

BUILDING CODE

1. BUILDING CODE: FBC 2023 (8TH EDITION)

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 318,"BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301," SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS"
2. CONCRETE MATERIAL SHALL COMPLY WITH:
 - A. CEMENT-ASTM C150 TYPE I, LOW ALKALI REQUIRED. SUBMIT MIX DESIGN WHICH CONTAINS ASR TEST RESULTS PER DAFB GUIDE, CERTIFYING ASR MITIGATION.
 - B. AGGREGATE-ASTM C33 MAXIMUM AGGREGATE SIZE 3/4"
 - C. WATER- POTABLE
 - D. AIR ENTRAINING ADMIXTURE-ASTM C260
 - E. WATER-REDUCING ADMIXTURE-ASTM C494,INCLUDING SUPER PLASTICIZERS
 - F. FLY ASH- ASTM C618, CLASS C
3. CONCRETE SHALL DEVELOP THE MAXIMUM 28 DAY COMPRESSIVE STRENGTH(f_c),(EXCEPT AS NOTED ON DRAWINGS)

TYPE OF CONSTRUCTION	COMPRESSIVE STRENGTH(f_c)
A. FOOTINGS,FOUNDATIONS,WALLS	3000PSI
B. INTERIOR SLABS	4000PSI
C. EXTERIOR SLABS,WALLS AND CURBS(AIR ENTRAINED CONCRETE)	4000PSI

CONCRETE PROPERTIES SHALL BE ESTABLISHED ON THE BASIS OF FIELD EXPERIENCE AND/OR TRIALMIXTURE IN ACCORDANCE WITH ACI-318-89 SECTIONS 5.2 AND 5.3 WHEN FLY ASH UTILIZED IN THE MIX. MIX SHALL CONTAIN A WATER REDUCER. FLY ASH SHALL BE ADDED AT THE RATE OF NOT MORE THAN 100 POUNDS PER CUBIC YARD AND CEMENT SHALL BE REDUCED BY NOT MORE THAN 15 PERCENT BY WEIGHT.
4. PRORPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP AT POINT OF PLACEMENT OF NOT MORE THAN 4 INCHES. WITH ADDITIONAL SLUMP ALLOWED VIA ADMIXTURES SUCH AS MASTER BUILDERS POLYHEED AND DELVA.
5. USE OF AIR ENTRAINING ADMIXTURE IN EXTERIOR EXPOSED CONCRETE TO 3 PERCENT ENTRAINED AIR.
6. READY MIX CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C94
7. NO ALUMINIUM ITEMS SHALL BE EMBEDDED IN ANY CONCRETE CHLORIDES IN ANY FORM OR CONCENTRATION SHALL NOT BE ADDED TO ANY CONCRETE.
8. REINFORCING STEEL:
 - A. REINFORCING BARS-ASTM A615 GRADE 60, EXCEPT TIES & STIRRUPS MAY BE GRADE 40 DEFORMED.
 - B. WELDED WIRE FABRIC-ASTM A 185
 - C. ACCESSORIES AND SUPPORTS FOR REINFORCEMENT- COMPLY WITH CRSI RECOMMENDATIONS.
 - D. BARS MARKED CONTINOUS AND ALL VERTICAL STEEL SHALL BE LAPPED OR EMBEDDED TO DEVELOP THE FULL TENSILE CAPACITY OF THE BAR. LAPS SHALL BE CLASS"B" UNLESS SHOWN OTHERWISE SPLICE TOP BARS NEAR MIDSPAN AND SPLICE BOTTOM BARS OVER SUPPORTS.
#4 & #5 BAR LAPS TO BE 48 DIAMETERS. (2'-0" MIN.)
9. CONCRETE WORK EXECUTION:
 - A. CONSTRUCT FORM TO CORRECT SIZE,SHAPE, ALIGNMENT,ELEVATION AND POSITION, AND SUPPORT VERTICAL AND LATERAL LOADS.
 - B. POSITION,SUPPORT AND SECURE REINFORCEMENT AGAINST PLACEMENT.
MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE UNLESS NOTED OTHERWISE ON THE DRAWINGS

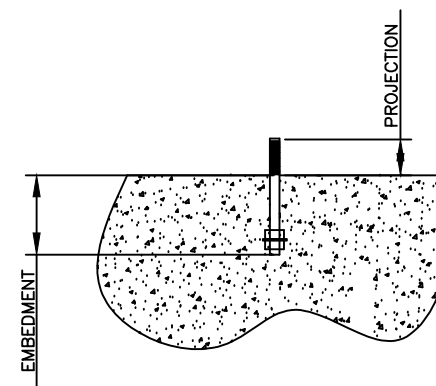
CAST AGAINST & EXPOSED EARTH	3 INCHES
EXPOSED TO EARTH OR WATER	2 INCHES
NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH	1/2 INCHES
 - C. PLACE CONCRETE IN COMPLIANCE WITH ACI 304"RECOMMEND PRACTICE FOR MEASURING,MIXING,TRANSPORTING AND PLACING CONCRETE"
 - D. CONSOLIDATE PLACED CONCRETE USING MECHANICAL VIBRATING EQUIPMENT SO THAT CONCRETE IS WORKED AROUND REINFORCEMENTS,EMBEDE ITEMS AND IN TO FORMS.
 - E. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY NOTED AS UNREINFORCED. REINFORCED CONCRETE NOT OTHERWISE INDICATED WITH THE SAME REINFORCEMENT AS OTHER SIMILAR SECTIONS.
 - F. PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH DUE TO WEATHER EXTREMES, IN COLD WEATHER. COMPLY WITH ACI 306; IN HOT WEATHER COMPLY WITH ACI 305.
 - G. IN CONCERNS OF GRADE BEAMS AND WALLS , PROVIDE CORNER REINFORCEMENT (LAP TWO FEET EACH DIRECTION) IN COURSE FACE, MATCHING SIZE AND SPACING OF HORIZONTAL REINFORCEMENT. PROVIDE THREE # 4 SUPORT BARS WHERE REQUIRED FOR SUPPORT OR CORNER BARS.
 - H. AT OPENINGS IN WALLS ADD ONE #5 BAR(OPENING DIMENSION PLUS 60 BAR DIAMETERS) FOR EACH FACE AND EACH SIDE OF OPENING AND ONE #5 BAR BY 5'-0" DIAGONALLY FOR EACH FACE AND EACH CORNER OF OPENING.
 - I. PROVIDE ONE #5 BAR DIAGONALLY AT EACH FACE OF ALL STEPS IN GRADE BEAMS AND FOUNDATION WALLS.
 - J. LAP REINFORCEMENTS AS FOLLOWS, EXCEPT AS NOTED OTHERWISE ON THE DRAWING: #4 BARS-12",#5 BARS-15",#6 BARS-19",#6 BARS-26".
 - K. PROVIDE CONSTRUCTION JOINTS IN FOOTINGS, GRADE BEAMS AND WALLS AT NOT GREATER THAN 80 FEET IN ANY DIRECTION,KEY OR DOWEL CONSTRUCTION JOINTS.
 - M. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.
 - O. REMOVE FINS AND PROJECTIONS, REPAIR AND PATCH DEFECTIVE AREAS WITH CEMENT GROUT IMMEDIATELY AFTER REMOVAL.

FOUNDATION GENERAL NOTES:

1. THE ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE A MINIMUM OF 1500 PSF. THE CONTRACTOR AND/OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO INVESTIGATE THE SITE AND PROVIDE A WRITTEN REPORT OF SOIL CHARACTERISTICS. THE DESIGN ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY CODITIONS ARE FOUND DIFFERENT THAN THOSE REPRESENTED IN THIS REPORT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE SOIL CONDITIOINS BEFORE CONSTRUCTION, AND IF UNUSUAL CONDITIONS ARE ENCOUNTERED, TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION, AND SHALL NOTIFY THE GEOTECHNICAL ENGINEER IMMEDIATELY.
2. COMPACTED BACKFIL SHALL BE USED IN THE EXCAVATION AFTER THE CONCRETE IS SET.
3. REFER METAL BUILDING MANUFATURER'S ANCHOR BOLT PLAN FOR ANCHOR BOLT PLACEMENT.
4. NO FLOOD ZONE AND STEEP SLOPE REQUIRMENTS ARE INCLUDED IN THE DESIGN.
5. MONOLATHIC POUR IS ACCEPTABLE.
6. NO VEHICLE OR ANY SPECIAL HEAVY LOADS ARE CONSIDERED IN SLAB DESIGN.

LEGAL NOTES:

1. USING THESE PLANS, DRAWINGS AND SPECIFICATIONS TO CONSTRUCT THE STRUCTURES OR FOUNDATIONS CONSTITUTE AGREEMENT BY THE CLIENT TO THE FOLLOWING.
2. INDEMNIFICATION
 - A. THE CLIENT SHALL INDEMNIFY AND HOLD HARMLESS THE DESIGNER AND OFF OF ITS PERSONNEL & SUB CONTRACTORS FROM AND AGAINST ANY AND ALL CLAIMS. DAMAGES, LOSSES & EXPENSES (INCLUDING REASONABLE ATTORNEY'S FEES) ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE SERVICES, PROVIDED THAT ANY SUCH CLAIMS, DAMAGE, LOSS OR EXPENSE IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENT ACT OR OMISSION AND/OR STRICT LIABILITY OF THE CLIENT, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THE CLIENT OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE. THIS INDEMNIFICATION SHALL INCLUDE ANY CLAIM, DAMAGE OF LOSSES DUE TO THE PRESENCE OF HAZARDOUS MATERIALS.
3. RISK ALLOCATION
 - A. IN RECOGNITION OF THE RELATIVE RISKS, REWARDS & BENEFITS OF THE PROJECT TO BOTH THE CLIENT & THE DESIGNER THE RISKS HAVE BEEN ALLOCATED SO THAT THE CLIENT AGREES THAT TO THE FULLEST EXTENT PERMITTED BY LAW. THE DESIGNER'S TOTAL LIABILITY TO THE CLIENT, FOR ANY & ALL INJURIES, CLAIMS, LOSSES, EXPENSES, DAMAGES OR CLAIM EXPENSES ARISING OUT OF THIS AGREEMENT, FROM ANY CAUSE OF CAUSES, SHALL NOT EXCEED THE TOTAL AMOUNT OF \$50,000.00, THE AMOUNT OF THE DESIGNER'S FEE (WHICHEVER IS LESS) OR OTHER AMOUNT AGREED UPON WHEN ADDED UNDER SPECIAL CONDITIONS. SUCH CAUSES INCLUDE, BUT ARE NOT LIMITED TO, THE DESIGNER'S NEGLIGENCE, ERRORS, OMMISIONS, STRICT LIABILITY, BREACH OF CONTRACT OR BREACH OF WARRANTY.
4. OWNERSHIP DOCUMENTS
 - A. ALL DOCUMENTS PRODUCED BY THE DESIGNER UNDER THIS AGREEMENT REMAIN THE PROPERTY OF THE DESIGNER & MAY NOT BE USED BY THE CLIENT FOR ANY OTHER ENDEAVOR WITHOUT THE WRITTEN CONSENT OF THE DESIGNER.
5. DISPUTE RESOLUTION
 - A. ANY CLAIM OR DISPUTE BETWEEN THE CLIENT AND THE DESIGNER SHALL BE SUBMITTED TO NON-BINDING MEDIATION SUBJECT TO THE PARTIES AGREEING TO A MEDIATOR(S). THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE PRINCIPAL PLACE OF BUSINESS OF THE DESIGNER.



ANCHOR BOLT DETAIL
N.T.S.

ANCHOR BOLT SUMMARY					
Qty	Loc	Dia (in)	Length (in)	Embed (in)	Proj (in)
16	Jamb	1/2"	12.00	10.00	2.00
24	Endwall	5/8"	15.00	12.00	3.00
28	Frame	3/4"	18.00	15.00	3.00

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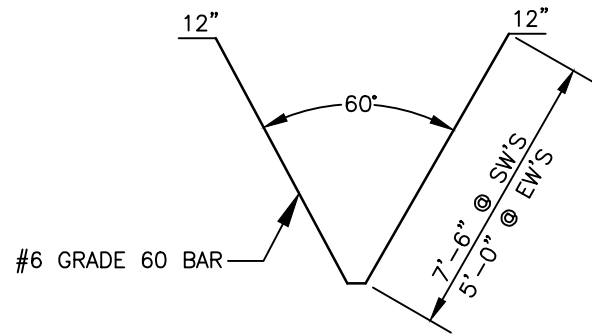
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REVISIONS		
NO.	DATE	DESCRIPTION
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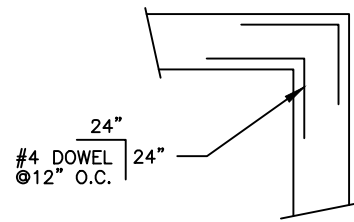
MBMI
METAL BUILDINGS

4723 W ATLANTIC AVE.
SUITE A20
DELRAY BEACH, FL 33445
TEL: 800-293-2097

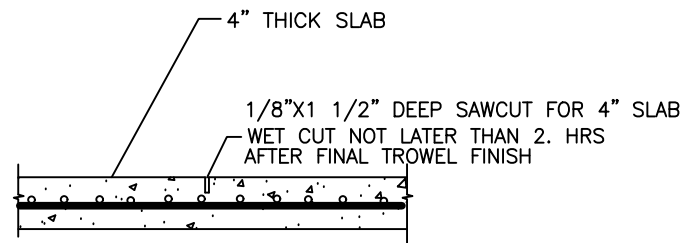
FELIPE CAMPOS	
FELIPE CAMPOS 265 ENTERPRISE ROAD DELTONA, FL 32725	
DATE 10/ 7/24	DWG NO 1 OF 3
FOUNDATION NOTES	JOB NO 29258



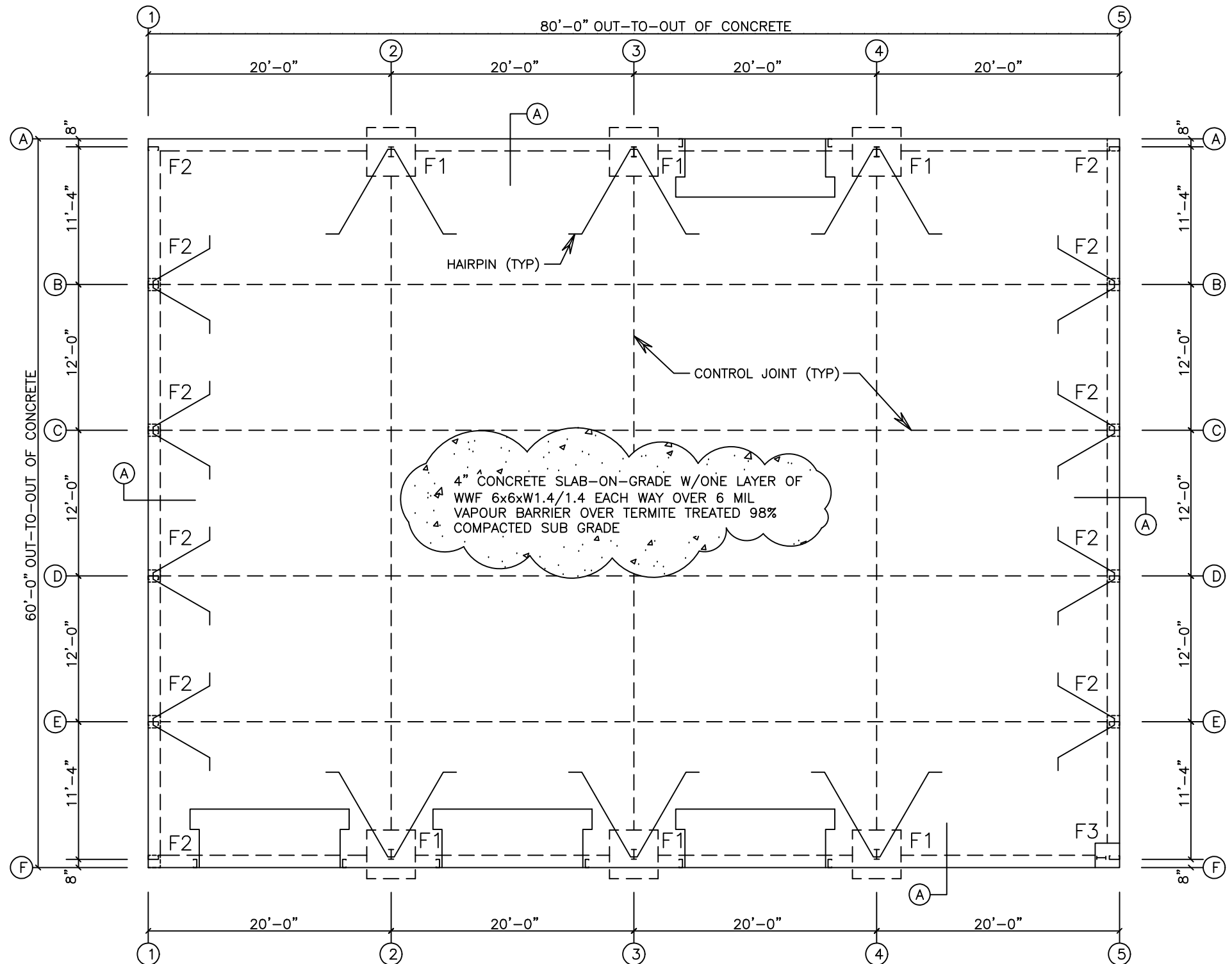
TYP. HAIRPIN DETAIL
N.T.S.



TYP. CORNER DETAIL
Scale: N.T.S.



TYP. CONTROL JOINT DETAIL
N.T.S.



FOUNDATION PLAN
NOTE: All Base Plates @ 100'-0" (U.N.)
Scale: N.T.S.

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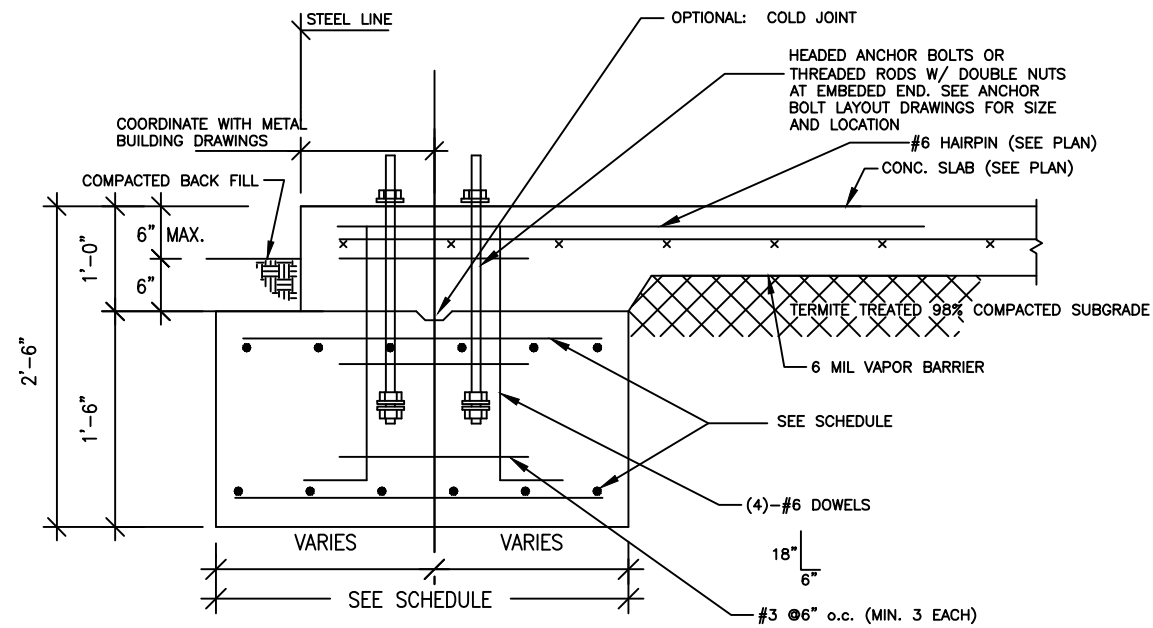
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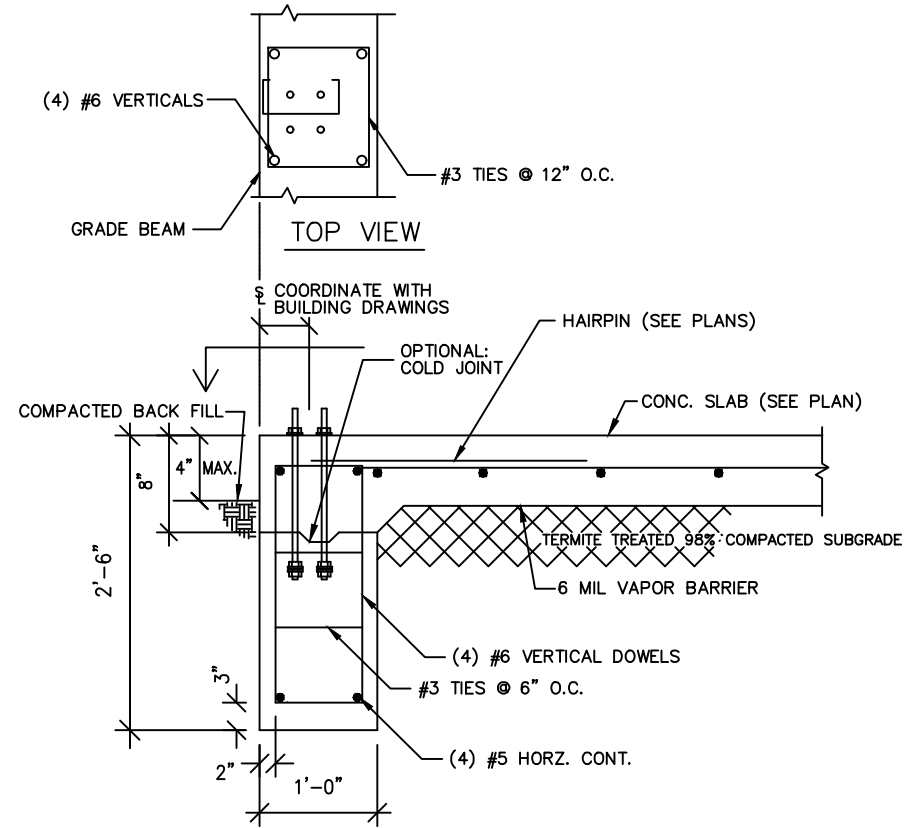
FELIPE CAMPOS
265 ENTERPRISE ROAD
DELTONA, FL 32725

DATE 10/ 7/24	DWG NO 2 OF 3
FOUNDATION PLAN	
JOB NO 29258	



TYP. SECTION THRU COL. FOOTINGS F1

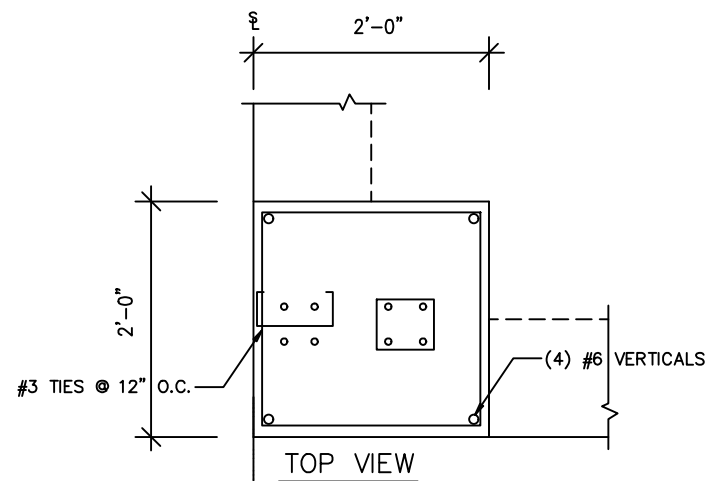
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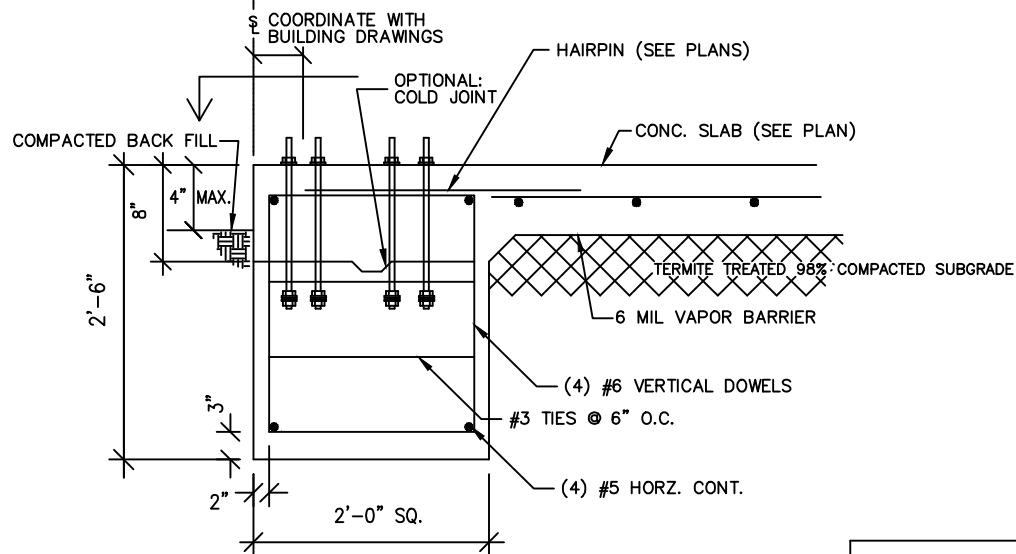
TYP. SECTION THRU COL. FOOTING F2

N.T.S.

FOOTING SCHEDULE		
MK	SIZE	REINFORCEMENT
F1	4'-0"X4'-0"X1'-6" MIN.	7 # 5 EW TOP AND BOTTOM
F2	GRADE BEAM	4 # 5
F3	2'-0"X2'-0"X2'-6" MIN.	4 # 6 VERTICAL

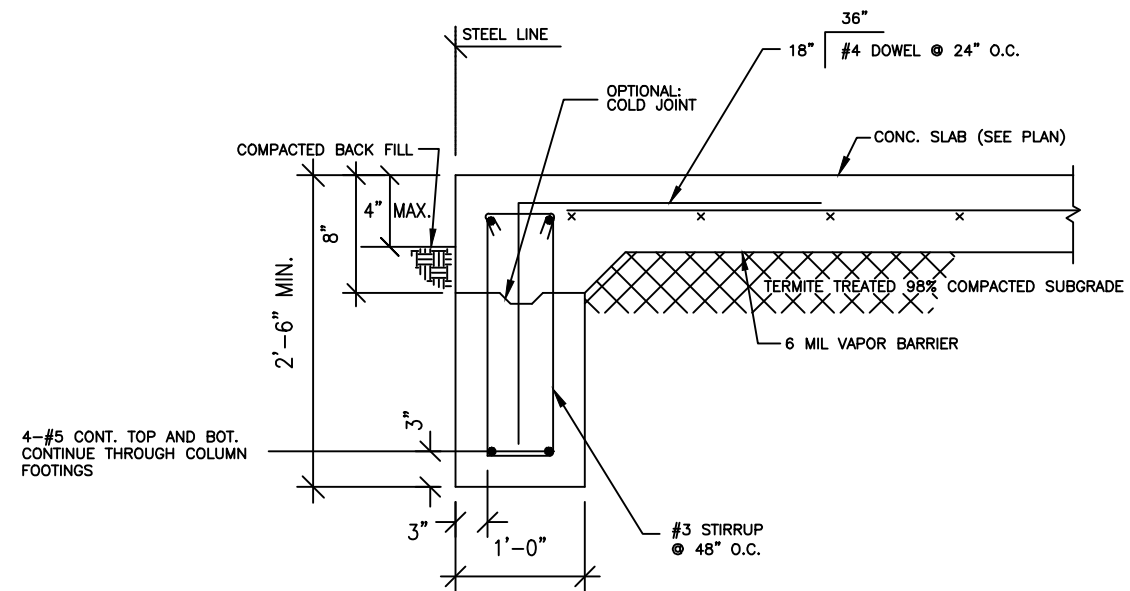


TOP VIEW



SECTION THRU COL. FOOTING F3

N.T.S.



SECTION A

N.T.S.

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