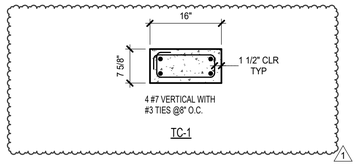
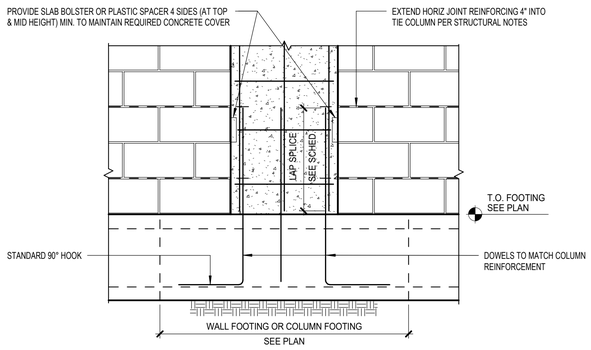
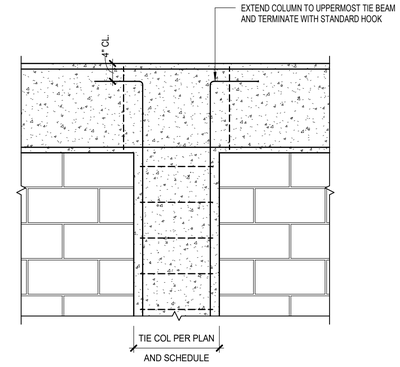


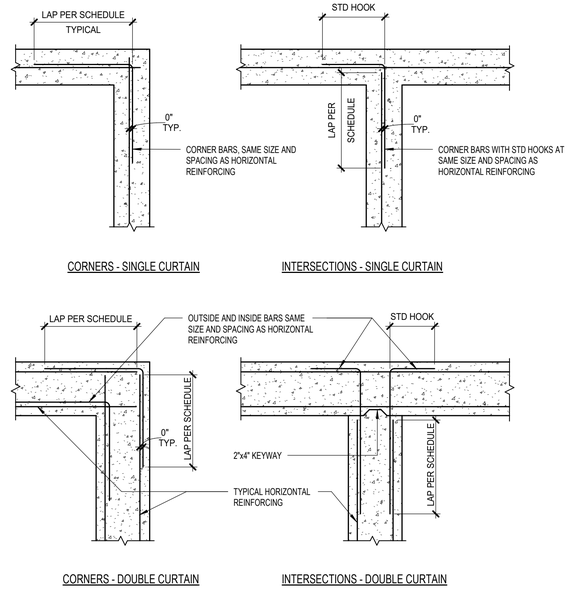
TYPICAL TIE COLUMN DIAGRAM



1 TYPICAL TIE COLUMN DETAIL
3/4" = 1'-0"



2 TYPICAL TIE COLUMN TERMINATION
AT TIE BEAM OR BOND BEAM
3/4" = 1'-0"

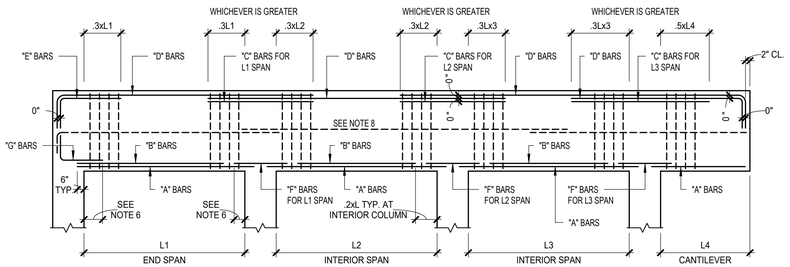


NOTE:
ZERO DIMENSION IS USED TO INDICATE THAT THE BARS ARE INTENDED TO BE PLACED IN THE SAME PLANE

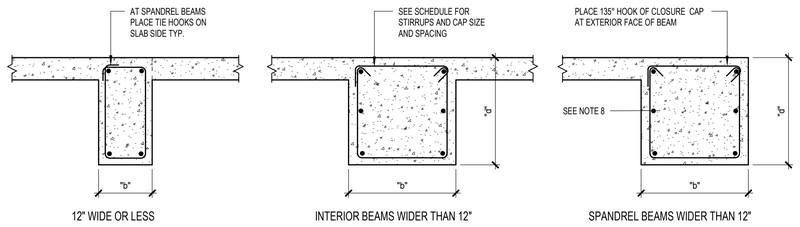
3 TYPICAL HORIZONTAL REINFORCING
CONCRETE TIE BEAMS, WALLS AND FOOTINGS
3/4" = 1'-0"

BEAM SCHEDULE

TYPE	ELEV. TOP OF BEAM	SIZE "b"x"d"	REINFORCING			STIRRUPS		REMARKS
			BOT. CONT.	TOP CONT.	MID. CONT.	SIZE	SPACING EACH END	
B-1	10'-4"	7 5/8"x12"	2#5	2#5		#3	@5" O.C.	
B-2	10'-4"	7 5/8"x12"	2#5	2#5		#3	@5" O.C.	



TYPICAL CAST-IN-PLACE CONCRETE BEAM BAR PLACING DIAGRAM



CAST-IN-PLACE CONCRETE BEAM DETAILS

BEAM SCHEDULE NOTES

1. PRECAST PRESTRESSED SOFFIT BEAMS ARE DESIGNATED WITH ULTIMATE MOMENTS (FOOT-KIPS) IN COLUMN "A" AND ULTIMATE SHEARS (KIPS) IN THE "SPACING EACH END" COLUMN
2. IN PRECAST SOFFIT BEAMS, PLACE "B", "F" AND "G" BARS DIRECTLY ON TOP OF SOFFIT.
3. "C" AND "F" BARS OCCUR AT CONTINUOUS END OF BEAM. IF BOTH ENDS ARE CONTINUOUS, PLACE "C AND "F" BARS AT END OF BEAM ADJACENT TO BEAM WITH THE HIGHER MARK NUMBER. IN THE CASE OF REPETITIVE MARK NUMBERS, PLACE "C" AND "F" BARS AT SUPPORT BETWEEN IDENTICAL BEAM MARKS.
4. "D" BARS LAP OVER INTERIOR COLUMNS AND EXTEND TO FAR FACE OF COLUMN AND HOOK AT DISCONTINUOUS ENDS. WHERE NECESSARY, SPLICE "D" BARS AT MIDSPAN WITH A MINIMUM 48 BAR DIAMETER LAP SPLICE.
5. PROVIDE "E" AND "G" BARS AT BOTH ENDS OF SINGLE SPAN BEAMS.
6. DEVELOPMENT LENGTH NOTED FOR "F" AND "G" BARS ARE AS FOLLOW:

BAR SIZE	#5	#6	#7	#8	#9
BAR LENGTH	3'-0"	3'-0"	3'-6"	4'-0"	4'-6"

7. PLACE FIRST STIRRUP 2" FROM FACE OF SUPPORT. SPACE BALANCE OF STIRRUP TIES AS SCHEDULED. SPACES DESIGNATE NUMBER OF SPACES, NOT QUANTITY OF TIES. IN PRECAST SOFFIT BEAMS, SPECIFIED SHEAR OCCURS AT DISTANCE "d" FROM FACE OF SUPPORT. PLACE FIRST STIRRUP 2" FROM END OF SOFFIT, NEXT 4 TIES @6" O.C. (MAX.) AND BALANCE SPACED AT d/2 (MAX.)
8. FOR 30" AND DEEPER BEAMS, PROVIDE THE FOLLOWING INTERMEDIATE HORIZONTAL REINFORCING EVENLY SPACED BETWEEN THE INNERMOST LAYER OF TOP AND BOTTOM REINFORCING, OR TOP OF PRECAST SOFFIT. PROVIDE 36 BAR DIAMETER LAP AT SUPPORTS AND HOOK DISCONTINUOUS ENDS.

INTERMEDIATE HORIZONTAL REINFORCING					
BEAM DEPTH	30"≤ d <36"	36"≤ d <46"	46"≤ d <56"	56"≤ d <56"	66" AND GREATER
REINF. EA. FACE	2 #5	3 #5	4 #5	5 #5	#5@10" O.C.

9. FOR BARS SPECIFIED AS "CONTINUOUS", EXTEND BARS TO THE END OF THE BEAM FRAME AND HOOK, U.O.N. WHERE NECESSARY, SPLICE TOP BARS AT MIDSPAN AND BOTTOM BARS AT SUPPORTS WITH A 48 BAR DIAMETER LAP
10. EXTEND ALL HOOKED BARS TO FACE OF SUPPORT. WHERE NECESSARY, STAGGER ENDS OF HOOKS 2 INCHES
11. ALIGN BARS IN ALL LAYERS VERTICALLY AND SEPARATE MULTIPLE LAYERS OF #7 BARS AND LARGER WITH #8 SPACER BARS AT 48" O.C. BUNDLE #5 AND #6 BARS VERTICALLY.

MAXIMUM NUMBER OF BARS PER LAYER											
REBAR	BEAM WIDTH										
	8"	10"	12"	16"	18"	20"	24"	28"	30"	32"	36"
#6	2	3	3	-	-	-	-	-	-	-	-
#7	2	3	3	4	5	6	8	-	-	-	-
#8	2	2	3	4	4	5	7	8	-	-	-
#9	2	2	2	4	4	5	6	8	9	9	10
#10	-	-	2	3	4	4	6	8	9	9	10
#11	-	-	2	3	4	4	5	7	8	9	10

Carbon design + architecture
FLORIDA LIC No: AR95989

CLIENT DATA
Client:
CITY OF OCALA
501 NE 1st Ave.
Ocala, FL 34470

PROJECT DATA
Project No: 24020
Project Na: OCALA SUNTRAN RESTROOMS & KIOSK

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ENGINEER DATA

ISSUE + REVISION DATA

No:	Description:	Date:
1	BLD24-1291 Building Comments	06/25/2024

ARCHITECTURE SEAL

Lazaro Alfonso
Reason: This item has been digitally signed and sealed by Lazaro Alfonso, PE (No. 69782), on the date shown below. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
Contact Info: 561-623-7081
Date: 2024.06.24 20:44:25-04'00'

LAZARO ALFONSO LICENSE No. 69782 STATE OF FLORIDA PROFESSIONAL ENGINEER

05.28.2024

DRAWN BY S.C

CHECKED BY L.A

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Lazaro Alfonso, P.E. FL Reg. No. 69782

To the best of the Structural Engineer's knowledge, the Plans and Specifications comply with the applicable minimum building codes.

S-402
ALL SCHEDULES

100% CD's Set

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