



23100 BAXTER RD, WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7366

A. GENERAL:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE 2013 C.B.C. AS AMENDED BY THE STATE AND LOCAL AGENCY HAVING JURISDICTION.
2. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS ON DRAWINGS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
3. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE JOB SITE AS SHOWN ON THE DRAWINGS. SHOULD CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE ON THE PLANS, NOTIFY FCP, INC. BEFORE PROCEEDING WITH THE WORK.

B. FOUNDATION:

1. ALL FOOTINGS SHALL BE DESIGNED WITH AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. THE BEARING PRESSURE MAY BE INCREASED IN ACCORDANCE WITH TABLE 1804A.2 OF THE GOVERNING BUILDING CODE.
2. ALL FOOTINGS SHALL REST 12 IN. MIN. BELOW NATURAL GRADE AND FINISHED GRADE, WHICHEVER IS LOWER. ALL FOOTINGS SHALL REST ON FIRM, UNDISTURBED SOIL. WHERE FROST LINE DEPTH MAY PRESENT A PROBLEM, OWNER SHALL CONSULT WITH LOCAL BUILDING DEPARTMENT FOR RECOMMENDATIONS AS TO REQUIRED DEPTH OF FOOTING.
3. FOOTINGS SHALL BE CENTERED BY THE CENTERLINES OF THE FOUNDATION PLAN.
4. IF EXPANSIVE SOILS ARE ENCOUNTERED ON THE JOB SITE THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY.

C. CONCRETE:

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. CEMENT SHALL BE TYPE V TO PROVIDE PROTECTION AGAINST SULFATE AND CHLORIDE AND MAXIMUM WATER CEMENT RATIO OF 0.4.
3. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE. UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI @ 28 DAYS USING AT LEAST 5 SACKS OF CEMENT PER YARD AND NO MORE THAN 7 1/2 GALLONS OF WATER PER SACK OF CEMENT.
5. ALL REINFORCING STEEL NO. 5 OR LARGER SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615, GRADE 60 AND NO. 4 OR SMALLER, SHALL CONFORM TO ASTM A-615 GRADE 40 U.N.O. WELDED WIRE MESH SHALL CONFORM TO ASTM A-185. ALL REINFORCING SHALL BEAR MILL STOCK IDENTIFICATION.
6. CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE AS FOLLOWS:

A. CONCRETE CAST AGAINST EARTH

B. SLAB ON GRADE

C. CAST IN PLACE WALLS: NO. 5 & SMALLER

D. INTERIOR BEAMS AND COLUMNS

E. FORMED CONCRETE NOT INCLUDED ABOVE

CENTER (FOR ONE LAYER)

3"

1 1/2"

2"

1 1/2"

3/4"
7. REINFORCING STEEL SHALL BE CLEAN OF RUST, MUD, OIL, GREASE OR OTHER COATING MATERIAL LIKELY TO IMPAIR BONDING.

PROJECT: MARK & BECKY ENGEMANN

ADDRESS: 2845 SYD RD

LOCATION: GREENWOOD, CA 95635

DESCRIPTION: RCA BARN

D. STEEL:

1. DESIGN AND CONSTRUCTION OF ALL STEEL ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: AISC "MANUAL OF STEEL CONSTRUCTION", AISI "COLD-FORMED STEEL DESIGN MANUAL", AND BUILDING CODE REQUIREMENTS FOR "COLD-FORMED STEEL STRUCTURAL MEMBERS".
2. ALL LIGHT GAUGE ROUND, SQUARE, OR RECTANGULAR SHAPED STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500, GRADE B.
3. ALL LIGHT GAUGE C AND Z SHAPED STRUCTURAL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-653, GRADE 50.
4. ALL LIGHT GAUGE DECKING PROFILES SHALL CONFORM TO THE REQUIREMENTS OF EITHER ASTM A-572, GRADE 50 OR ASTM A-792 GRADE 80.
5. ALL LIGHT GAUGE COLD-FORMED STEEL MEMBERS SHALL BE GALVANIZED UNLESS NOTED OTHERWISE ON PLANS.
6. WELDING OF STRUCTURAL STEEL MEMBERS SHALL BE PERFORMED BY CURRENTLY CERTIFIED WELDERS AND DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE AISC, AISI, AND AWS SPECIFICATIONS. (NO FIELD WELDING)
7. ALL WELDING SHALL BE ACCOMPLISHED USING THE FLUX-CORE ARC WELDING (FCAW) PROCESS UTILIZING AN E71T-11 ELECTRODE, OR THE GAS METAL ARC WELDING (GMAW) PROCESS UTILIZING AN ER70S6 ELECTRODE. (NO FIELD WELDING)
8. ALL SELF-DRILLING SCREWS SHALL BE VS BRAND AS MANUFACTURED BY DB BUILDING FASTENERS, INC. (ICC-ES REPORT # ER-5617)
9. FCP STRUCTURAL WALL PANELS HAVE BEEN TESTED AND ACCEPTED BY THE FOLLOWING REVIEW SYSTEMS:

ICC-ES REPORT # ESR-2937

LA RR - 23398

E. DESIGN CRITERIA:

1. CODE: 2013 CALIFORNIA BUILDING CODE
2. BUILDING INFORMATION:

A. OCCUPANCY: U

B. TYPE OF CONSTRUCTION: V-B

C. BUILDING HEIGHT: 16 FT. - 0 IN.

D. TOTAL FLOOR AREA: 2861 SQ. FT.
3. GRAVITY LOADS:

A. DEAD LOAD = 2.5 PSF

B. ROOF LIVE LOAD = 20 PSF

C. SNOW LOAD = 30 PSF
4. WIND LOADS:

A. WIND SPEED = 100mph, 3 SECOND GUST

B. WIND STAGNATION PRESSURE: COMP/C.LADDING=35.2 psf/34.7psf.

C. RISK CATEGORY = I

TABLE OF CONTENTS

- C1.1 COVER SHEET
- S1.1 FLOOR PLAN
- S1.2 FOUNDATION PLAN
- S1.3 ROOF PLAN
- S3.1 SECTION & ELEVATIONS
- S4.1 FOUNDATION DETAILS
- S5.1 STRUCTURAL DETAILS
- S5.2 STRUCTURAL DETAILS
- S5.3 STRUCTURAL DETAILS



23100 BAXTER RD, WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7366

COVER SHEET

MARK & BECKY ENGEMANN

2845 SYD RD

GREENWOOD, CA 95635

RCA BARN

NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: NONE
DRAWING NUMBER:
ZJS NUMBER: 26445-16

SHEET NUMBER:
C1.1
SHEET 1 OF 9





23100 BAXTER RD. WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7368

FLOOR PLAN

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635

RCA BARN

NO.	REVISION/ISSUE	DATE

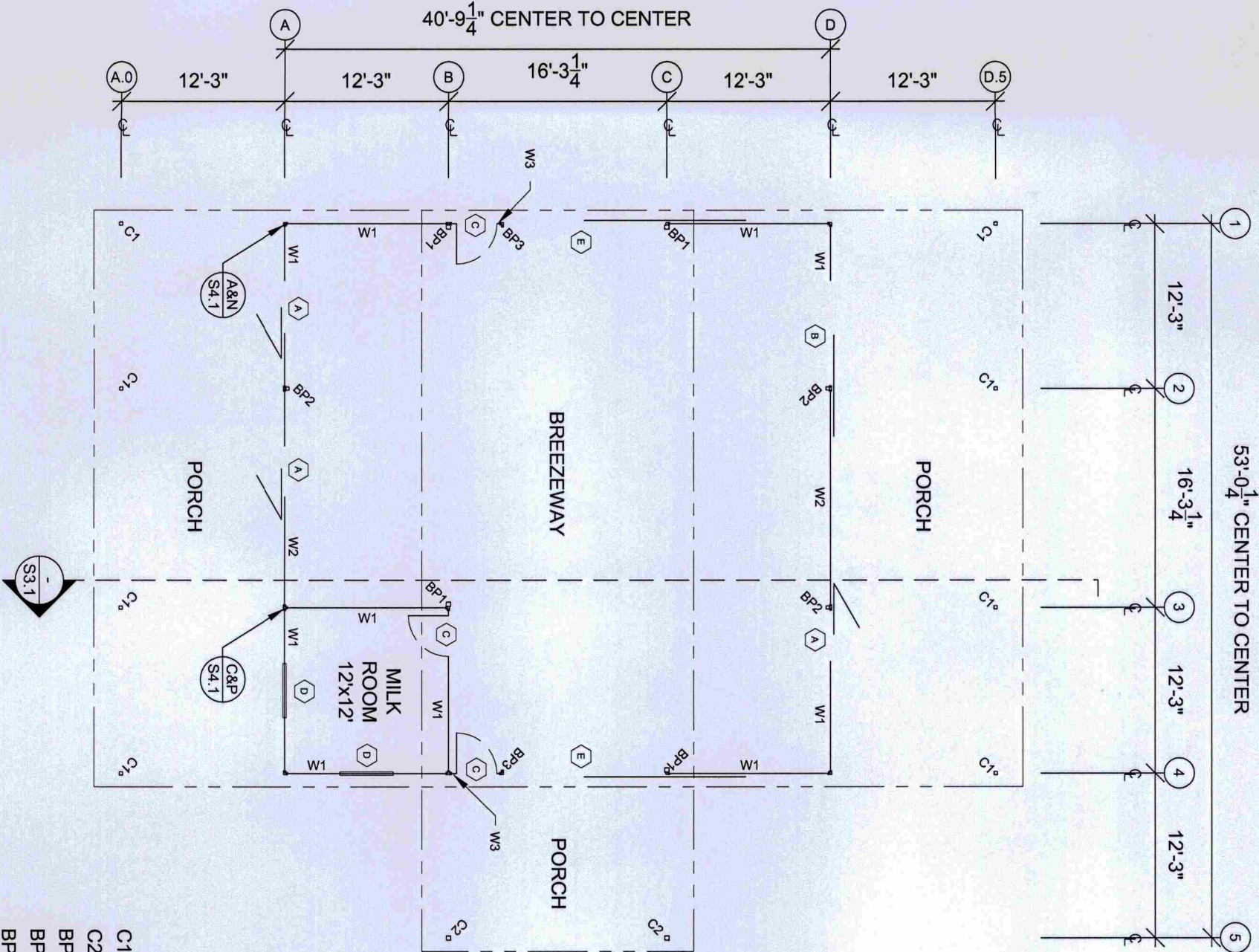
DATE: 02/12/2016
DRAWN BY: DCV
SCALE: 3/32"=1'-0"
DRAWING NUMBER:
ZIS NUMBER: 26445-16

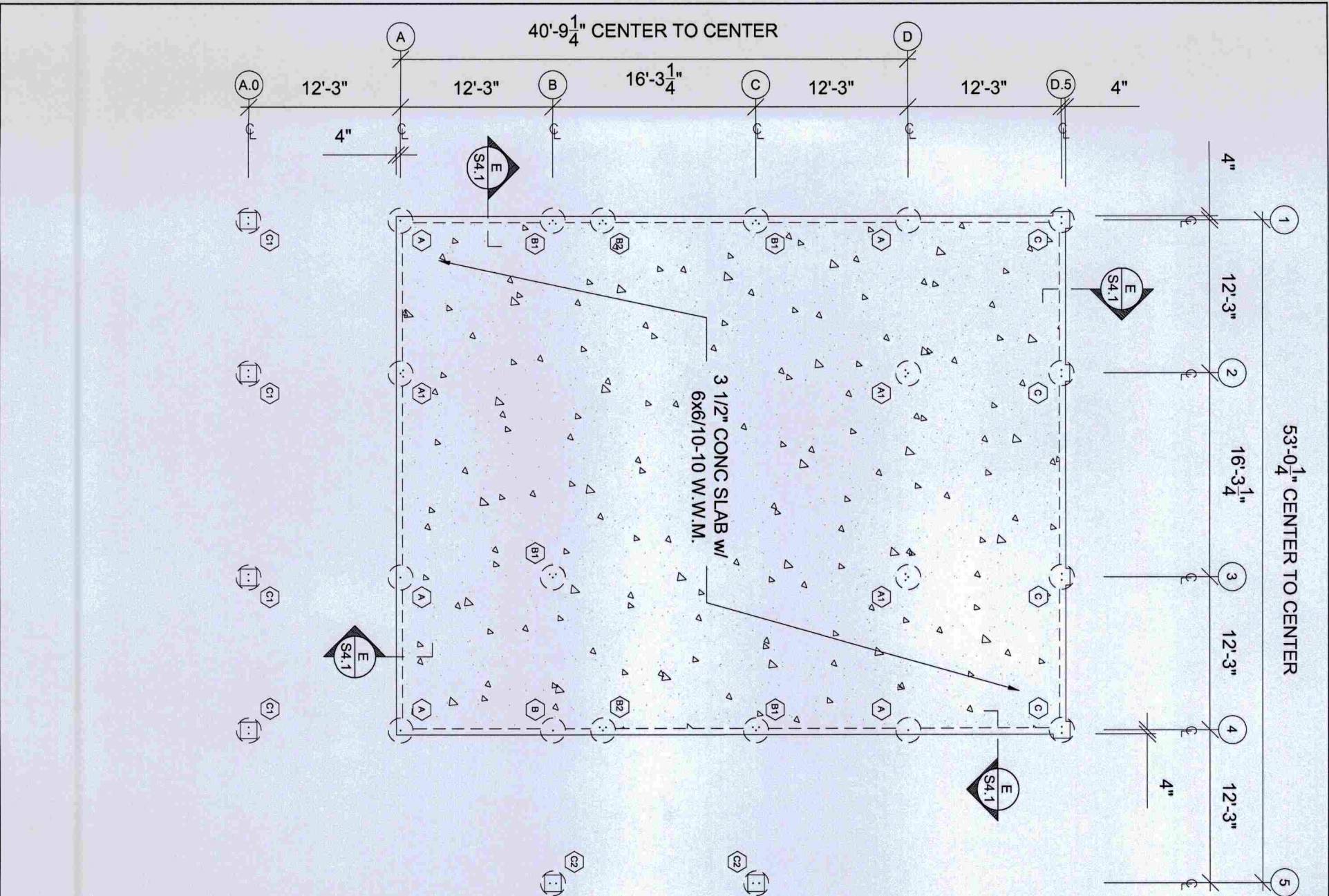
SHEET NUMBER:
S1.1
SHEET 2 OF 9

OPENING SCHEDULE						
SYMBOL	OPENING TYPE	GLASS	SAFETY GLASS	TRACK & ROLLER	NOTES	QUANTITY
A	4080 DOOR OPENING	N	N	Y	4' SOLID SLIDING DOOR w/ DUTCH TOP BARN WALL MATERIALS	3
B	8080 DOOR OPENING	N	N	Y	8' SOLID SLIDING DOOR BARN WALL MATERIALS	1
C	3670 DOOR OPENING	N	N	N	3670 ENTRY DOOR	3
D	4030 WINDOW OPENING	Y	N	N	4030 WINDOW BY OTHERS	2
E	12080 DOOR OPENING	N	N	Y	12' SOLID SLIDING DOOR BARN WALL MATERIALS	2

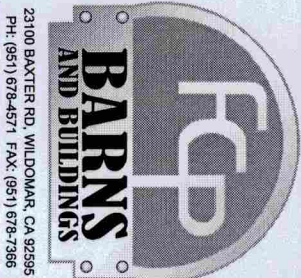
WALL SCHEDULE			
SYMBOL	SIZE	NOTE	QUANTITY
W1	12' x 8'	SEE DETAIL A/SS.1	10
W2	16' x 8'	SEE DETAIL B/SS.1	2
W3	4' x 8'	SEE DETAIL J/SS.1	2

- C1 - COLUMN: 3"x 3"x 14 GA.
C2 - COLUMN: 4"x 4"x 13 GA.
BP1 - CONNECTOR COLUMN w/ 4"x 4"x 13 GA. (SEE DETAIL L/S4.1)
BP2 - CONNECTOR COLUMN w/ 3"x 3"x 14 GA. (SEE DETAIL M/S4.1)
BP3 - CONNECTOR COLUMN w/ 2"x 2"x 16 GA. (SEE DETAIL Q/S4.1)





FOUNDATION SCHEDULE				
SYMBOL	FOOTING SIZE	FOOTING DEPTH	REINFORCEMENT	ANCHOR METHOD
A	2'-9"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(2) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
A1	2'-9"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(3) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
B	3'-3"Ø	2'-6"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(3) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
B1	3'-3"Ø	2'-6"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(3) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
B2	2'-0"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(3) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
C	2'-0"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(2) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
C1	2'-0"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(2) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"
C2	2'-0"Ø	2'-0"	(2) #4 REBAR EACH WAY TOP & BOTTOM	(2) 5/8"Ø SIMPSON STRONG BOLT 2 ICC-ES ESR-3037 EFFECTIVE EMBEDMENT: 4 1/2"



FOUNDATION PLAN

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635

RCA BARN

NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: 3/32"=1'-0"
DRAWING NUMBER:
ZLS NUMBER: 26445-16

SHEET NUMBER:
S1.2
SHEET 3 OF 9



23100 BAXTER RD. WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7386

ROOF PLAN

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635

RCA BARN

NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: 3/32"=1'-0"
DRAWING NUMBER:
ZUS NUMBER: 26445-16

SHEET NUMBER:
S1.3
SHEET 4 OF 9

RAFTER SCHEDULE			
SYMBOL	SIZE	NOTE	QUANTITY
69R1	12' S.S. RAFTER	SEE DETAIL L/S5.2	11
69R2	16' PEAK RAFTER	SEE DETAIL M/S5.2	3

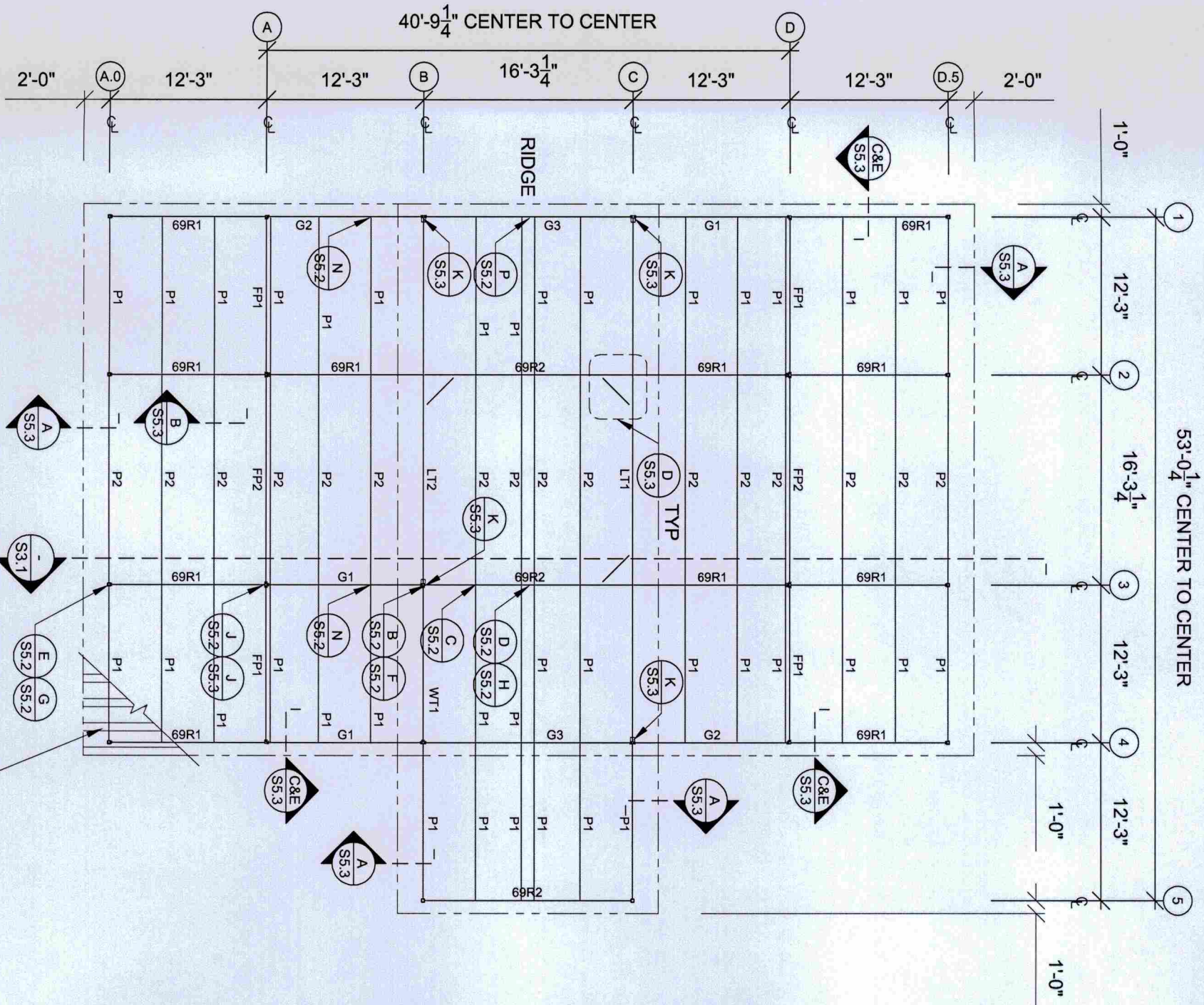
TRUSS SCHEDULE			
SYMBOL	SIZE	NOTE	QUANTITY
LT1	40' LADDER TRUSS	SEE DETAIL K/S5.1	1
LT2	28' LADDER TRUSS	SEE DETAIL G/S5.1	1
WT1	12' WINDOW TRUSS	SEE DETAIL Q/S5.1	1

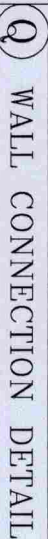
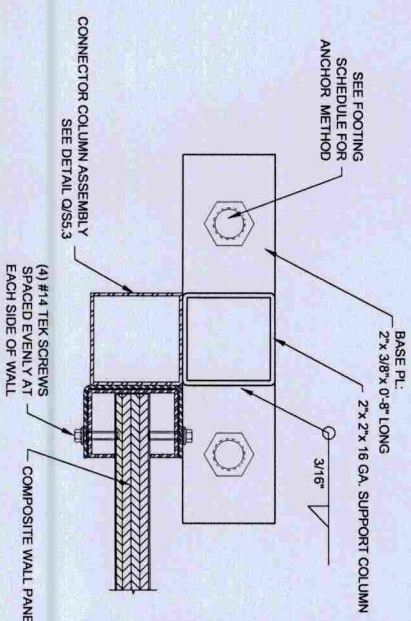
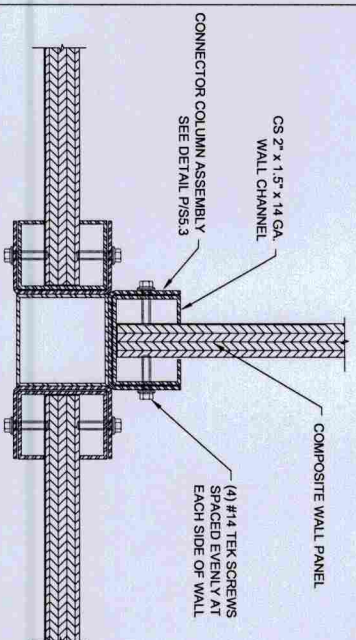
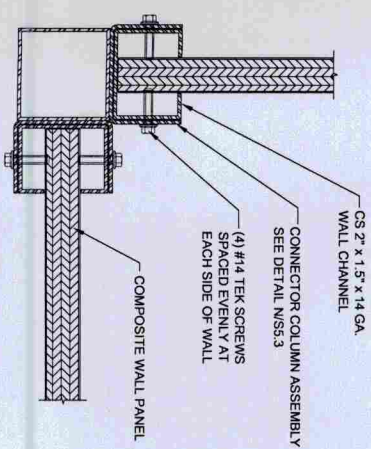
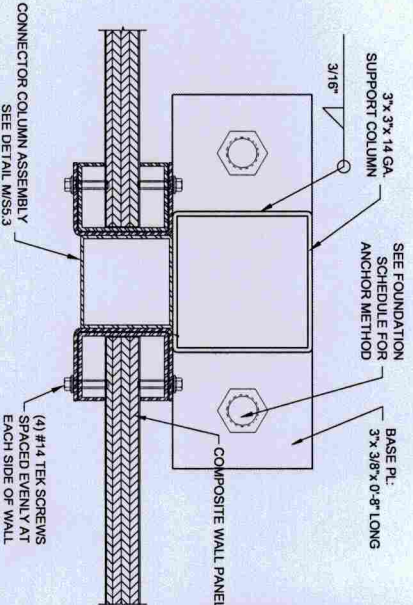
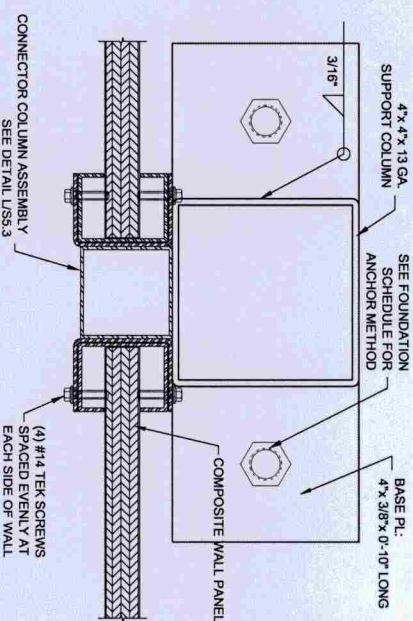
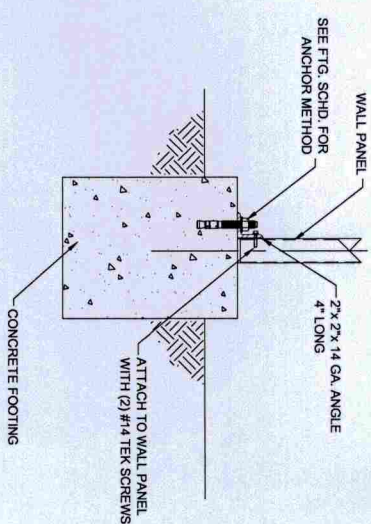
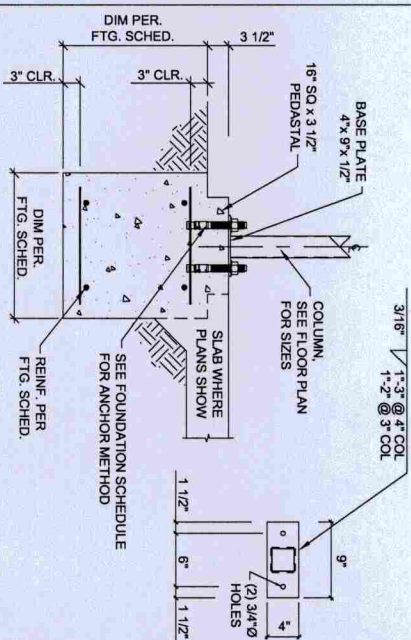
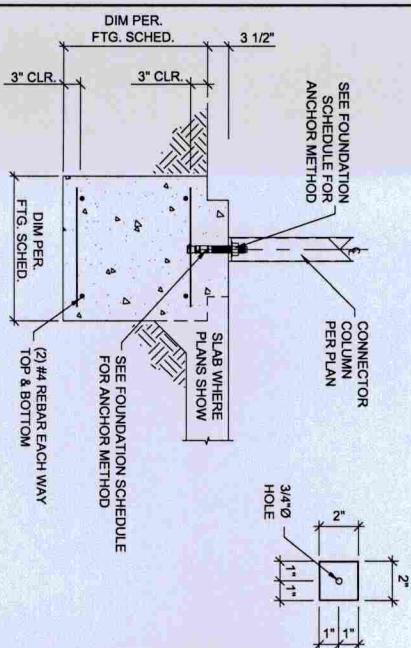
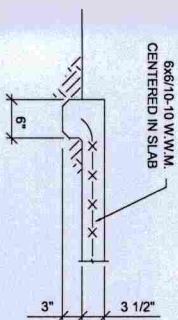
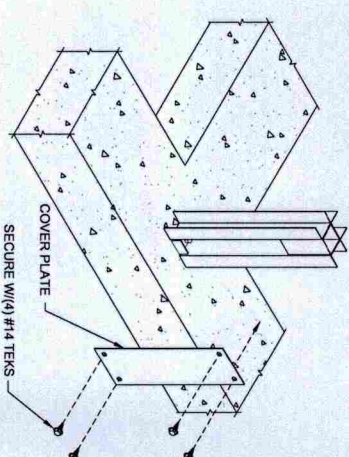
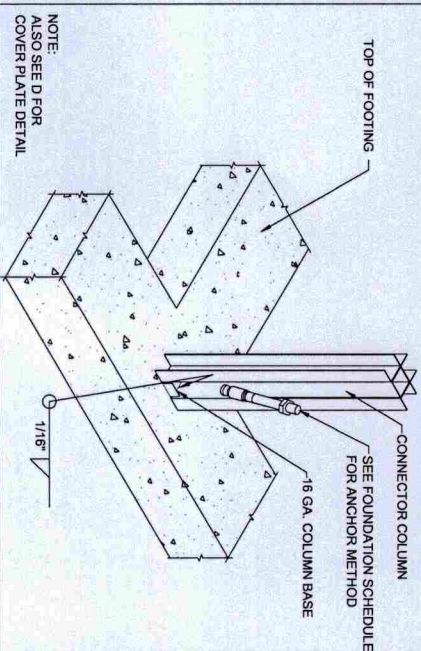
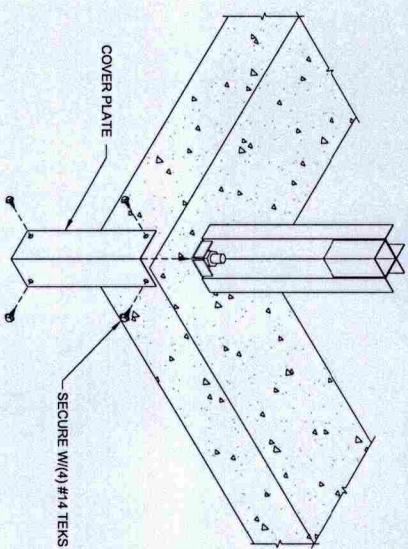
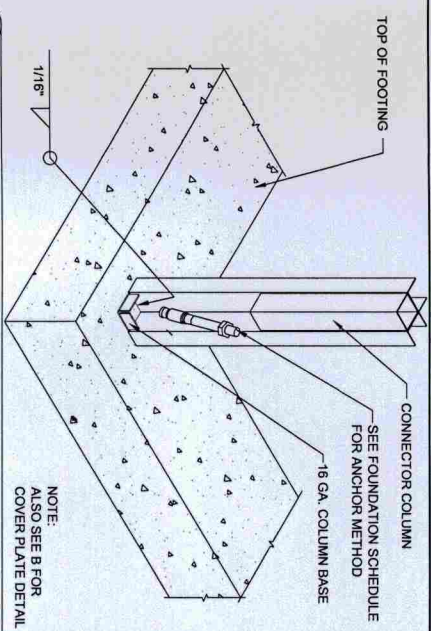
GABLE END PANEL SCHEDULE			
SYMBOL	SIZE	NOTE	QUANTITY
G1	12' S.S. GABLE PANEL	SEE DETAIL E/S5.1	3
G2	12' S.S. GABLE PANEL	SEE DETAIL E/S5.1 (OPP. HAND OF G1)	2
G3	16' PEAK GABLE PANEL	SEE DETAIL F/S5.1	2

FILLER PANEL SCHEDULE			
SYMBOL	SIZE	NOTE	QUANTITY
FP1	12x 1' FILLER PANEL	SEE DETAIL C/S5.1	4
FP2	16x 1' FILLER PANEL	SEE DETAIL D/S5.1	2

P1 - PURLIN: [8"x 2 1/2"x 16 GA.
P2 - PURLIN: [8"x 2 1/2"x 14 GA.

26 GA. "MULTI-RIB" ROOFING
(SEE DETAIL F/S5.3 FOR ATTACHMENT)





FOUNDATION DETAILS

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635
RCA BARN



23100 BAXTER RD, WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7366

NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: NONE
DRAWING NUMBER:
ZJIS NUMBER: 26445-16

SHEET NUMBER:

SCALE: NONE
DRAWING NUMBER:

DRAWING NUMBER:

ZJS NUMBER: 26445-16

ZJS NUMBER: 26445-16

SHEET NUMBER:

S4.1

SHEET 6 OF 9



23100 BAXTER RD. WILDOMAR, CA 92595
PH: (951) 678-4571 FAX: (951) 678-7366

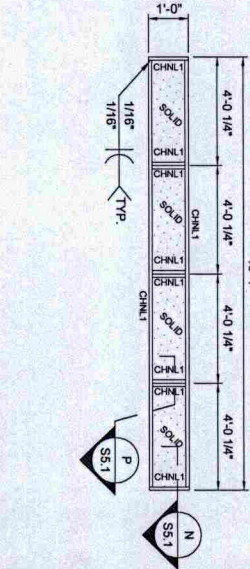
STRUCTURAL DETAILS

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635
RCA BARN

NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: NONE
DRAWING NUMBER:
ZIS NUMBER: 26445-16

SHEET NUMBER:
S5.1
SHEET 7 OF 9

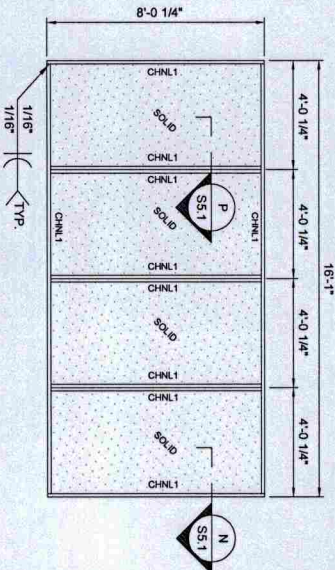


D FILLER PANEL (FP2)

LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.

C FILLER PANEL (FP1)

LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.

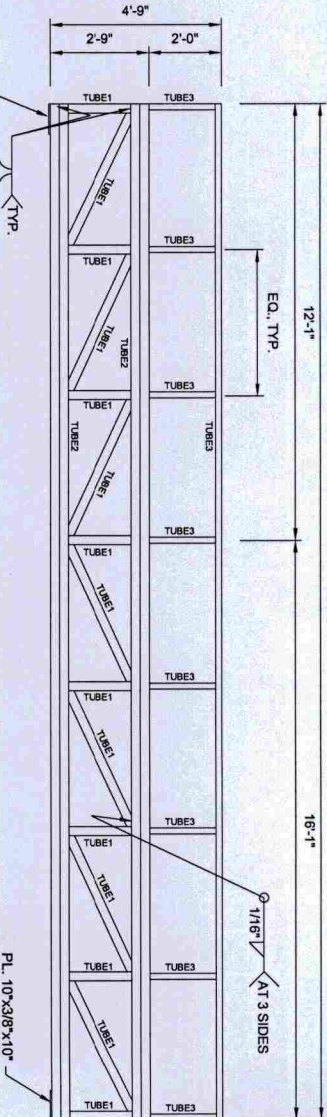


B WALL PANEL

LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.

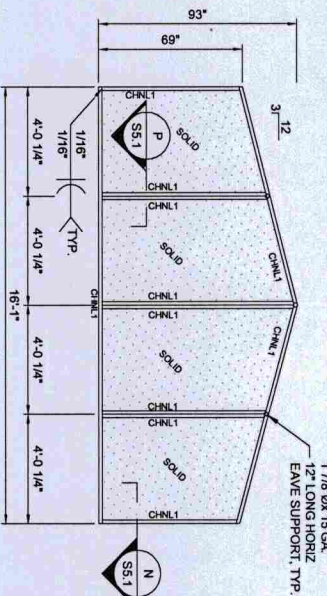
A WALL PANEL

FCP, INC. STRUCTURAL WALL PANEL
ICC-ES REPORT # ESR-2857,
REISSUED APRIL, 2014



G LADDER TRUSS (LT2)

LIST OF MATERIALS
DESCRIPTION
SECTION
TUBE1
TS 2" x 2" x 16 GA.
TUBE2
TS (2) 2" x 3" x 14 GA.

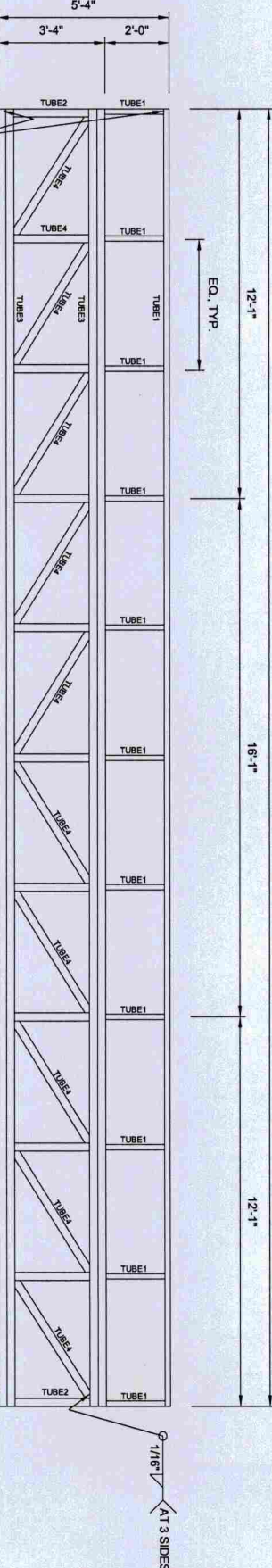


F CABLE PANEL

LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.

E CABLE END PANEL

LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.

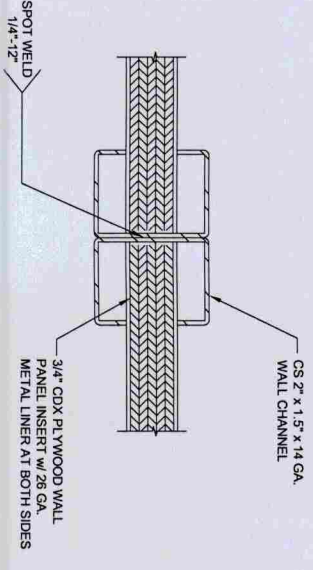


K LADDER TRUSS (LT1)

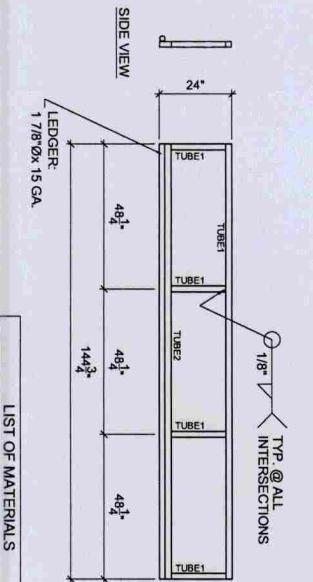
LIST OF MATERIALS
DESCRIPTION
SECTION
TUBE1
TS 2" x 2" x 16 GA.
TUBE2
TS 3" x 3" x 14 GA.
TUBE3
TS (2) 3" x 3" x 14 GA.
TUBE4
TS 2" x 3" x 14 GA.

J WALL PANEL

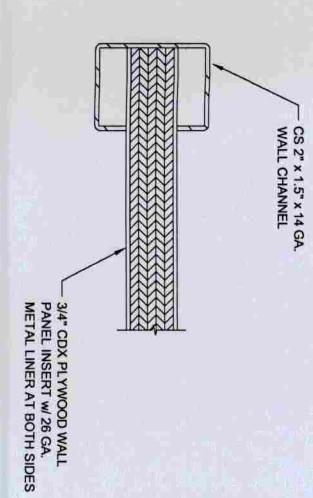
LIST OF MATERIALS
DESCRIPTION
SECTION
CHNL.1
CS 2" x 1.5" x 14 GA.



P WALL SECTION

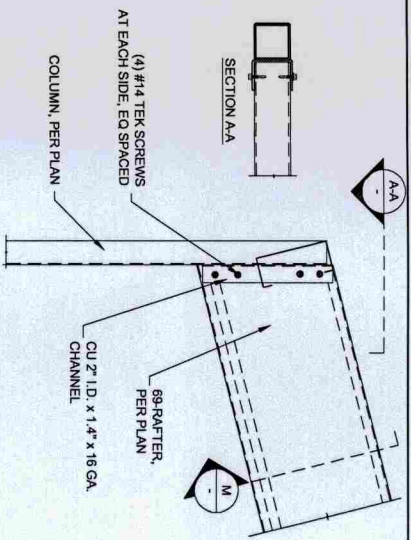


Q WINDOW TRUSS

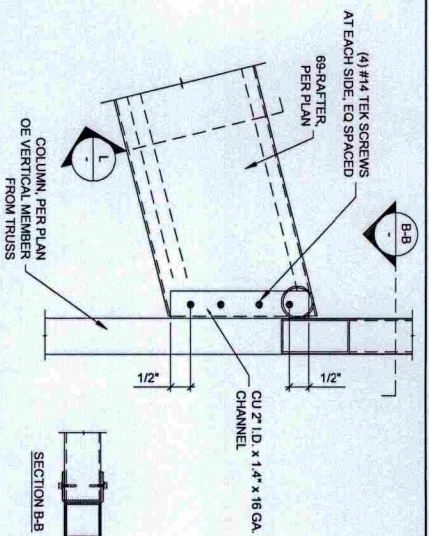


N WALL SECTION

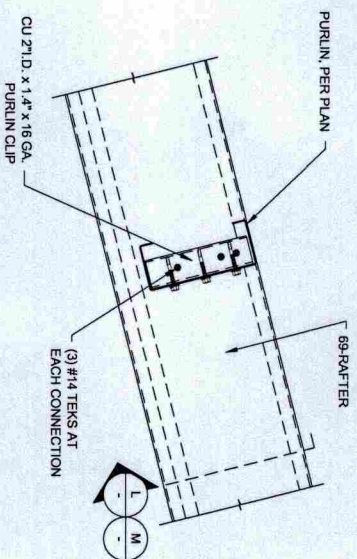




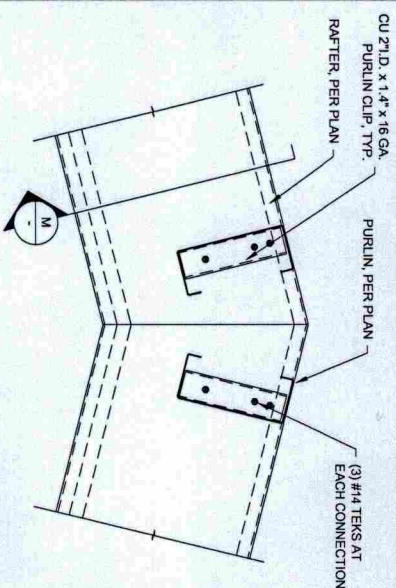
A RAFTER CONNECTION



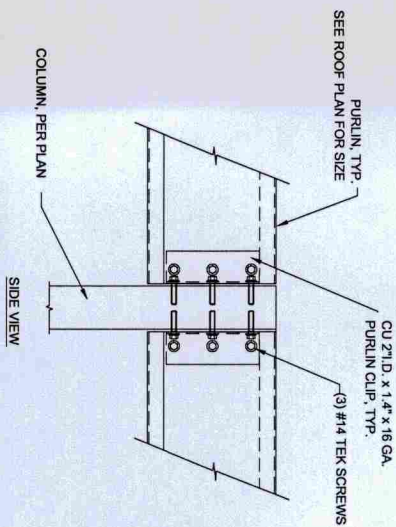
B RAFTER CONNECTION



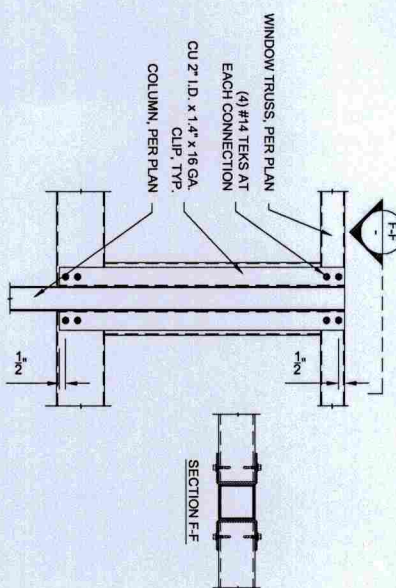
C PURLIN TO RAFTER CONN.



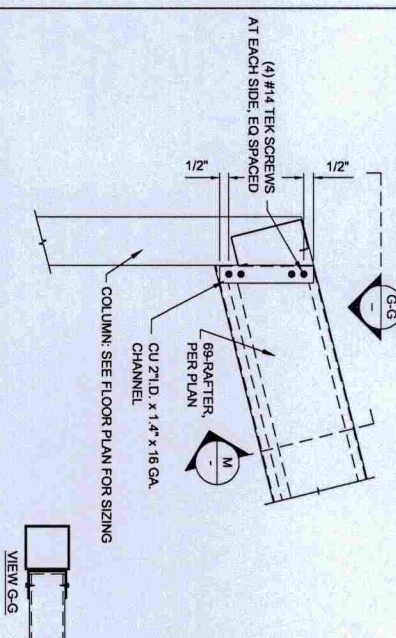
D PURLIN TO RAFTER



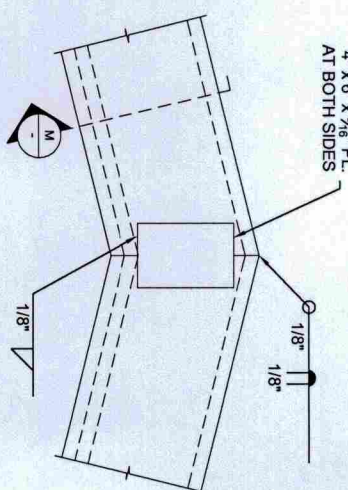
E PURLIN TO COLUMN CONN.



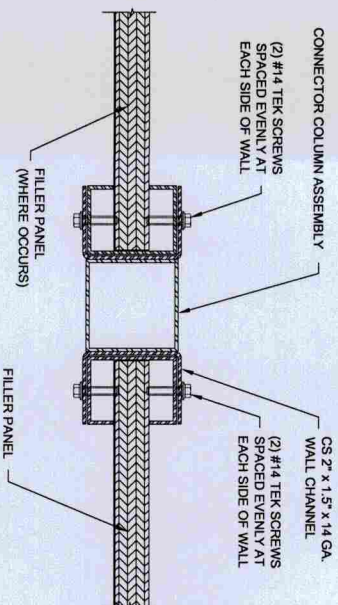
F WINDOW TRUSS TO COLUMN



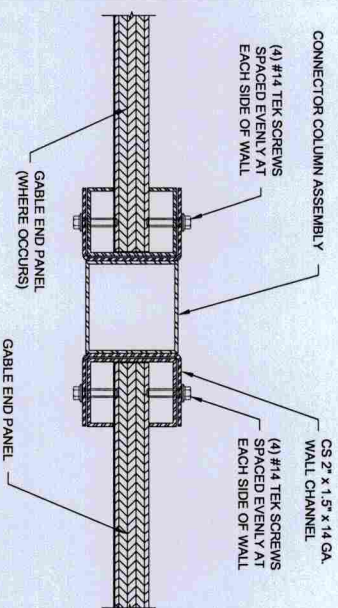
G RAFTER CONNECTION



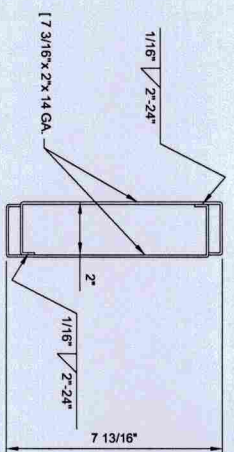
H PURLIN TO RAFTER



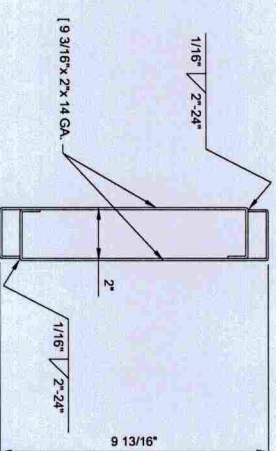
J FILLER PANEL CONNECTION



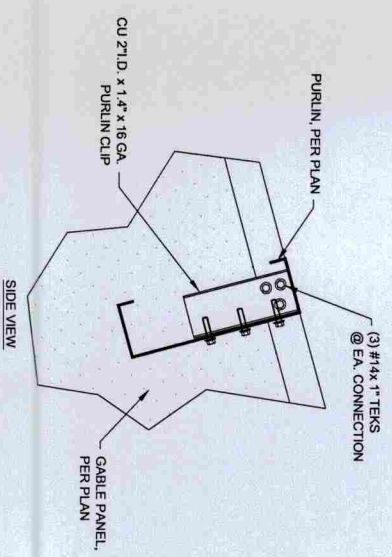
K GABLE CONNECTION DETAIL



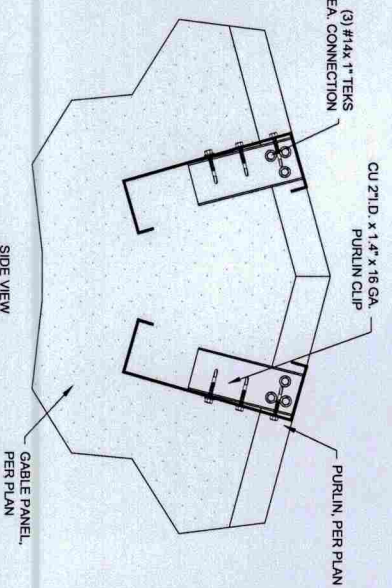
L 69R1 CONSTRUCTION



M 69R2 CONSTRUCTION



N PURLIN TO GABLE END CONN.



P PURLIN TO GABLE END CONN.



STRUCTURAL DETAILS

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635
RCA BARN

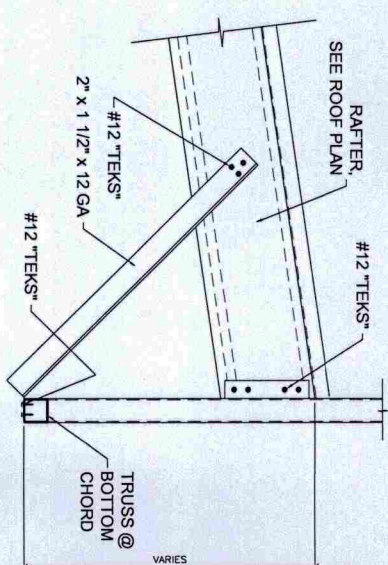
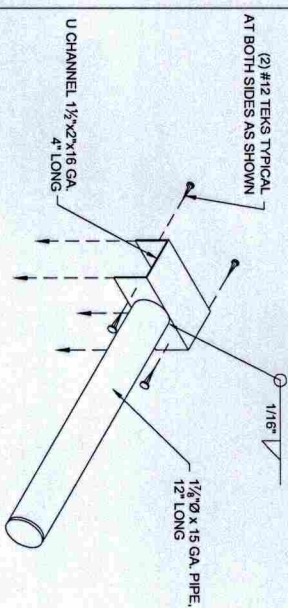
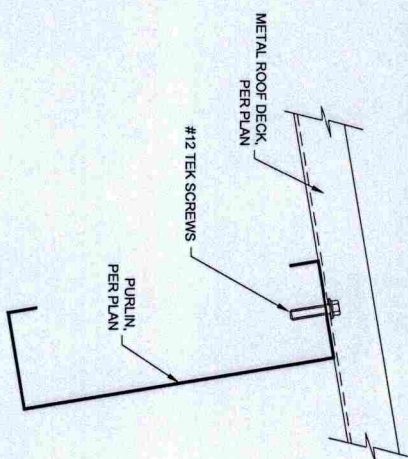
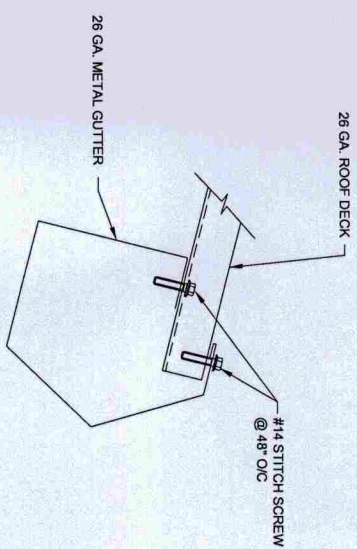


23100 BAXTER RD. WILDOMAR, CA 92596
PH: (951) 678-4571 FAX: (951) 678-7386

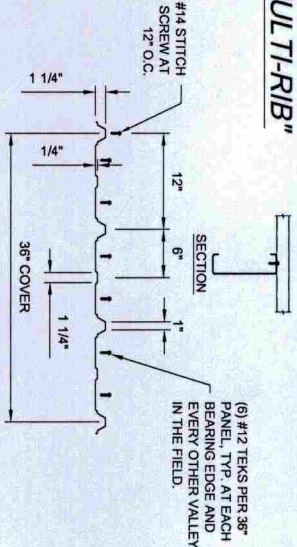
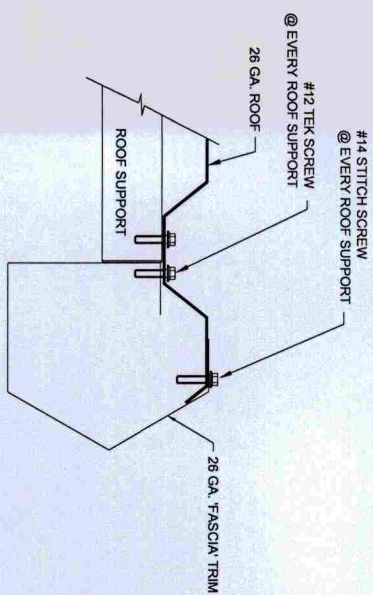
NO.	REVISION/ISSUE	DATE

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: NONE
DRAWING NUMBER:
ZJS NUMBER: 26445-16

SHEET NUMBER:
S5.2
SHEET 8 OF 9

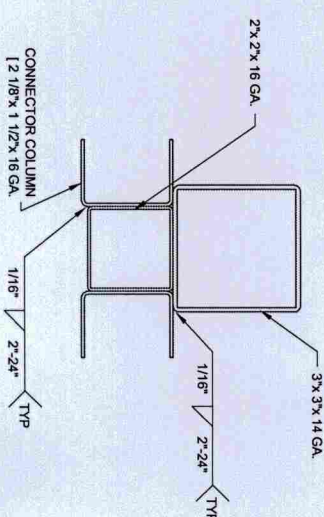
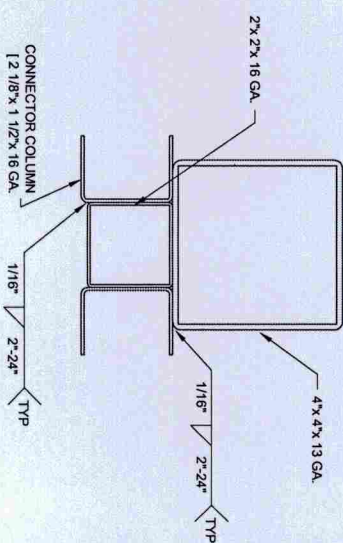
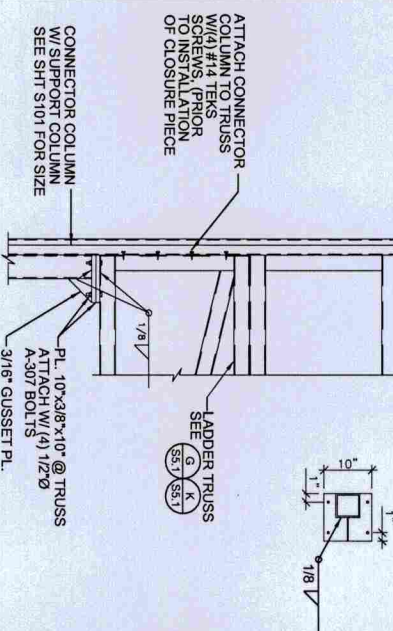
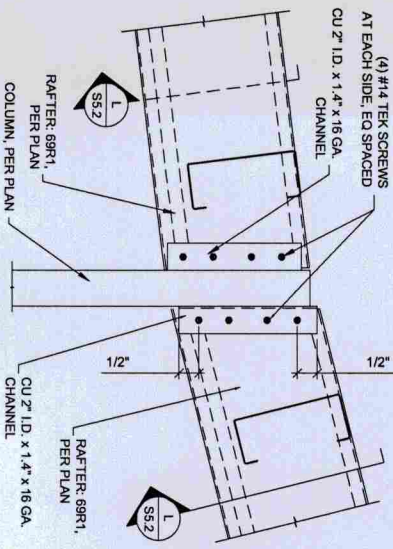


⑨ GUTTER TO METAL ROOF DECK.

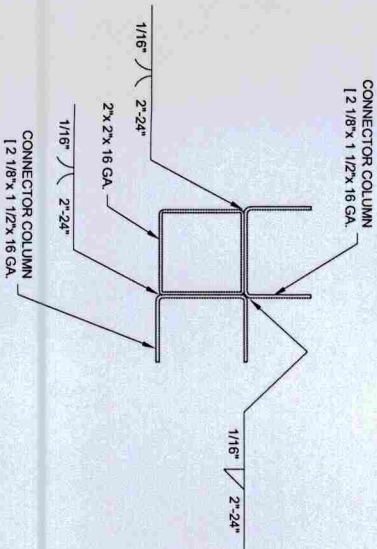


MULTIRIB SECTION PROPERTIES					
	WT.	S ⁺	I ⁺	S ⁻	I ⁻
Gauge		(lbs/in ²)	(in ² /ft)	(in ² /ft)	(in ² /ft)
26	.90	.0461	.0475	.0712	.0394
24	1.16	.0667	.0666	.1058	.0540

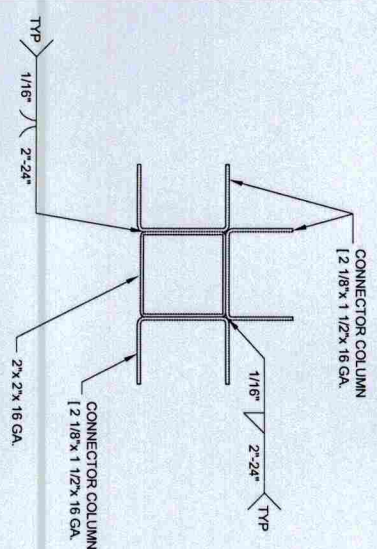
(F) METAL ROOF EDGING



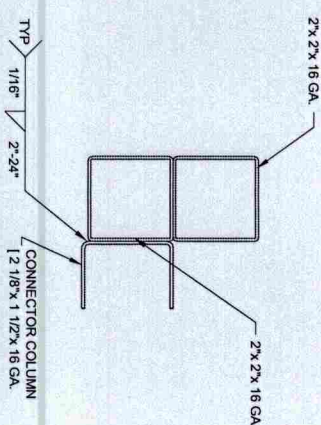
9 AFTER TO COLUMN



(K) TRUSS TO COLUMN



(L) COLUMN BUILD OUT



(M) COLUMN BUILD OUT



(N) COLUMN BUILD OUT



Q COLUMN BUILD OUT

(B) METAL ROOFING TO PURLIN

© DROP-IN OVERHANG

TRUSS BRACING

(F) ROOFING TO PURLIN

STRUCTURAL DETAILS

MARK & BECKY ENGERMANN
2845 SYD RD.
GREENWOOD, CA 95635

RCA BARN



FCP
BARNs
AND BUILDINGS

23100 BAXTER RD. WILDOMAR, CA 92595
PH. (951) 678-4571 FAX. (951) 678-7366

DATE: 02/12/2016
DRAWN BY: DCV
SCALE: NONE
DRAWING NUMBER:
ZLS NUMBER: 26445-16
SHEET NUMBER:

SHEET NUMBER:

SHEET 9 OF 9

NO.	REVISION/ISSUE	DATE
-----	----------------	------

NO