESSIONAL ENGINEER
JOSEPH OAKLEY JR.
No. 2000
Exp. 09/30/15
STRUCTURAL
STATE OF CALIFORNIA

No.	Description	Date
1	PLANNING CODE REQUIREMENTS	02/14/2

OWNER:
MR. CARL ADAMS
6333 JERILYNN ANENUE
RICHMOND, CA 94806

TYPICAL FOUNDATION & FRAMING DETAILS

Project number	2013-(
Date	1/17/20
Drawn by	STAF
Checked by	G.

S5.1

Scale AS NOTE