

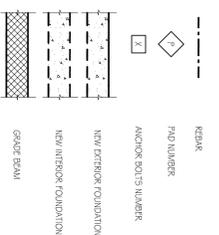
FOUNDATION NOTES

1. ALL CONTINUOUS INTERIOR AND EXTERIOR BEARING WALLS FOOTINGS (SHEAR & NON-SHEAR) SHALL HAVE 50# DIAMETER X 12" AS 5 WITH 3" X 3" LAP WELDING. MIN. 7" REINFORCING ON/OFF CONCRETE AT SHOULD BE LOCATED MAX. 12" AWAY FROM THE END OF THE SLAB PLATES. MIN. (2) AS 5, PER SILL PLATE PER SHEAR PANEL.
2. ALL INTERIOR NON-BEARING WALLS SHALL HAVE (4) #14 X 12" MIN. PENETRATION OF 1" INTO SLAB AT 24" O.C. UNLESS NOTED OTHERWISE. ACTUAL SLAB THICKNESS SHALL BE MINIMUM 5" / 12".
3. ALL HOLDINGS AND POST ANCHORS SHALL BE INSTALLED ACCORDING TO SHIMSON STRONG TIE SPECIFICATIONS AND REQUIREMENTS OF ICC ESR # 2330 AND SHALL BE TIED IN PLACE PRIOR TO FOUNDATION REINFORCEMENT.
4. MIN. CONCRETE WIDTH SHALL BE 8" FOR RECEIVING WALLS, AND 12" FOR RECEIVING BEAMS. ALL ANCHORS SHALL BE INSTALLED WITH ROUGH FRAME TO ASSURE PROPER AND ACCURATE INSTALLATION.
5. PROVIDE #3/8" DOOR AT 24" O.C. AND 12" FROM THE CORNER AT ALL CONCRETE STOPS AND JOINTS.
6. PROVIDE MINIMUM #2/4 REINFORCING BAR AT TOP AND (2) #4 AT BOTTOM FOR ALL CONTINUOUS FOOTING IN ADDITION (1) #4 BAR EXTRA FOR CONCRETE. LOCATION TO BE DETERMINED WITH ELECTRICAL CONTRACTOR.
7. VERIFY MINIMUM SPACING PERMITS WITH REINFORCING STEEL, AND ADDITIONAL PERMISSIBLE SOIL REQUIREMENTS WITH VALUE 50% REPORT AND IF ANY MORE RESTRICTIVE THE SHALL SUPERSEDE THE ABOVE MINIMUMS.
8. CONCRETE STRENGTH SHALL BE MINIMUM 2500 PSI.
9. FOUNDATION DRAWING SHALL REFLECT THE STRUCTURAL REQUIREMENT ONLY. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS NOT SHOWN. ALL DIMENSIONS SHALL BE IN FEET AND INCHES. THE CENTERLINE SHALL BE SHOWN UNLESS NOTED OTHERWISE.
10. WAITING PERIOD FOR CONCRETE SLAB ON GRADE PRIOR TO START OF CONSTRUCTION IS AS FOLLOWS:
 - a. WALK ON SLAB 24 HOURS AFTER CONCRETE HAS BEEN POURED.
 - b. BEGIN ROOF FLOOR FRAMING 7.0 DAYS AFTER CONCRETE POUR.
 - c. DO NOT LOAD ROOF FLOOR TO 1.4 DWS AFTER CONCRETE POUR.
11. THE ALLOWABLE SOIL BEARING PRESSURE IS 1500 PSF. AS PER SOIL REPORT. PREPARED BY SOIL EXPLORATION COMPANY, INC. PROJECT NO. 7098-02 DATED 03/17/2014.
12. VERIFY ALL DIMENSIONS SHOWN WITH ARCHITECTURAL PLANS, NOTIFY ARCHITECT OF ANY INCONSISTENCY.
13. DEEPEN FOOTING @ HARDY FRAME AS REQUIRED TO ACHIEVE THE 4.5' DEPTH + 3" COVER.
14. FOUNDATION PLAN AND DETAILS SHALL BE REVIEWED BY GEOLOGISTS/ENGINEERS FOR COMPLIANCE WITH HIGHER RECOMMENDATIONS.

PAD SCHEDULE

- | | |
|-----|--|
| F1 | 2'-0" SQ. X 18" DEEP PAO W/3" #4 E.W. @ BOTTOM |
| F2 | 2'-6" SQ. X 18" DEEP PAO W/4" #4 E.W. @ BOTTOM |
| F3 | 3'-0" SQ. X 18" DEEP PAO W/5" #4 E.W. @ BOTTOM |
| F4 | 3'-6" SQ. X 18" DEEP PAO W/5" #4 E.W. @ BOTTOM |
| F5 | 4'-0" SQ. X 18" DEEP PAO W/5" #4 E.W. @ BOTTOM |
| F6 | 4'-6" SQ. X 18" DEEP PAO W/6" #5 E.W. @ BOTTOM |
| F7 | 3'-0" SQ. X 18" DEEP PAO W/7" #5 E.W. @ BOTTOM |
| F8 | 3'-6" SQ. X 18" DEEP PAO W/7" #5 E.W. @ BOTTOM |
| F9 | 4'-0" SQ. X 18" DEEP PAO W/7" #5 E.W. @ BOTTOM |
| F10 | 4'-6" SQ. X 18" DEEP PAO W/7" #5 E.W. @ BOTTOM |
| F11 | 7'-0" SQ. X 18" DEEP PAO W/7" #4 E.W. @ BOTTOM |

SYMBOLS LEGEND



ANCHOR BOLT SCHEDULE

- | | |
|---|---|
| 1 | MIN. (2) 50# DIAMETER X 12" ANCHOR BOLTS |
| 2 | MIN. (3) 50# DIAMETER X 12" ANCHOR BOLTS |
| 3 | 50# DIAMETER X 12" ANCHOR BOLTS @ 48" O.C. |
| 4 | 50# DIAMETER X 12" ANCHOR BOLTS @ 36" O.C. |
| 5 | 50# DIAMETER X 12" ANCHOR BOLTS @ 18" O.C. |
| 6 | 50# DIAMETER X 12" ANCHOR BOLTS @ 8" O.C. |
| 7 | 3/4" DIAMETER X 12" ANCHOR BOLTS @ 18" O.C. |
| 8 | 3/4" DIAMETER X 12" ANCHOR BOLTS @ 8" O.C. |

TO REPLACE MISSING OR MISLOCATED ANCHOR BOLTS, USE DETAIL (1) (RTP1).

FRAMING SCHEDULE

- INDICATES NOTES APPLICABLE TO THIS PLAN ONLY. NOTES APPLY ONLY WHEN REFERENCED BY PLAN.
- 1. BALLOON FRAMED WALL.
- 2. BALLOON FRAMED WALL TO BOTTOM CHORD OF ROOF.
- 3. 2X6 STUDS @ 16" O.C.
- 4. 2X4 STUDS @ 16" O.C.
- 5. 2X4 DIAGONAL SWAY BRACE CUT INTO TOP PLATES (10' OF MIN. LENGTH).
- 6. POINT LOAD FROM ABOVE FLOOR.
- 7. BEAM TO BE FLUSH WITH JOISTS, PROVIDE JOIST HANGERS AT BEAM, @ JOIST OVERLAP.
- 8. BELOW JOIST WIDTHS OVERLAPPING AND CONTINUOUS 2X4 BLOCKING @ JOIST OVERLAP.
- 9. 30" SQUARE ATTIC ACCESS.
- 10. LINE OF RAU IN ATTIC, SEE METEOROLOGICAL PLANS, REWAVE AS REQUIRED TO ACCOMMODATE LOAD.
- 11. LINE OF CEILING BREAK, SEE PLAN FOR HEIGHTS.
- 12. STRUCTURE FLOOR PLAN FOR MORE INFO.
- 13. LINE OF EXISTING WITH EDGE WALLING AND WITH CSJ 16 STEPS TO CONNECT ALL BAYS.
- 14. LINE OF FULL HEIGHT BLOCKING.
- 15. HOLDING STRAP FROM FLOOR ABOVE.
- 16. CONT. PLYWOOD SHEATS UNDER CALIFORNIA FRAMING.
- 17. LINE OF FLOOR ABOVE.
- 18. HANGER PER TRUSS MANUFACTURE.
- 19. 2X6 FULL HEIGHT STUDS D.F.#1 @ 120" O.C.
- 20. 2X8 FULL HEIGHT STUDS D.F.#2 @ 16" O.C.

FRAMING NOTES

- A. BALLOON FRAMED WALLS USE 2X4 STUDS @ 16" O.C. TO 100" IN HEIGHT OVER 17'-6" IN HEIGHT USE (2) 2X4 STUDS AT 12" O.C. (U.O.N.)
- B. PROVIDE DOUBLE FLOOR JOIST UNDER ALL INTERIOR WALLS PARALLEL WITH FRAMING, USE SOLID BLOCKING UNDER INTERIOR WALLS PERPENDICULAR WITH FRAMING.
- C. SPLIT PLATES OF EXTERIOR WALLS AND SHEAR WALLS WILL (2) 16d AT MULTI JOIST. (3) OR MORE SHALL BE FASTENED TOGETHER WITH 1/2" DIAMETER MACHINE BOLTS AT 18" O.C. STAGGERED (U.O.N.)
- D. BELOW JOIST WIDTHS OVERLAPPING AND CONTINUOUS 2X4 BLOCKING @ JOIST OVERLAP.
- E. ALL HEIGHTS TO BE 4x6 (U.O.N.)
- F. WAP ALL EXPOSED POSTS AND BEAMS IN GARAGE WITH 90# TIE X GYPSUM BOARD (U.O.N.)
- G. PROVIDE 4X POSTS AT ALL HOLD DOWNS (U.O.N.)
- H. ALL FRAMING HARDWARE TO BE SIMPSON STRONG-TIE CCR OR APPROVED EQUIVALENT.
- I. PROVIDE 4X4 POSTS AT EACH END OF 4X10 OR LARGER MEMBERS. USE (2) 2X STUDS AT EACH END OF 4X8 OR SMALLER MEMBERS. (U.O.N.)
- J. PROVIDE MULTIPLE STUDS UNDER MULTIPLE JOISTS.
- K. INDICATES SHEAR WALL (SEE SHEAR SCHEDULE).
- L. INDICATES BEAM OR HEADER AND SPAN.
- M. INDICATES INTERIOR NON-BEARING WALL.
- N. INDICATES INTERIOR BEARING WALL.
- O. TOP PLATE HEIGHT

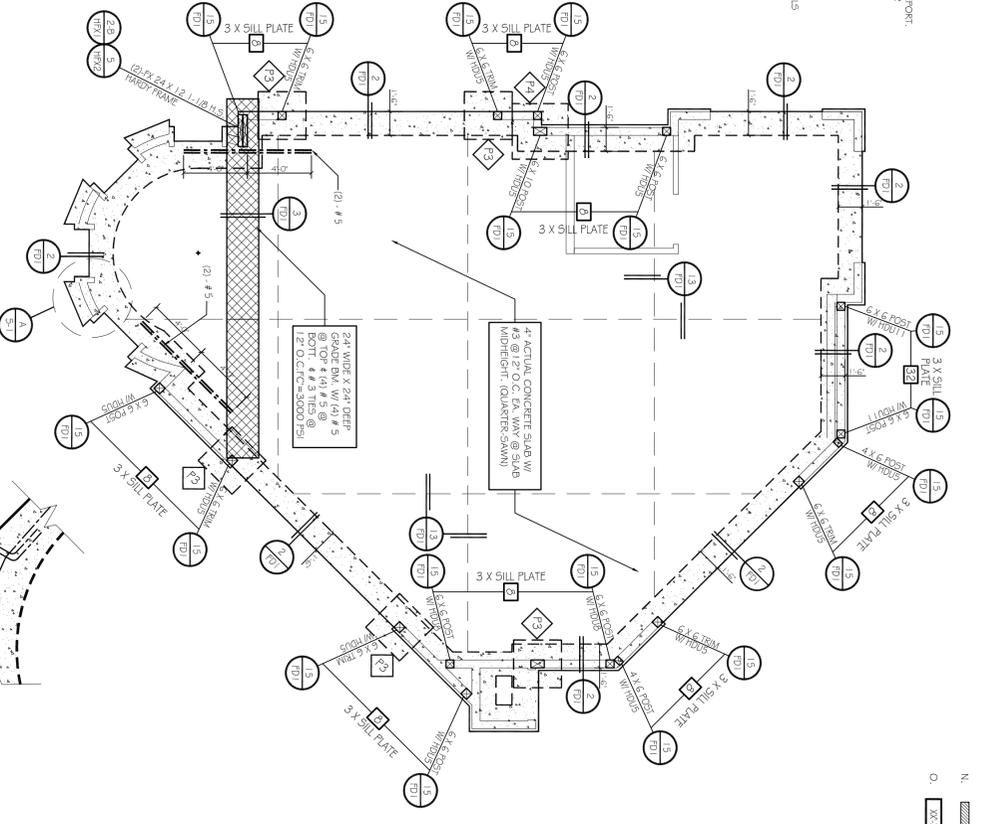
TRUSS NOTES

- ALL TRUSSES DESIGNED BY TRUSS MFR. SHALL BE DESIGNED TO SUSTAIN ANY VERTICAL, LATERAL OR ANY OTHER PERMITTED LOAD SUCH AS BRACING OR FOR CHORDS AND BOTTOM CHORDS IN ADDITION TO ANY CONNECTION OVER 17'-6" IN HEIGHT USE (2) 2X4 STUDS AT 12" O.C. (U.O.N.)
- ALL TRUSSES TOP AND BOTTOM CHORDS SHALL BE D.F.#2 OR BETTER.
- ALL THE TRUSS HANGERS SHALL BE SPECIFIED BY THE TRUSS MFR.
- TRUSSES ARE A REFERRED SUBMITTAL ITEM. TRUSS DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE SUBMITTING TO THE BUILDING DEPARTMENT. THE TRUSS DESIGN SHALL APPROVE BY THE BUILDING DEPARTMENT BEFORE THE TRUSSES ARE INSTALLED.
- PER CBC 2013 SECTION 1607, THE TRUSS COMPANY AND 20 PER LIVE LOAD AT THE BOTTOM CHORD OF THE TRUSSES LOCATED AT UNINHABITABLE ATTIC WITH LIMITED STORAGE AREA, USED ONLY TO BE APPLIED TO THOSE PORTIONS OF THE BOTTOM CHORD WHERE THERE ARE TWO OR MORE ADJACENT TRUSSES WITH THE SAME WEB CONFIGURATION CAPABLE OF CONTAINING A RECTANGULAR PATCH BY THE LEFT OR RIGHT, LOCATED WITHIN THE PLANE OF THE TRUSS.

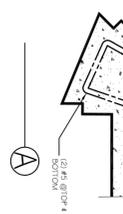
SHEAR WALL SCHEDULE

S/W TYPE	WALL SHEETING	SILL PLATE ON WOOD FLOOR OR FOUNDATION	SILL PLATE ON CONCRETE FOUNDATION
1	7/8" STUCCO OVER BRICKED LATH WITH 1/2" GAUGE STARTERS AT 6" O.C. ALONG EDGES AND FIELD SHALL BE APPLIED IN ACCORDANCE WITH CERO REPORT NUMBER 1318, JULY 1996 (U.O.N.)	16d SINKER @ 32" O.C.	3/8" X 12" @ 32" O.C.
2	3/8" X 1/2" KATED PLYWOOD WITH 8d COMMON NAILS AT 6" O.C. EDGES AND 12" O.C. FIELD. (2500 FPD)	16d SINKER @ 4" O.C.	3/8" X 12" @ 32" O.C.
3	1/2" APA SAVED PLYWOOD WITH 8d COMMON NAILS AT 40" C. EDGES AND 12" O.C. FIELD. (350 FPD)	16d SINKER @ 3" O.C.	3/8" X 12" @ 32" O.C.
4	1/2" STRUCTURAL I PLYWOOD WITH 8d COMMON NAILS AT 30" C. EDGES AND 12" O.C. FIELD (1) (550 FPD)	3/8" X 12" @ 3" O.C.	3/8" X 12" @ 32" O.C.
5	1/2" STRUCTURAL I PLYWOOD WITH 10d COMMON NAILS AT 30" C. EDGES AND 12" O.C. FIELD (1) (665 FPD)	3/8" X 12" @ 3" O.C.	3/8" X 12" @ 32" O.C.
6	1/2" STRUCTURAL I PLYWOOD WITH 10d COMMON NAILS AT 20" C. AT EDGES 12" O.C. FIELD (1) (870 FPD)	3/8" X 12" @ 3" O.C.	3/8" X 12" @ 32" O.C.
(1)	PROVIDE 3" NOMINAL OR WIDER FRAMING AT ADJOINING PANEL. PROVIDE 3" X 1/2" SILL PLATE WITH WALLS STAGGERED FOR SHEAR PANELS TYPE 4, 5 AND 6.		

RUN PLYWOOD OVER POST AND/OR APPLY PLYWOOD BEFORE BOX-CUT



FOUNDATION PLAN



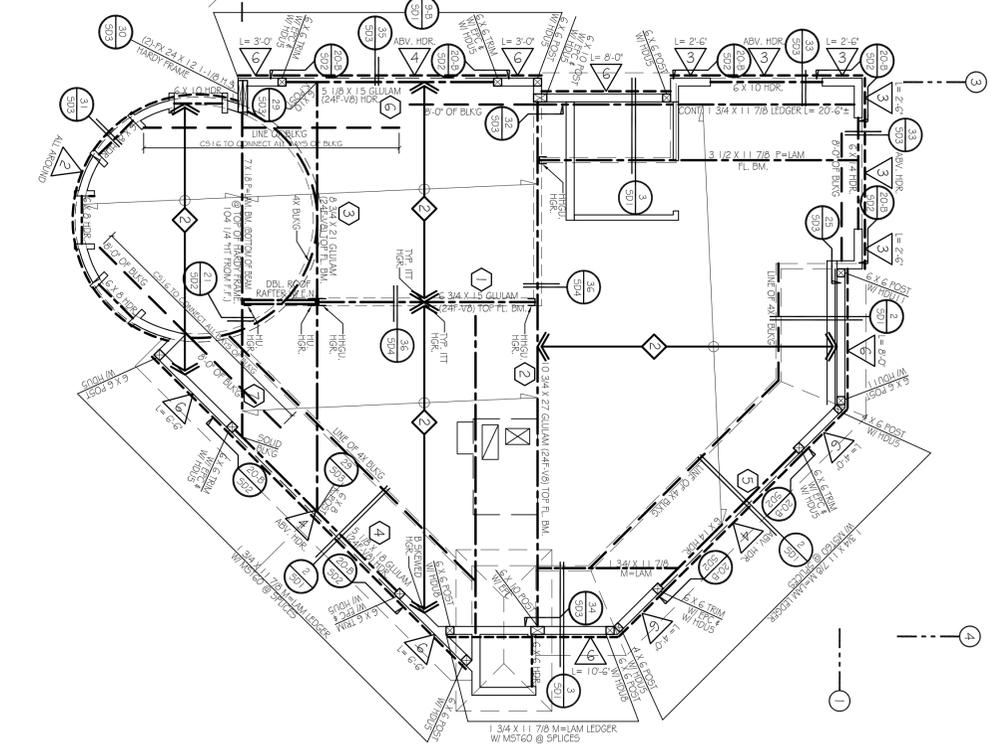
WATER/WEATHER PROOFING

- A. THE BUILDING AND WAP WERE DESIGNED IN ACCORDANCE WITH THE SOIL REPORT.
- B. THE FOUNDATION WALLS HAVE BEEN PROPERLY ANCHORED AND CONNECTED TO THE FOUNDATION.
- C. ALL FOUNDATION WALLS SHALL BE PROPERLY WATERPROOFED AND DRAINAGE SHALL BE PROVIDED TO THE EXTERIOR.

List of work requiring special inspection:

- SOIL COMPLIANCE PRIOR TO FOUNDATION INSPECTION
- FIELD WELDING
- HIGH STRENGTH BOLTING
- STRUCTURAL CONCRETE OVER 2500 PSI
- PRESTRESSED CONCRETE
- DISPERSION PROOF ANCHORS
- STRUCTURAL MASONRY
- STRUTTED OR INTERROOMING
- DESIGNER SPECIFIED
- OTHER:
- STRUCTURAL SHEAR PANELS (TYPE 4, 5, & 6)

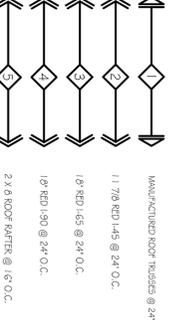
ROOF FRAMING PLAN



DESIGN LOADS

1. ROOF DEAD LOAD = 20.0 PSF
2. WIND W/EA WEIGHT (S) 10.0 PSF
3. ROOF LIVE LOAD = 20.0 PSF
4. FLOOR LIVE LOAD = 40.0 PSF
5. WIND : EXPOSURE 'C'
6. WIND SPEED : 110 MPH
7. 5s = 1.516
8. 1s = 0.600
9. 30s = 0.300
10. F = 1.5
11. 30s = 0.600

FRAMING LEGEND



FARAH ENGINEERING INC.
 1787 POMONA RD, UNIT K
 CORONA CA, 92880
 TEL. (951) 738-1215 FAX (951) 738-1153
 EMAIL: taraheng@sbcglobal.net

**FOOTHILL RANCHO PLAZA
 NEW SHOPPING CENTER:
 9606 FOOTHILL BLVD.
 RANCHO CUCAMONGA, CA**

REGISTERED PROFESSIONAL ENGINEER
 F. FARAH
 No. 10000
 Exp. 06/30/16
ROOF FRAMING PLAN

JOB# 12-013
SCALE: 3/16" = 1'-0"
DESIGN BY: FADY
BRWN
S-1
BLDG. A

TRUSS NOTES

ALL TRUSSES DESIGNED BY TRUSS MFR. SHALL BE DESIGNED TO SUSTAIN ANY VERTICAL, LATERAL OR ANY OTHER PERMITTED LOAD SUCH AS BRACKEN OF RELATED TRUSSES. ALL TRUSSES SHALL BE DESIGNED TO SUSTAIN ANY VERTICAL, LATERAL OR ANY OTHER PERMITTED LOAD SUCH AS BRACKEN OF RELATED TRUSSES. ALL TRUSSES SHALL BE DESIGNED TO SUSTAIN ANY VERTICAL, LATERAL OR ANY OTHER PERMITTED LOAD SUCH AS BRACKEN OF RELATED TRUSSES. ALL TRUSSES SHALL BE DESIGNED TO SUSTAIN ANY VERTICAL, LATERAL OR ANY OTHER PERMITTED LOAD SUCH AS BRACKEN OF RELATED TRUSSES.

FRAMING SCHEDULE

- 1. BALLOON FRAMED WALL.
- 2. BALLOON FRAMED WALL TO BOTTOM CHORD OF TRUSS.
- 3. 2X6 STUDS @ 16" O.C.
- 4. 2X4 STUDS @ 16" O.C.
- 5. 2X4 DIAGONAL SWAY BRACE CUT INTO TOP PLATE (10'0" MIN LENGTH).
- 6. POINT LOAD FROM ABOVE FLOOR.
- 7. BEAM TO BE FLUSH WITH JOISTS, PROVIDE JOIST HANGERS AT BEAM.
- 8. BELOW JOIST WOODSITS OVERLAPPING AND CONTIGUOUS 2X4 BLOCKING @ JOIST OVERLAP.
- 9. 30" SQUARE ATTIC ACCESS.
- 10. LINE OF RAIN AT TIC, SEE METEOROLOGICAL PLANS, RAINFOW AS REQUIRED TO ACCOMMODATE LOAD.
- 11. LINE OF CEILING BREAK, SEE PLAN FOR HEIGHTS.
- 12. SHOWHIT SET FLOOR PLAN FOR MORE INFO.
- 13. LINE OF EXISTING WITH EDGE WALKING AND WITH CS 16 STEPS TO CONNECT ALL BAYS.
- 14. LINE OF FULL HEIGHT BLOCKING.
- 15. HOLLOWDOWN STRAP FROM FLOOR ABOVE.
- 16. CONT. PLYWOOD SHEATS UNDER CALIFORNIA FRAMING.
- 17. LINE OF FLOOR ABOVE.
- 18. HANGER PER TRUSS MANUFACTURE.
- 19. 2X6 FULL HEIGHT STUDS D.F.#1 @ 120" C. OR 2X2X6 FULL HEIGHT STUDS D.F.#2 @ 16" O.C.

FRAMING NOTES

- A. BALLOON FRAMED WALLS USE 2X4 STUDS @ 16" O.C. TO 10'0" IN HEIGHT OVER 17'-6" IN HEIGHT USE (2) 2X4 STUDS AT 12" O.C. (U.O.N.)
- B. PROVIDE DOUBLE FLOOR JOIST UNDER ALL INTERIOR WALLS PARALLEL PERPENDICULAR WITH FRAMING.
- C. SPEC PLATE'S OF EXTERIOR WALLS AND SHEAR WALLS WITH 1/2" DIAMETER JOIST (3) OR MORE SHALL BE FASTENED TOGETHER WITH 1/2" DIAMETER MACHINE BOLTS AT 16" O.C. STAGGERED (U.O.N.)
- D. ALL HEADERS TO BE 4X6 (U.O.N.)
- E. WEAR ALL EXPOSED POSTS AND BEAMS IN GARAGE WITH 5/8" TYPE 'X' GYPSUM BOARD (U.O.N.)
- F. PROVIDE 4X POSTS AT ALL HOLD DOWNS (U.O.N.)
- G. ALL FRAMING HARDWARE TO BE SIMPSON STRONG-TIE COR. APPROVED EQUIVALENT.

WEATHER/WEATHER PROOFING

WEATHER/WEATHER PROOFING - ARE NOT IN ANY WAY OR CONDITION UNDER ANY WEATHER/WATER PROOFING DETAILS MATERIALS OR METHODS THIS SHALL BE OBTAINED BY OTHERS E.G. ARCHITECTS, CONTRACTORS OR BUILDERS.

ROOF FRAMING PLAN

3/16-1'-0"

List of work requiring special inspection:

- SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION
- FIELD WELDING
- STRUCTURAL CONCRETE OVER 2500 PSI
- HIGH STRENGTH BOLTING
- PRESTRESSED CONCRETE
- EXPANSION PROX ANCHORS
- STRUCTURAL MASONRY
- SPRAYED ON FIREPROOFING
- DESIGNER SPECIFIED
- STRUCTURAL SHEAR PANELS (TYPE 4, 5, & 6)
- OTHER

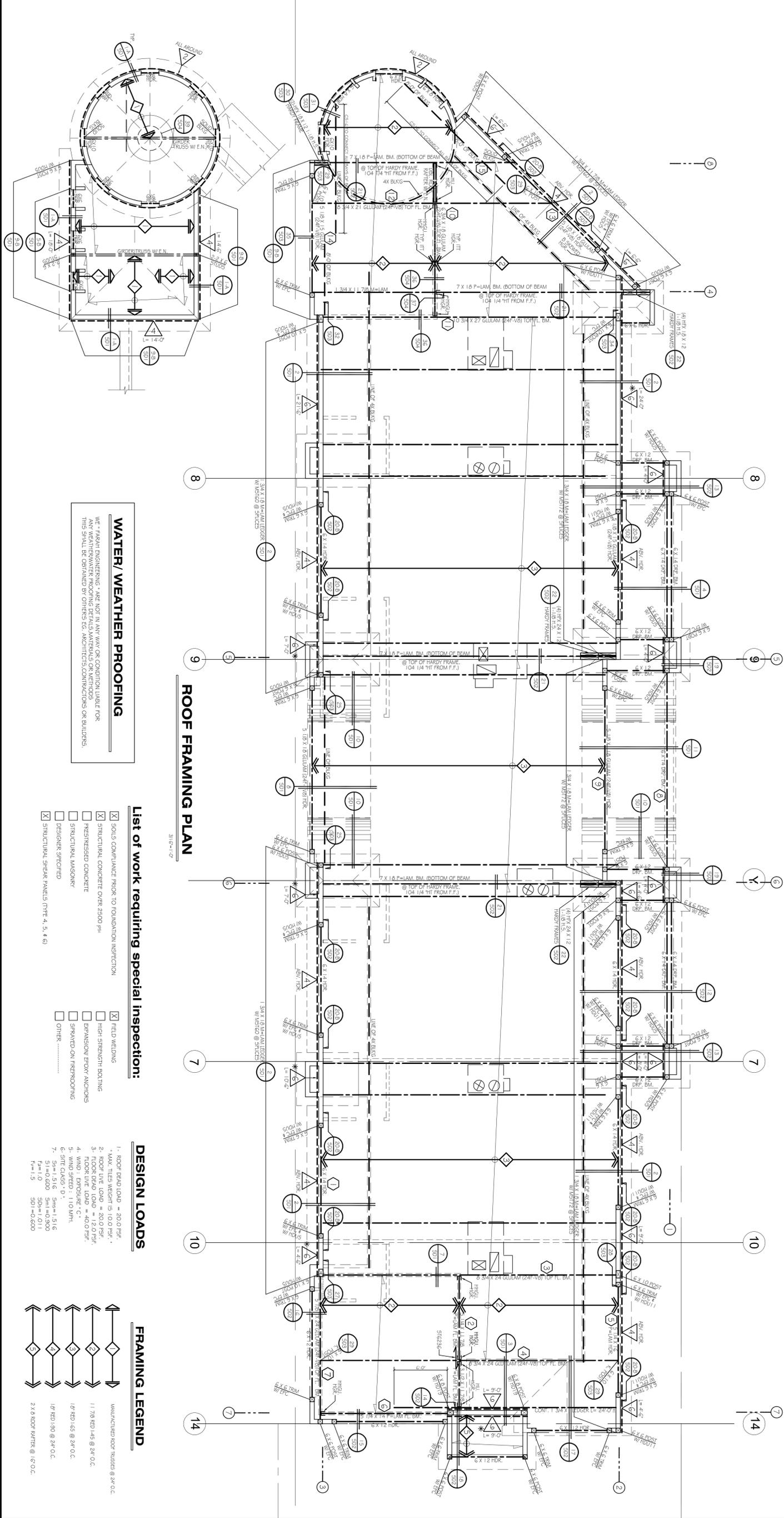
DESIGN LOADS

- 1. ROOF DEAD LOAD = 20.0 PSF*
- 2. WIND SUE WEIGHT (S) 10.0 PSF*
- 3. ROOF LIVE LOAD = 20.0 PSF*
- 4. FLOOR LIVE LOAD = 40.0 PSF*
- 5. WIND SUE LOAD = 11.0 MPH
- 6. SUE CLASS = D-1
- 7. S1 = 1.516 S2 = 1.516 S3 = 1.516 S4 = 1.516 S5 = 1.516 S6 = 1.516 S7 = 1.516 S8 = 1.516 S9 = 1.516 S10 = 1.516 S11 = 1.516 S12 = 1.516 S13 = 1.516 S14 = 1.516 S15 = 1.516

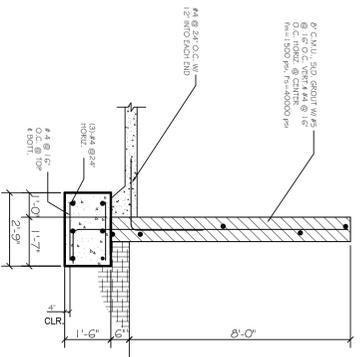
FRAMING LEGEND

- MANUFACTURED ROOF TRUSSES @ 24" O.C.
- 1 1/2" HD 145 @ 24" O.C.
- 2 X 2 ROOF RAFTERS @ 14" O.C.

S/W TYPE	WALL SHEATHING	SILL PLATE ON WOOD FLOOR ON FOUNDATION	SILL PLATE ON CONCRETE FOUNDATION
1	7/8" STUCCO OVER BRICKED JAMB WITH 1/2" GAUGE STARTERS AT 6" O.C. ALONG EDGES AND FIELD SHALL BE APPLIED IN ACCORDANCE WITH (CERO REPORT NUMBER 1316, JULY 1996) (U.O.N.)	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
2	PROVIDE MULTIPLE STUDS UNDER MULTIPLE JOISTS.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
3	INDICATES SHEAR WALL (SEE SHEAR SCHEDULE).	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
4	INDICATES BEAM OR HEADERS AND SPAN.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
5	INDICATES INTERIOR NON-BEARING WALL.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
6	INDICATES INTERIOR BEARING WALL.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
7	INDICATES TOP PLATE HEIGHT.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
8	PROVIDE 3" NOMINAL OR WIDER FRAMING AT ADJOINING PANEL EDGES WITH NAILS STAGGERED FOR SHEAR PANEL TYPE'S 4, 5 AND 6. PANELS TYPE 4, 5 AND 6.	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.
9	RUN PLYWOOD OVER ROOF AND/OR APPLY PLYWOOD BEFORE BOX-CUT	1 1/2" HD 145 @ 24" O.C.	5/8" X 1 1/2" @ 32" O.C.

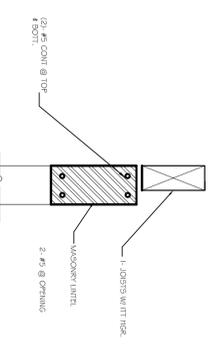


	<p>ROOF FRAMING PLAN</p>	<p>FOOTHILL RANCHO PLAZA NEW SHOPPING CENTER: 9606 FOOTHILL BLVD. RANCHO CUCAMONGA, CA</p>	<p>FARAH ENGINEERING INC. 1787 POMONA RD, UNIT K CORONA CA, 92880 TEL. (951) 738-1215 FAX (951) 738-1153 EMAIL: faraheng@sbcglobal.net</p>
<p>JOB# 12-013</p> <p>SCALE: 3/16"=1'-0"</p> <p>DESIGN BY: FADY</p> <p>BRANN BY: BRW/M</p> <p style="font-size: 2em; font-weight: bold;">S-3</p> <p>BLDG. B</p>			

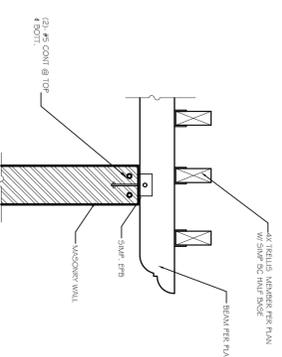


SPECIAL INSPECTION IS REQUIRED

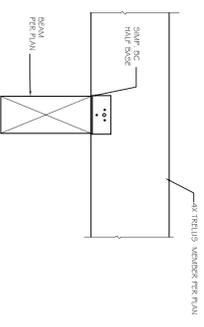
1 TRASH ENCLOSURE WALL DETAIL



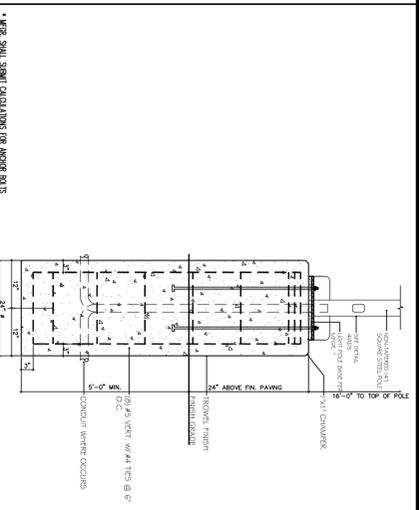
2 LINTAL BEAM DETAIL



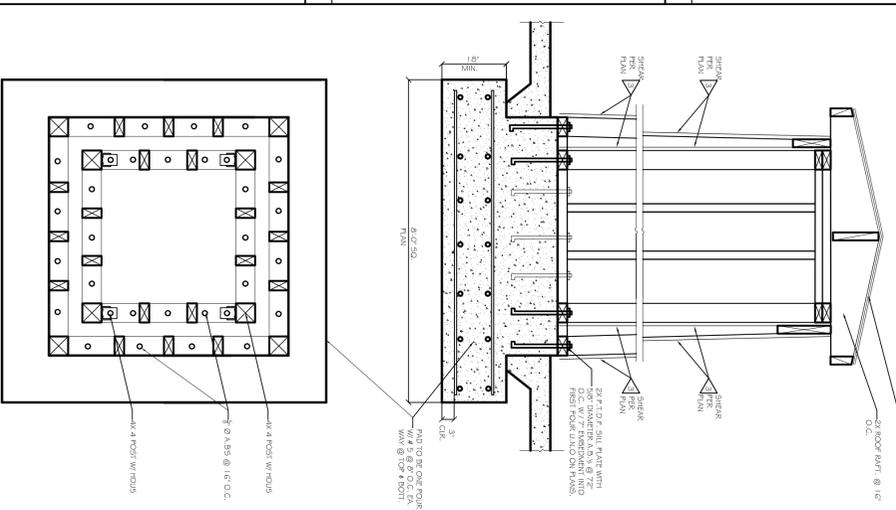
3 WOOD BEAM TO MASONRY



4 BEAM TO BEAM CONNECTION



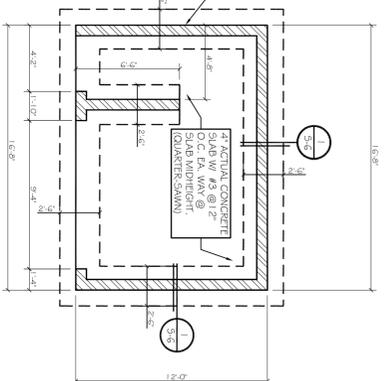
5 LIGHT POLE CONC. BASE



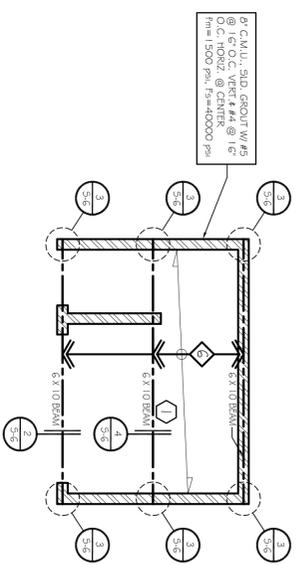
6 MONUMENT DETAIL

OTHER FOUNDATION NOTES

- THE BUILDING FND WAS PREPARED IN ACCORDANCE WITH THE SOils
- THE LIMIT TRENCHES HAVE BEEN PROPERLY BACKFILLED AND
- THE FOUNDATION CHARACTERISTICS



FOUNDATION PLAN



ROOF FRAMING PLAN



SHEAR WALL SCHEDULE		WALL SHEATHING	SOIL EXTER. NAILING ON WOOD FLOOR	SOIL EXTER. ANCHOR BOLTS ON FOUNDATION
1	7/8\"/>	1\"/>	1\"/>	5/8\"/>
2	3/8\"/>	1\"/>	1\"/>	5/8\"/>
3	1532\"/>	1\"/>	1\"/>	5/8\"/>
4	1532\"/>	1\"/>	1\"/>	5/8\"/>
5	1532\"/>	1\"/>	1\"/>	5/8\"/>
6	1532\"/>	1\"/>	1\"/>	5/8\"/>



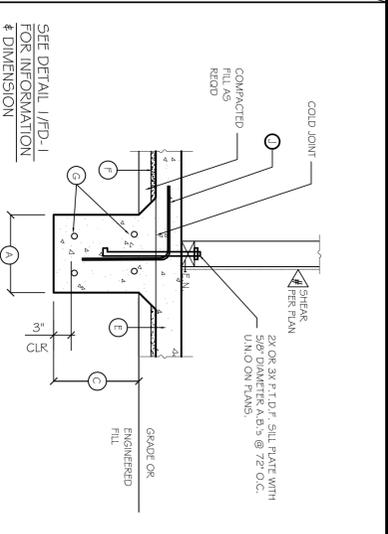
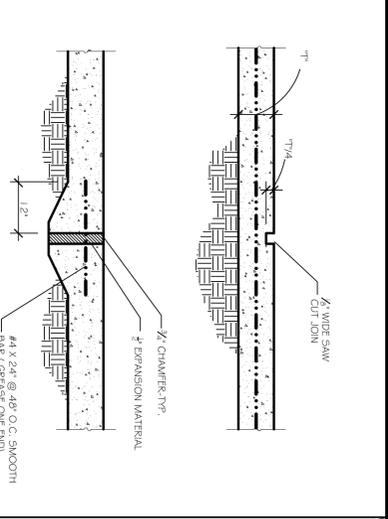
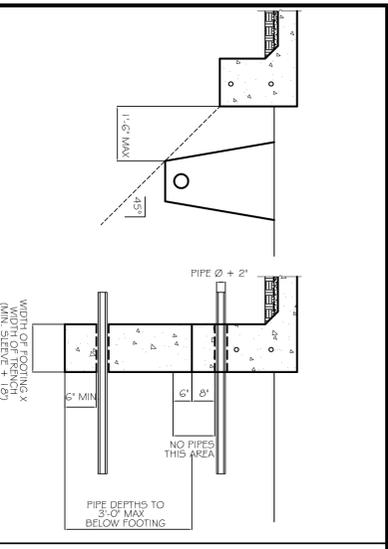
FOUNDATION AND ROOF FRAMING PLAN

FOOTHILL RANCHO PLAZA
NEW SHOPPING CENTER:
9606 FOOTHILL BLVD.
RANCHO CUCAMONGA, CA

FARAH ENGINEERING INC.
1787 POMONA RD, UNIT K
CORONA CA, 92880
TEL. (951) 738-1215 FAX (951) 738-1153
EMAIL: faraheng@sbcglobal.net



JOB# 12-013
SCALE: 3/16"=1'-0"
DESIGN BY: FADY
DRAWN BY: BR/VM
S-6



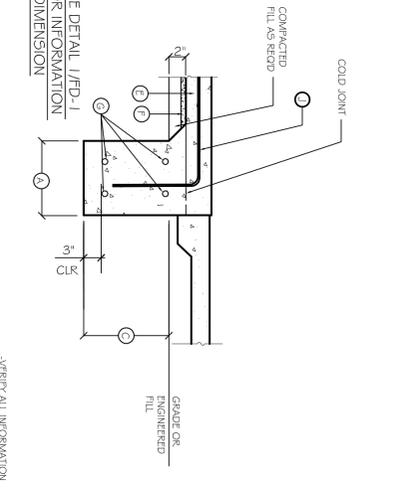
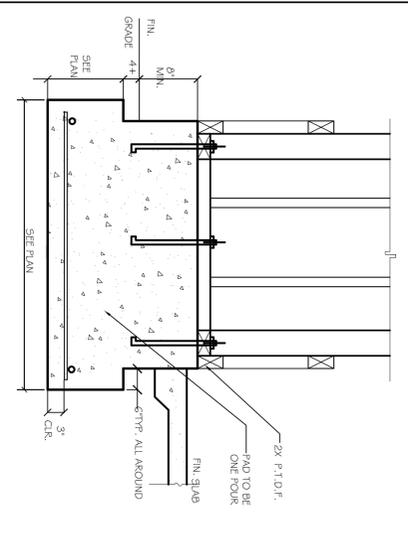
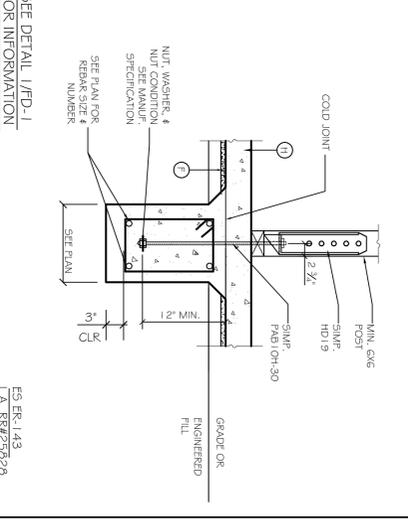
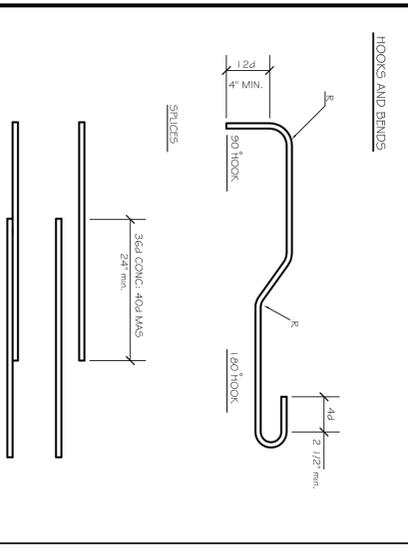
(A)	SEE PLANS
(B)	EXTERIOR: 18\"/>
(C)	INTERIOR: 12\"/>
(D)	4\"/>
(E)	0\"/>
(F)	2\"/>
(G)	(2) #5 BAR AT TOP AND (2) #5 BAR AT BOTTOM.
(H)	4\"/>
(I)	Ø (1) & (2)-STOREY
(J)	#4 DOWELS @ 24\"/>

FO-479 TRENCHES AT FOOTINGS 17

FO-233 SLAB CONSTRUCTION JOINT 13

FO-003 INTERIOR BEARING FOOTING 5

FO-002 EXTERIOR BEARING FOOTING 2

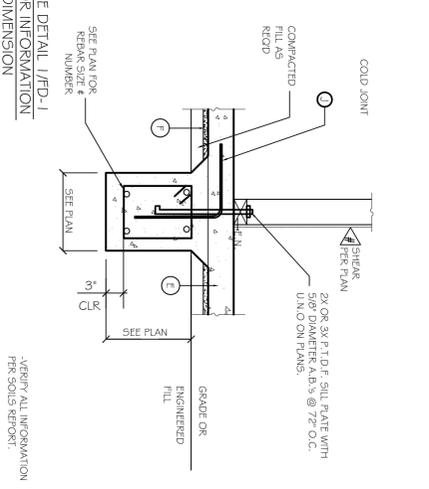
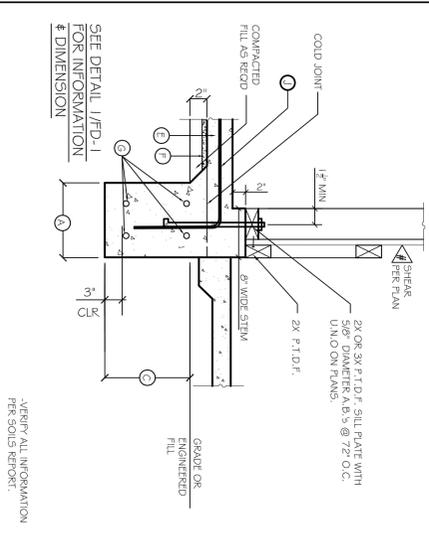
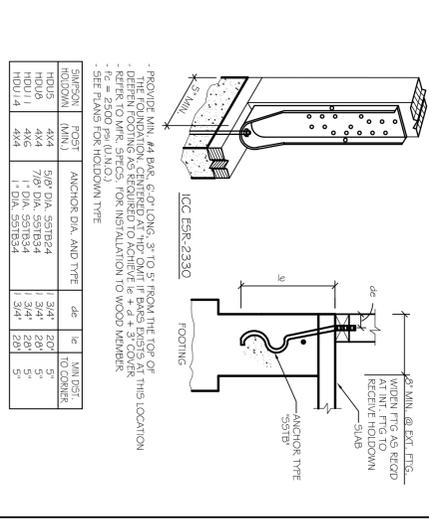
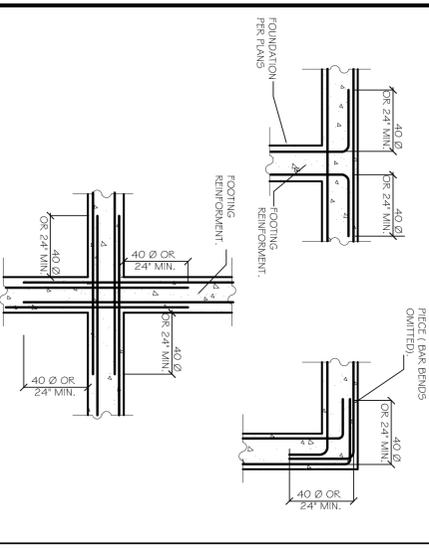


FO-016 TYP. REINFORCNG BAR DETAIL 18

FO-567 TYP. HD19 HOLDOWN INSTALLATION 14

FO-048 ISOLATED COLUMN FOOTING 6

FO-002 EXTERIOR BEARING FOOTING 2

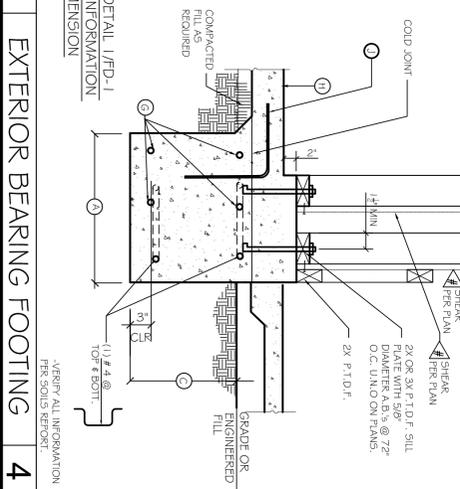
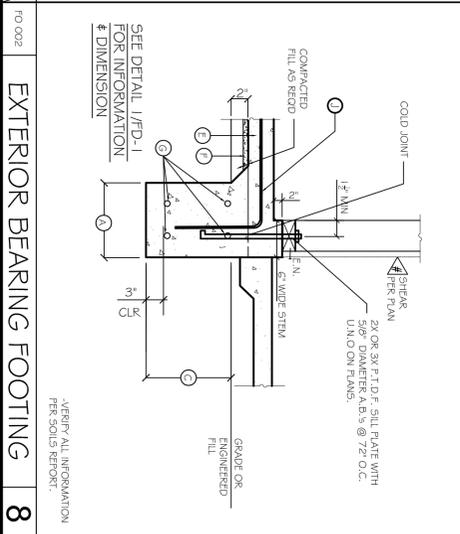
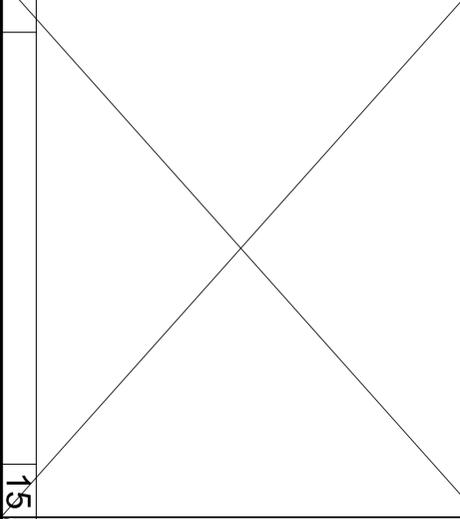
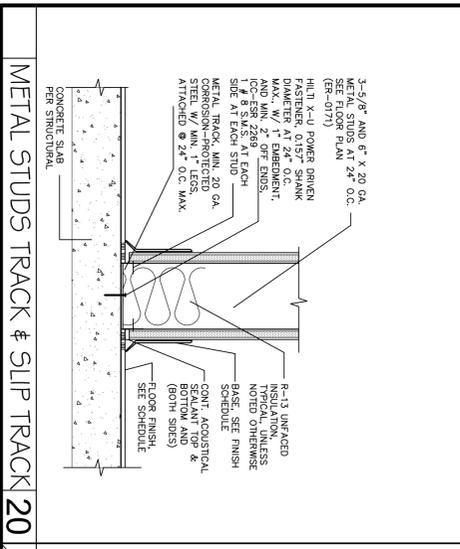


FO-444 REINFORCING REBAR @ CORNERS DETAIL 19

FO-002 TYPICAL HOLDOWN INSTALLATION 15

FO-002 EXTERIOR BEARING FOOTING 7

FO-002 INTERIOR GRADE BEAM 3



FO-444 METAL STUDS TRACK & SLIP TRACK 20

FO-002 TYPICAL HOLDOWN INSTALLATION 15

FO-002 EXTERIOR BEARING FOOTING 8

FO-002 EXTERIOR BEARING FOOTING 4



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FOOTHILL RANCHO PLAZA
 NEW SHOPPING CENTER:
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 RANCHO CUCAMONGA, CA

STRUCTURAL DETAILS



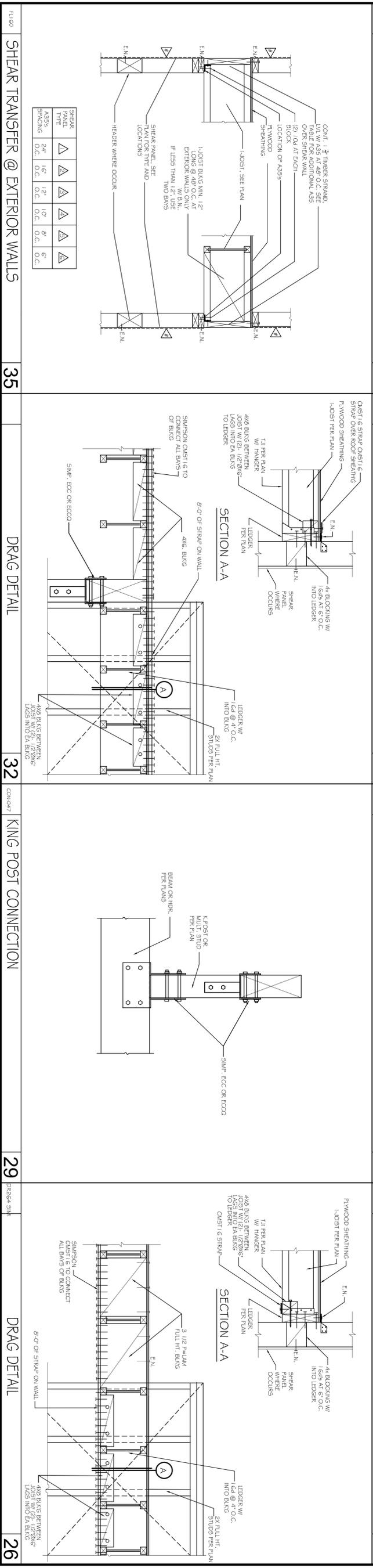
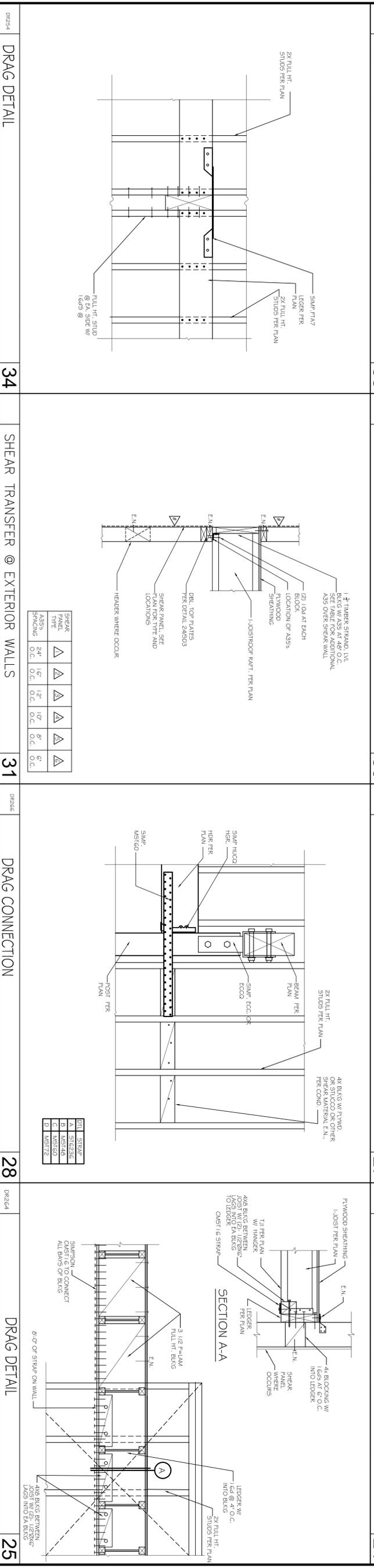
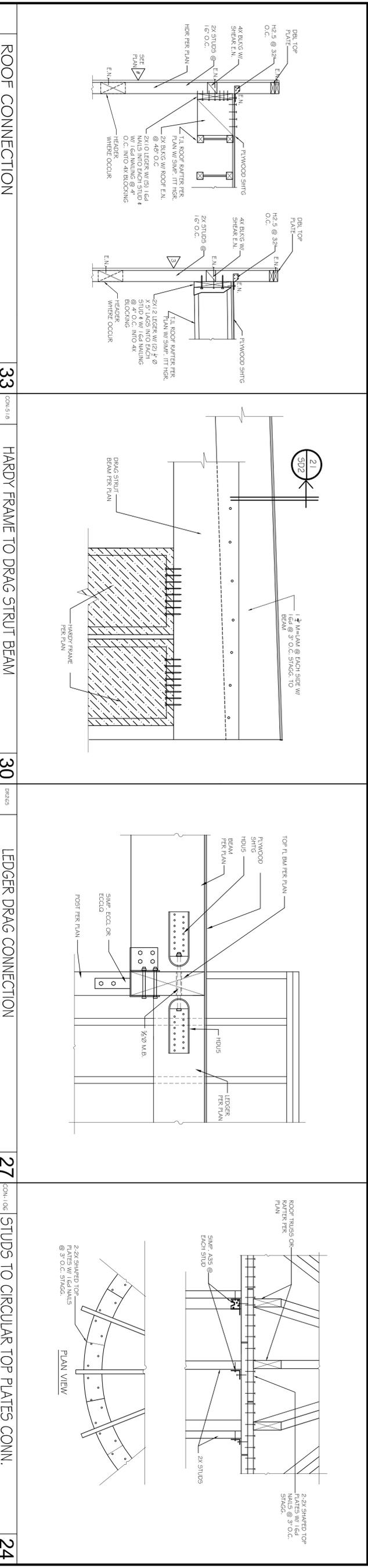
JOB#
 12-013

SCALE

DESIGN BY:

DRAWN BY:

FD-1



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FOOTHILL RANCHO PLAZA
 NEW SHOPPING CENTER:
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 RANCHO CUCAMONGA, CA

STRUCTURAL DETAILS



JOB#
12-013

SCALE

DRAWN BY:
 M.F.

SD-3



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**FOOTHILL RANCHO PLAZA
 NEW SHOPPING CENTER:
 9606 FOOTHILL BLVD.
 RANCHO CUCAMONGA, CA**

**STRUCTURAL
 DETAILS**



JOB#
12-013

SCALE

DRAWN BY:
M.F.

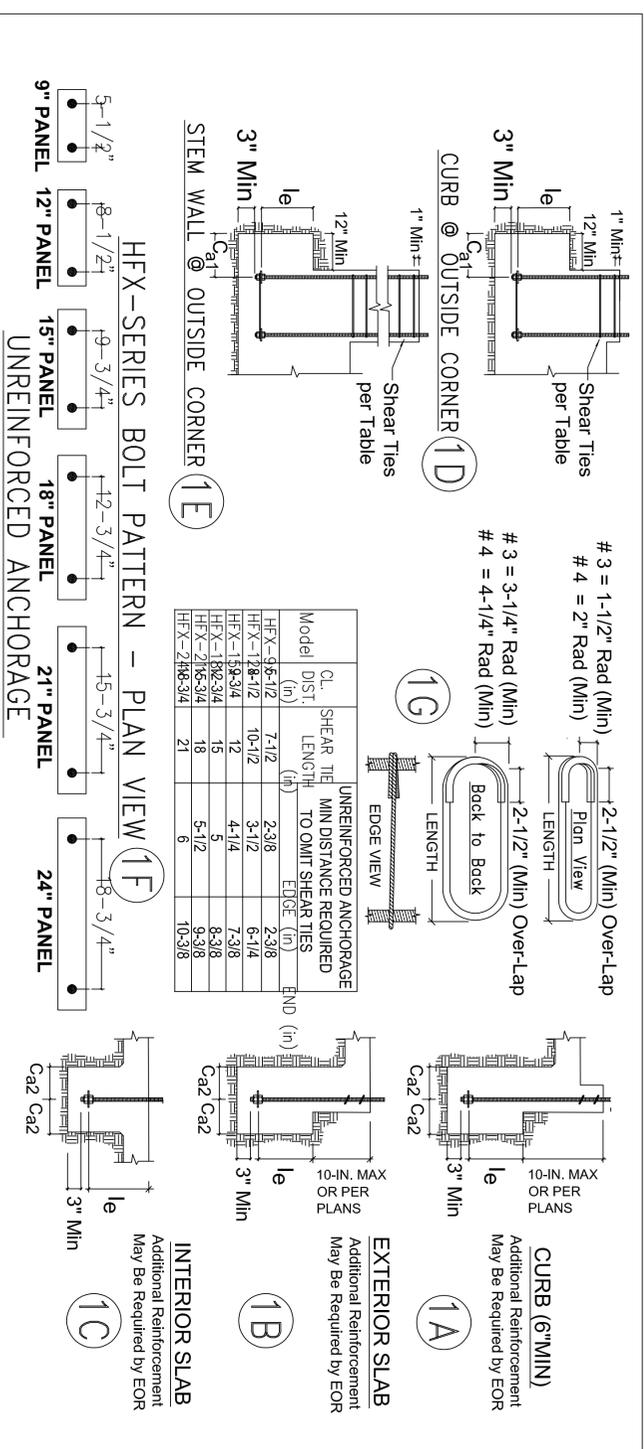
SD-4

TABLE NOTES

- 1) Designs are based on ACI 318 for 2500 psi concrete to resist shear and tension loads when subjected to the allowable seismic shear and wind load for the corresponding Panel being anchored.
- 2) STD indicates HD rods complying with ASTM F1554 Grade 36 with a Hardy Frame Bolt Broce (HFxBB) installed with double nuts on the embed end.
- 3) HS indicates HD rods complying with ASTM A193 Grade B7 with a 1/2"x3"x3" (Min) Plate Washer installed with double nuts on the embed end (HFxBB not required).
- 4) le = length of embedment from the top of footing or grade beam to the top of the HFxBB Bolt Broce (top of the embedded plate Washer @ HS anchors)
- 5) C₁ = distance from HD CL to the end of the footing or grade beam at outside corner conditions.
- 6) C₂ = distance from HD CL to both the front and the back face of the footing or grade beam.
- 7) For Unreinforced and Reinforced, curbs and stemwalls must be 6 inch width (min). For Back to Back Reinforced curbs and stemwalls must be 8 inch width (min) and require supplemental shear reinforcement per ACI-318-08, fc = 2500 psi
- 8) Shear Ties are Grade 60 (Min) rebar and are required at curbs and stem walls for near edge distance conditions. Stem wall conditions may require additional ties. Shear Ties are not required for installation away from foundation edge, installation on wood framing, or for IBC Brocced Wall Panel applications
- 9) Stirrups are Grade 60 (Min) rebar. See table for size and spacing, see "Stirrup Layout" diagrams for layout pattern with corresponding Panel being installed.
- 10) Concrete Edge Distances must comply with ACI 318-08 D8.2
- 11) The EOR is responsible for foundation design and is permitted to design the anchorage

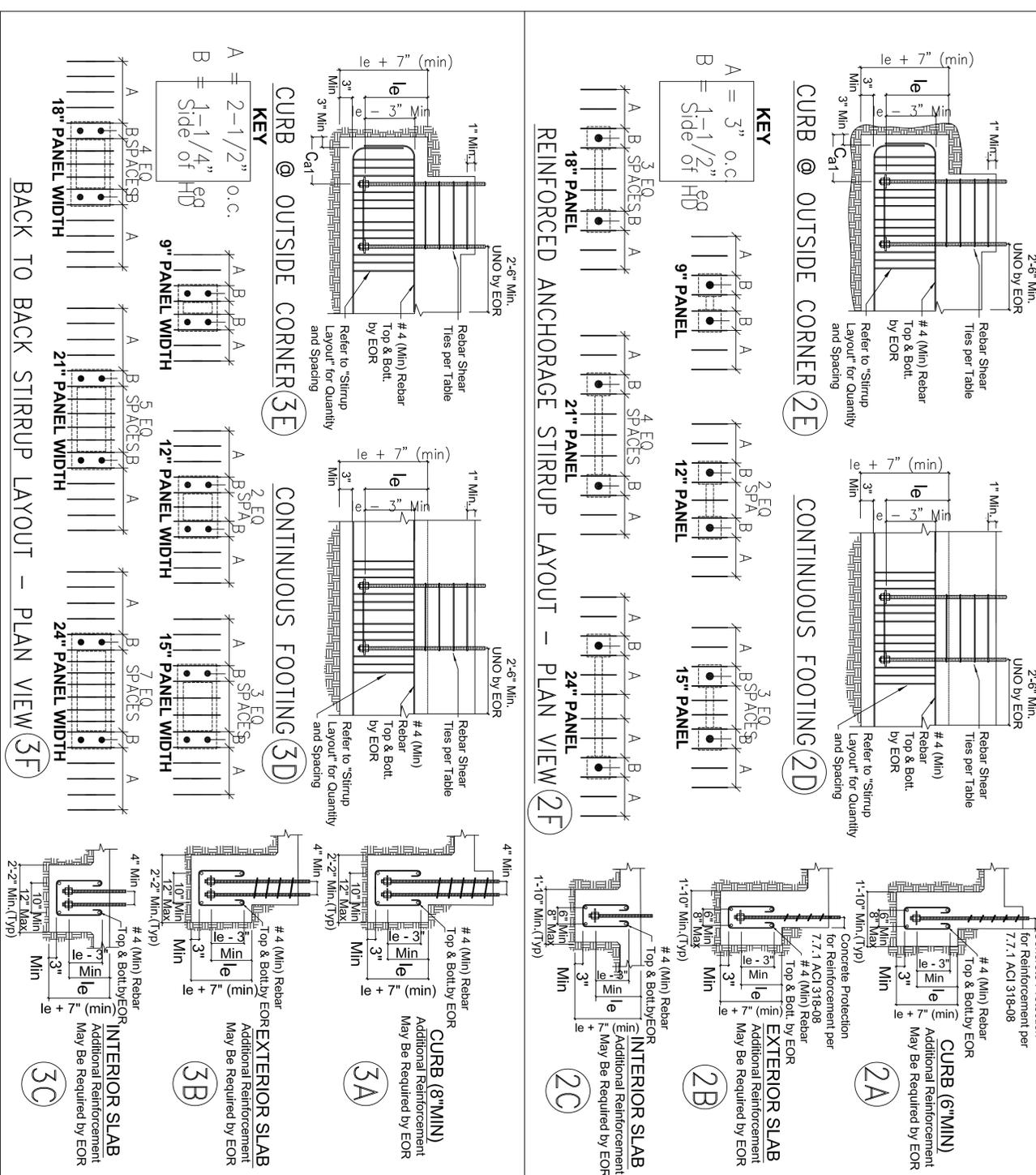
Panel Width	Panel Height	Anchorage 1	Rod Dia (in)	Rod 2,3 Grade	le 4 (in)	C ₁ 5 (in)	C ₂ 6 (in)	Stirrups 9 (ea)	Shear 7,8 Ties & Spacing (mm)
HF-X-9x	79.5'-8"	1-1/8-STD-13-19	1-1/8	STD	13	13	19	8 - #4	#3 (min) @ 3-3/4" OC
HF-X-12x	78'-10"	1-1/8-HS-20-30	1-1/8	HS	20	20	30	1 - #3	
HF-X-15x, 18x	78'-13"	1-1/8-STD-14-20	1-1/8	STD	14	14	20	20	
HF-X-15x, 18x Ballon	14-20"	1-1/8-HS-20-30	1-1/8	HS	20	20	30	30	
HF-X-21x, 24x	78'-13"	1-1/8-HS-23-34	1-1/8	HS	23	23	34	34	
HF-X-21x, 24x Ballon	14-20"	1-1/8-HS-20-30	1-1/8	HS	20	20	30	30	2 - #3

UNREINFORCED ANCHORAGE 1



Panel Width	Anchorage 1	Rod Dia (in)	Rod 2,3 Grade	le 4 (in)	C ₁ 5 (in)	C ₂ 6 (in)	Stirrups 9 (ea)	Shear 7,8 Ties & Spacing (mm)
HF-X-9x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	8 - #3	#3 (min) @ 3-3/4" OC
HF-X-12x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	9 - #3	
HF-X-15x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	10 - #4	#3 (min) @ 4" OC
HF-X-18x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	11 - #4	
HF-X-21x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	12 - #4	#4 (min) @ 4" OC
HF-X-24x	1-1/8-STD-14-RA	1-1/8	STD	14	14	19-3/4	12 - #4	#4 (min) @ 4" OC

REINFORCED ANCHORAGE 2



Model	Panel Width (in)	Anchorage 1	Rod Dia (in)	Rod 2,3 Grade	le 4 (in)	C ₁ 5 (in)	C ₂ 6 (in)	Stirrups 9 (ea)	Shear 7,8 Ties & Spacing (mm)
HF-X-9x	9	1-1/8-STD-BB-RA	1-1/8	STD	13	13	19-3/4	8 - #4	#3 (min) @ 3-3/4" OC
HF-X-12x	12	1-1/8-STD-BB-RA	1-1/8	STD	18	18	20-5/8	11 - #4	#3 (min) @ 4" OC
HF-X-15x	15	1-1/8-STD-BB-RA	1-1/8	STD	20	20	11	12 - #4	
HF-X-18x	18	1-1/8-STD-BB-RA	1-1/8	STD	23	23	20-5/8	15 - #4	
HF-X-21x	21	1-1/8-STD-BB-RA	1-1/8	STD	26	26	16 - #4	16 - #4	#4 (min) @ 4" OC
HF-X-24x	24	1-1/8-STD-BB-RA	1-1/8	STD	26	26	18 - #4	18 - #4	#4 (min) @ 4" OC

BACK TO BACK REINFORCED ANCHORAGE 3

TOP OF CONCRETE

END DIST. C.L. DISTANCE 2-3/4" FOR INSTALLATION IN CONCRETE

Model	Panel Width (in)	MIN. END DIST. (in)	CL. DIST. (in)
HF-X-9x	9	1-3/4"	5-1/2"
HF-X-12x	12	1-3/4"	8-1/2"
HF-X-15x	15	1-3/4"	9-3/4"
HF-X-18x	18	1-3/4"	12-3/4"
HF-X-21x	21	2-5/8"	15-3/4"
HF-X-24x	24	2-5/8"	18-3/4"

UNREINFORCED ANCHORAGE PLAN VIEW

REINFORCED ANCHORAGE PLAN VIEW

BACK TO BACK REINFORCED ANCHORAGE PLAN VIEW

DATE: 4-1-2014

HF-X1 ANCH

HF-X-Series Panels-Typ Anchorage Details

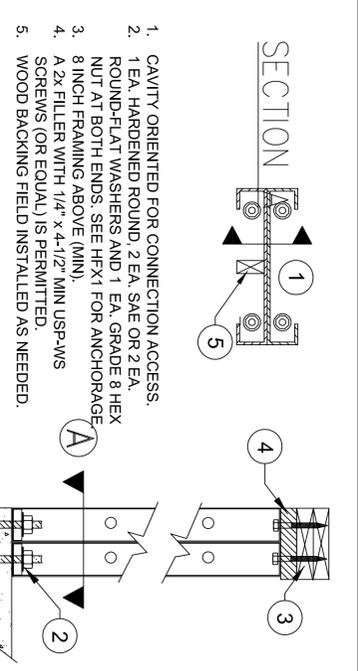
THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH HARDY FRAME PRODUCTS

HARDY FRAME
A MiTek Company
1732 PALMA DRIVE, SUITE 200, VENTURA, CA 93003
TELEPHONE: 800 754-3030 / www.hardyframe.com



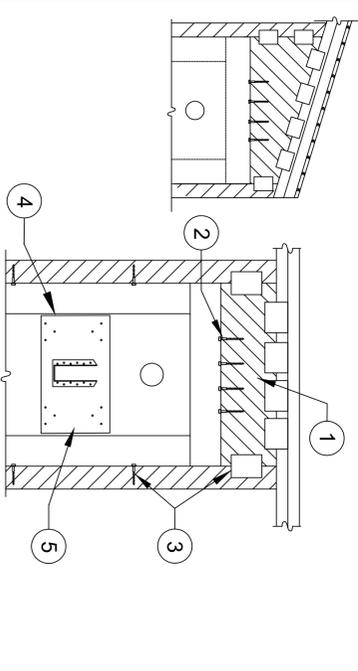
HFX-Series Panels Typical Framing Details

THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH HARDY FRAME PRODUCTS



BACK TO BACK INSTALLATION

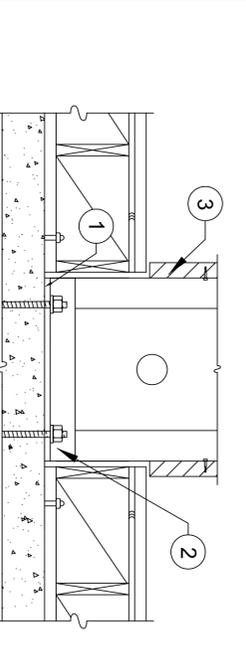
11



- 4x WOOD FILLER WITH USP MP4-F CONNECTORS (OR EQUAL) BY BUILDING DESIGN PROFESSIONAL.
- 1/4" x 3" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL), QUANTITY PER TABLES
- ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS IS INSTALLED AT THE EDGES WHEN INSTALLING A 4x FILLER ABOVE OR WHEN SPECIFIED BY DESIGN PROFESSIONAL.
- OPTIONAL LEDGER PRE-DRILL 3/16" DIA. HOLES, EVENLY SPACED, IN FACE OF PANEL AND INSTALL 1/4" DIA. WOOD SCREWS INTO 2x (MIN.) WOOD CONNECTOR AND ATTACHMENT BY BUILDING DESIGN PROFESSIONAL.

TOP CONNECTION W/ 4x FILLER

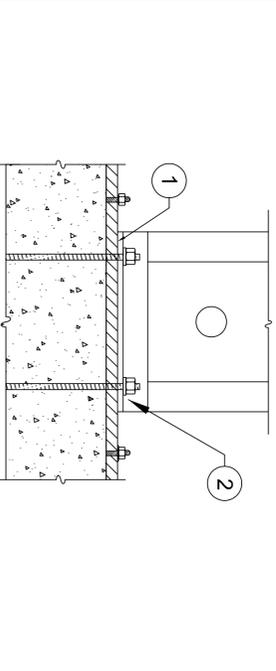
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- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL, BASE AND CONCRETE.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT AT BOTH ENDS. SEE HFX1 FOR ANCHORAGE.
- ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS IS INSTALLED AT THE EDGES WHEN INSTALLING A 4x FILLER ABOVE OR WHEN SPECIFIED BY DESIGN PROFESSIONAL.

RAISED FLOOR HEAD-OUT

9



- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL, BASE AND CONCRETE.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT. SEE HFX1 FOR ANCHORAGE.

INSTALLATION ON 2x PLATE

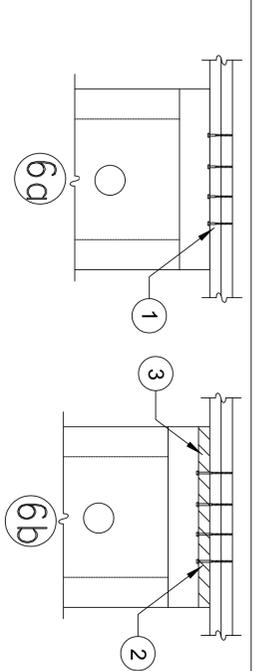
8

NOTES:
 A) OUT OF PLANE FORCES TO BE RESISTED BY OTHER FRAMING MEMBERS PER THE BUILDING DESIGN PROFESSIONAL.
 B) BALLOON WALL APPLICATIONS REQUIRE HIGH STRENGTH ANCHORAGE. SEE FOUNDATION PLAN AND ANCHORAGE TABLES ON SHEET HFX-1

- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL, BASE AND CONCRETE.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT. SEE HFX1 FOR ANCHORAGE.
- WELDED CONNECTION BY HARDY FRAMES, INC. (NO FIELD CONNECTION REQUIRED).
- A 2x FILLER WITH 1/4" x 4-1/2" MIN USP-WS SCREWS (OR EQUAL) IS PERMITTED.
- WHEN REQUIRED BY THE BUILDING DESIGN PROFESSIONAL ATTACH ADJACENT WOOD MEMBERS TO PANEL WITH 1/4" USP-WS SCREWS (OR EQUAL) THROUGH THE PANEL EDGE INTO THE WOOD MEMBER.

BALLOON WALL INSTALLATION

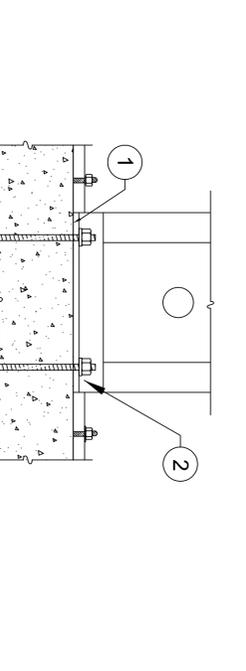
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- 1/4" x 3" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL), QUANTITY PER TABLES
- 1/4" x 4-1/2" (MIN) USP "WS-SERIES" SCREWS (OR EQUAL), QUANTITY PER TABLES
- 2x WOOD FILLER.

TOP PLATE CONNECTIONS

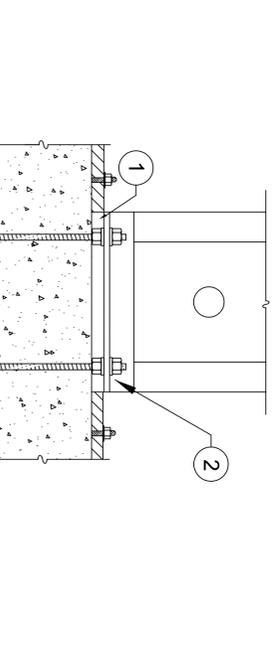
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- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL, BASE AND CONCRETE.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT AT BOTH ENDS. SEE HFX1 FOR ANCHORAGE.

INSTALLATION ON FOUNDATION

5

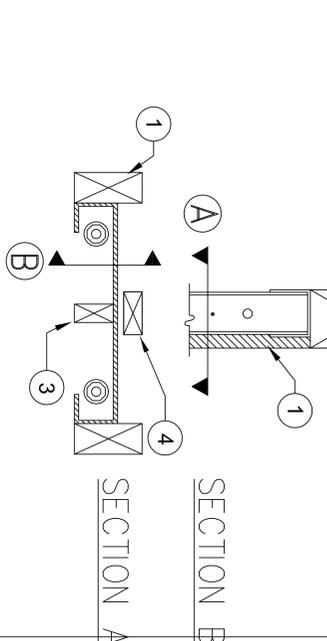


- PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH MIN 5,000 PSI STRENGTH NON-SHRINK GROUT.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT. SEE HFX1 FOR ANCHORAGE.

INSTALLATION ON NUTS&WASHERS

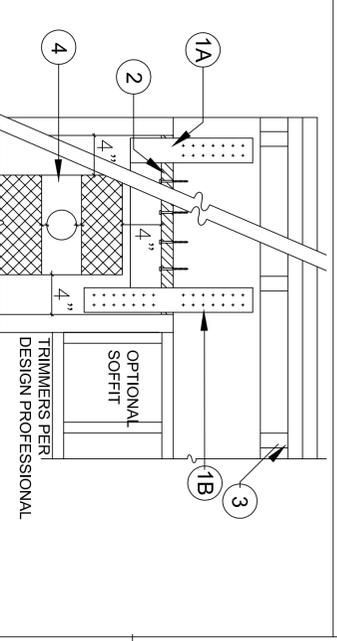
4

NOTES:
 ATTACHMENTS MAY BE MADE AT SCREW HOLES PROVIDED OR WITH SELF TAPPING SCREWS (#12 AT EDGES, #10 AT FACE).



6x HEADER ABOVE-SECTION

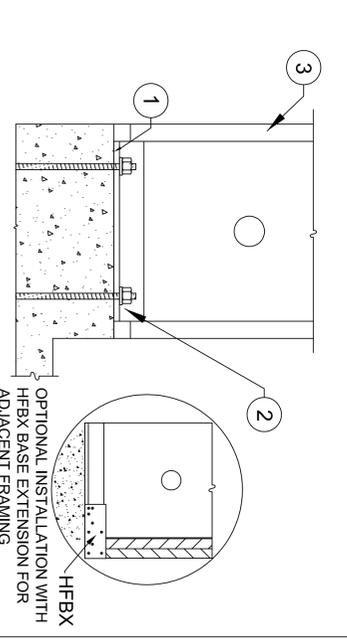
3



- TRIMMERS PROVIDE FULL BEARING FOR HEADER ABOVE. DESIGN AND CONNECTIONS BY OTHERS.
 - 6x HEADER.
 - WOOD MEMBERS MAY BE INSERTED VERTICALLY OR HORIZONTALLY IN CAVITY FOR BACKING AS NEEDED.
- WELDED STRAPS ARE AVAILABLE FROM MANUFACTURER WHEN REQUIRED BY THE DESIGN PROFESSIONAL.
 - WHEN STRAPS ARE FIELD INSTALLED THE DESIGN AND CONNECTION IS BY THE DESIGN PROFESSIONAL. CONNECTION TO PANEL WITH SELF TAPPING SCREWS IS PERMITTED.
 - A 2x WOOD FILLER WITH 1/4"x4-1/2" (MIN.) USP "WS" SERIES SCREWS OR EQUAL IS PERMITTED.
 - WHEN CRIPPLE STUDS OCCUR, SHEAR TRANSFER DESIGN TO BE PER THE DESIGN PROFESSIONAL.
 - THERE IS NO "INSIDE" OR "OUTSIDE" FACE OF PANEL. TO PREVENT THE NEED FOR ADDITIONAL HOLES ORIENT THE PANEL CAVITY TOWARD THE FIXTURE BEING INSTALLED.
 - A 1" DIA. HOLE MAY BE ADDED IN THE PANEL FACE WHEN IT IS LOCATED IN THE UPPER HALF OF THE PANEL HEIGHT AND IS 4" MIN. FROM ANY EDGE. FOR PANELS MORE THAN 12" WIDE, ADDITIONAL HOLES MUST ALSO BE 1" MINIMUM ABOVE AND BELOW THE 3" DIA. HOLE PROVIDED.
 - FOR HOLES LARGER THAN 1" DIA. OR TO ADD MORE THAN ONE HOLE CONTACT HARDY FRAMES, INC.

TOP CONNECTION TO HEADER

2



- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL, BASE AND CONCRETE.
- 1 EA. HARDENED ROUND, 2 EA. SAE OR 2 EA. ROUND-FLAT WASHERS AND 1 EA. GRADE 8 HEX NUT. SEE HFX1 FOR ANCHORAGE.
- ADJACENT FRAMING OPTIONAL U.N.O. BY BUILDING DESIGN PROFESSIONAL.

INSTALLATION ON CURB

1

HFX-SERIES 78 IN. THRU 13 FOOT

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter ¹ (in)	Top Screw Qty ² (ea)	Screw Qty Available at Edges (ea) ³
HFX-12,15,18,21 & 24x78	78	7/8		9" Width = 5	
HFX-9x79.5	79-1/2			12" Width = 6	4
HFX-12,15,18,21 & 24x8	92-1/4			15" Width = 8	
HFX-9x8	93-3/4	3-1/2	1-1/8	18" Width = 10	5
HFX-12,15,18,21 & 24x9	104-1/4			21" Width = 12	
HFX-12,15,18,21 & 24x10	116-1/4			24" Width = 14	6
HFX-15,18,21 & 24x11	128-1/4				
HFX-15,18,21 & 24x12	140-1/4				
HFX-15,18,21 & 24x13	152-1/4				

BALLOON PANELS

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter ¹ (in)	Top Screw Qty ² (ea)	Screw Qty Available at Edges (ea) ³
HFX-15,18,21 & 24x14	164-1/4			15" Width = 8	6
HFX-15,18,21 & 24x15	176-1/4			18" Width = 10	
HFX-15,18,21 & 24x16	188-1/4			21" Width = 12	7
HFX-15,18,21 & 24x17	200-1/4	3-1/2	1-1/8	24" Width = 14	8
HFX-15,18,21 & 24x18	212-1/4				
HFX-15,18,21 & 24x19	224-1/4				
HFX-15,18,21 & 24x20	236-1/4				

- INSTALLATION INSTRUCTIONS**
- When installing directly on concrete, place Panel over bolts and connect with (1 ea) Hardened Round, (2 ea) Round-Flat or (2 ea) SAE Washers below (1 ea) Grade 8 or 2H Heavy Hex Nut. Secure with a deep socket (recommended) until "Snug Tight".
 - If bottom connection is not detailed on plans, confirm with Design Professional before installing on plans, confirm with Design Professional.
 - Use 1/4"x4-1/2" USP-WS Series screws (or equal) at top connections above a 2x filler. If the top of Panel is in direct contact with the collector (recommended) until "Snug Tight".
 - For installations with a 4x filler above 1/4" diameter screws are required at the Panel edges to brace for the out-of-plane hinge or when they are specified by the Design Professional.

