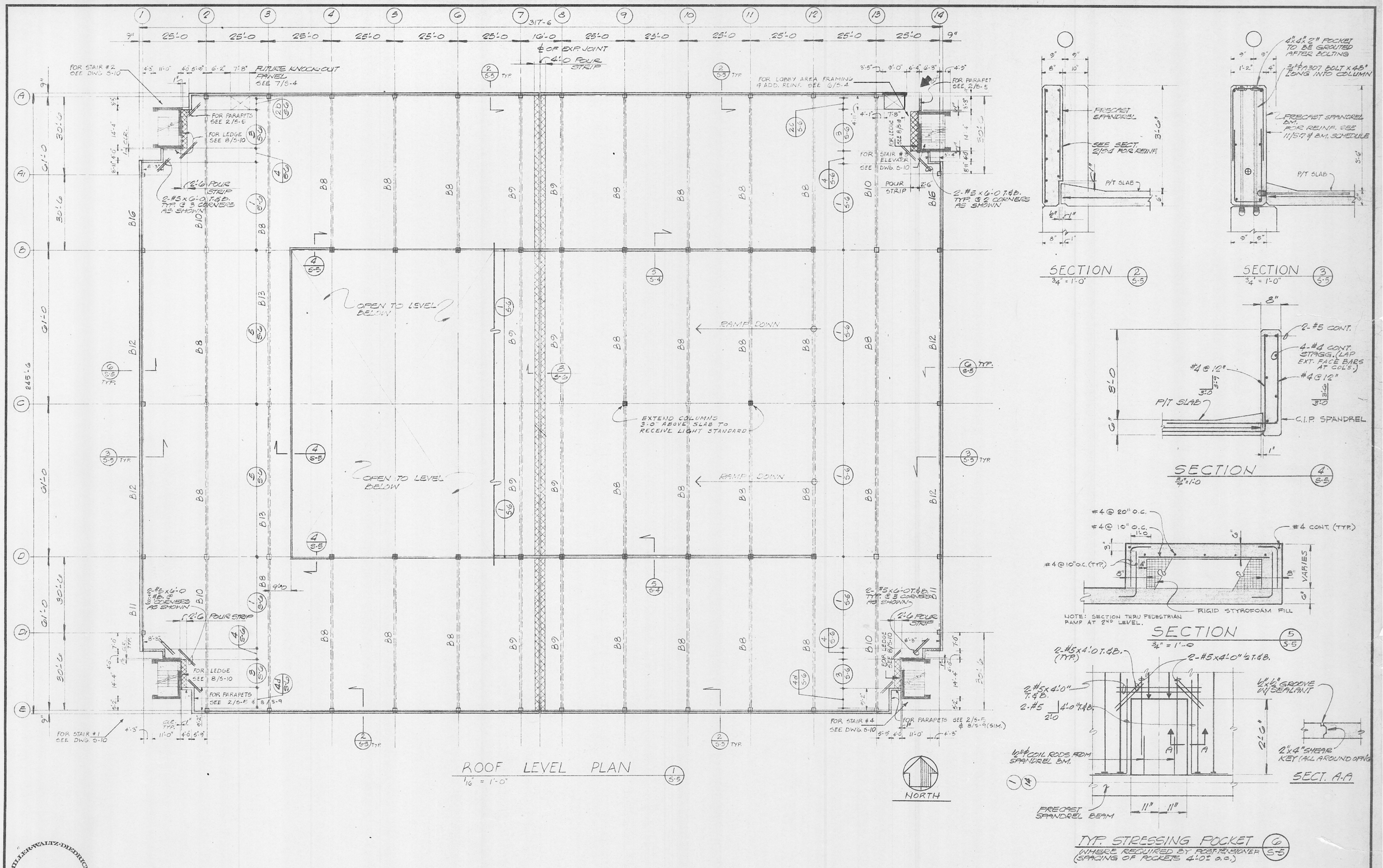

MILLER·WALTZ·DIEDRICH·ARCHITECTS & ASSOCIATES, INC.

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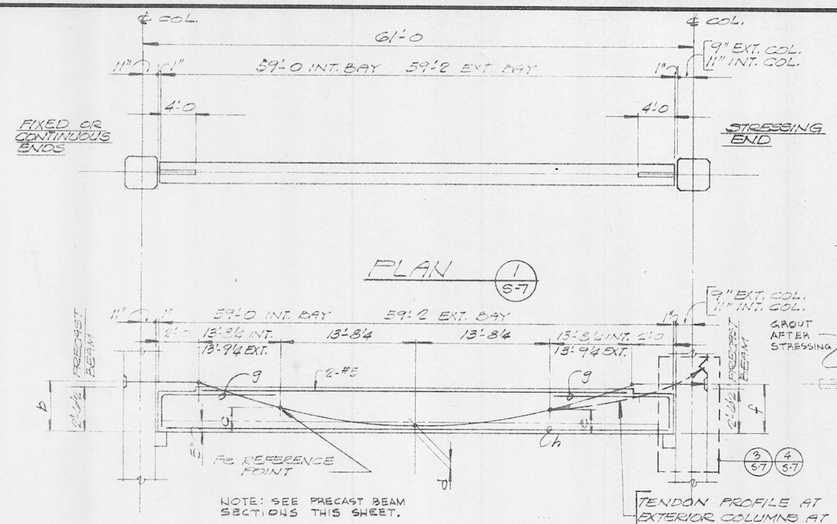
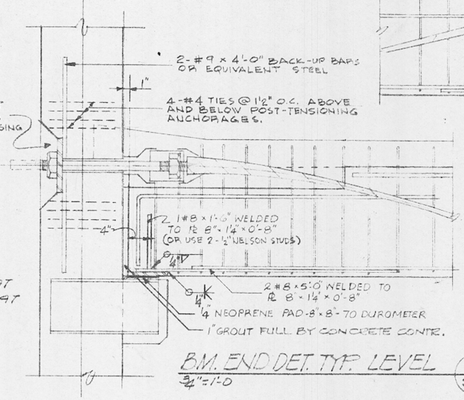
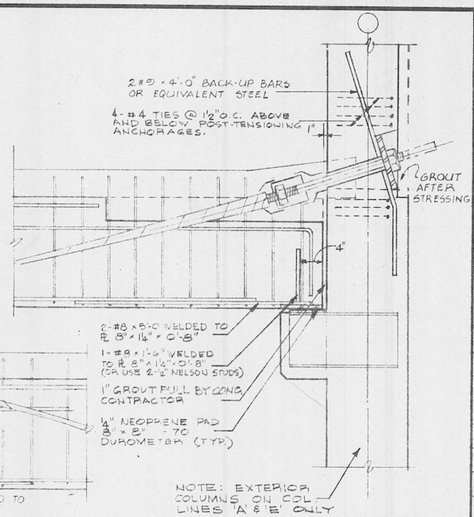
CONCOURSE PARKING GARAGE — PHASE 4

DOCUMENT DATE	DRAWING DESCRIPTION	PROJECT	SHEET
NOV. 2, 1973	ROOF LEVEL PLAN	475	S-5



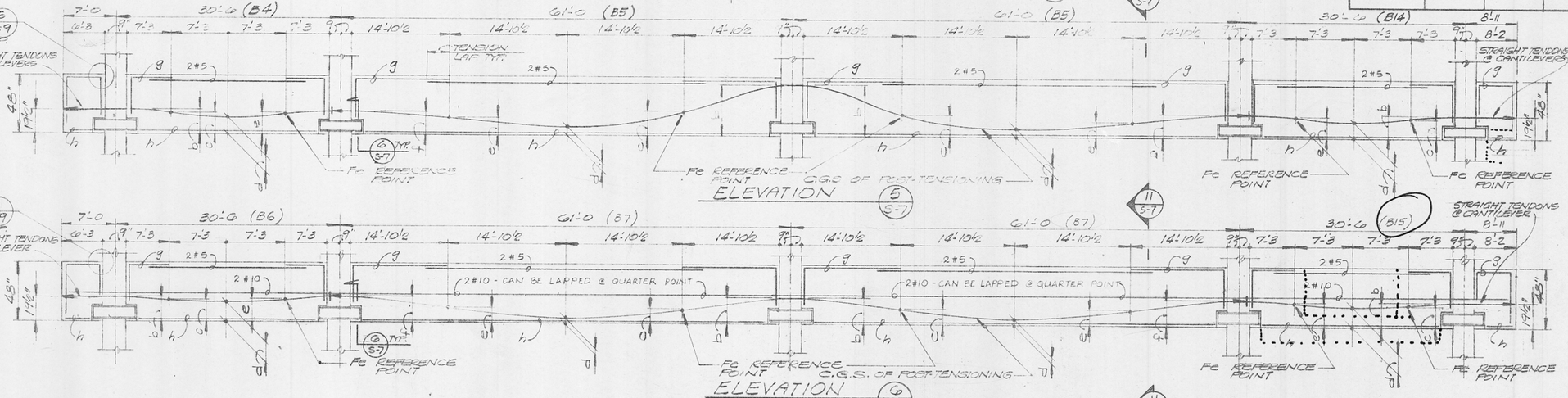


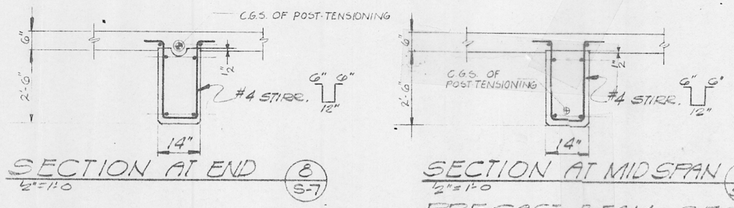


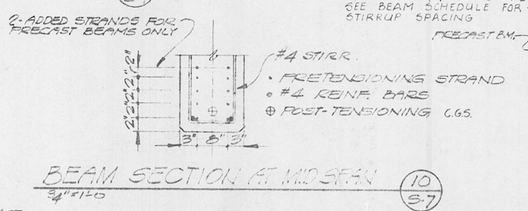
POST-TENSIONED BEAM SCHEDULE

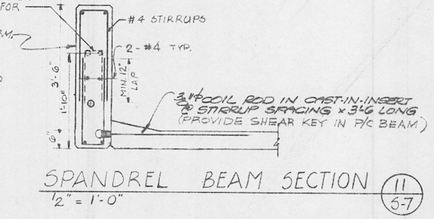
BEAM MARK	No. OF ½"ϕ (270K) STRDS (PRETENSIONING)	POST-TENSIONING Fe	b	c	d	e	f	MILD STL. REINF. g	h	#4 STIRRUPS FROM EACH END OF BEAM	ELEV.
B1	8	393ᴷ	30½	10¼"	3½	10¼"	30½	2-#5	2-#5	5@4", @@8", @@12", REM.@16"	2/S-7
B2	8	321	30½	10¼	3½	10¼	30½	2-#5	2-#5	5@4, @@8, @@12, REM.@16	2/S-7
B3	8	393	30½	10¼	3½	10¼	30½	2-#5	2-#8	5@4, @@8, @@12, REM.@16	2/S-7
B4	10	201	19½	15⅜	14	15⅜	19½	2-#5	2-#5	5@6, REM.@12	5/S-7
B5	10	201	42	24¾	7½	10½	19½	2-#5	2-#5	5@6, REM.@12	5/S-7
B6	10	267	19½	17⅜	16	16⅜	21	2-#8	2-#5	5@6, REM.@12	6/S-7
B7	10	267	21	7⅞	3½	7⅞	21	2-#8	2-#8	5@6, REM.@12	6/S-7
B8	8	393	30½	10¼	3½	10¼	30½	2-#7	2-#10	11@4, @@6, @@8, @@12, REM.@16	2/S-7
B9	8	321	30½	10¼	3½	10¼	30½	2-#8	2-#8	11@4, @@6, @@8, @@12, REM.@16	2/S-7
B10	8	393	30½	10¼	3½	10¼	30½	2-#8	2-#10	11@4, @@6, @@8, @@12, REM.@16	2/S-7
B11	10	201	22¼	17	15¼	16¼	19½	2-#7	2-#7	5@6, REM@12	7/S-7
B12	10	201	42	24¾	7½	10½	19½	2-#7	2-#7	5@6, REM@12	7/S-7
B13	8	393	30½	10¼	3½	10¼	30½	2-#8	2-#11	11@4, @@6, @@8 @@12, REM. @16	2/S-7
B14	10	201	19½	15⅜	14	15⅜	19½	2-#5	2-#5	5@6", REM.@12"	5/S-7
B15	10	267	19½	16⅞	16	17¼	21	2-#8	2-#5	5@6", REM.@12"	6/S-7
B16	10	201	23½	17⅜	16	16⅜	19½	2-#7	2-#7	5@6", REM.@12"	7/S-7

NOTES:
(1.) THE PRECAST CONNECTIONS SHOWN ARE "TYPICAL" ONLY. IT IS THE PRECASTERS RESPONSIBILITY TO DESIGN AND DETAIL ALL CONNECTIONS AND SUBMIT TO ENGINEER PRIOR TO FABRICATION.
(2.) THE POST-TENSIONING SYSTEM COULD CONSIST OF WIRES OR STRANDS. THE PRECASTER SHALL USE SUFFICIENT NUMBER OF STRANDS OR WIRES TO DEVELOP THE REQUIRED EFFECTIVE FORCE "Fe" AT THE "Fe" REFERENCE POINT. THE PRECASTER SHALL WORK OUT STRESSING PROCEDURES AND FRICTION CALCULATIONS AND SUBMIT TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
(3.) THE BEAM FOR THE OPENINGS MAY NOT BE STRESSED UNTIL THE POST-TENSIONING OF THE SLAB, LOADING THAT BEAM, HAS BEEN COMPLETED.
(4.) ALL CONT. BEAM TENDONS SHALL BE STRESSED SIMULTANEOUSLY AT COLUMN LINES 'B' AND 'D'.
(5.) PROVIDE WEEPS AT LOW POINTS OF P/T TENDONS.



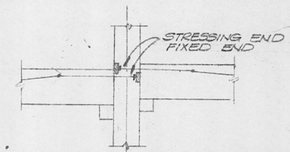


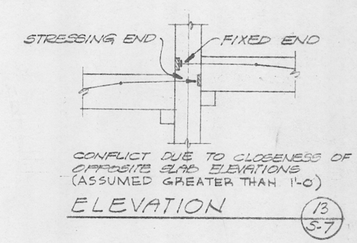




PRECAST BEAM SECTIONS

POST-TENSIONING BEAM ANCHORAGES





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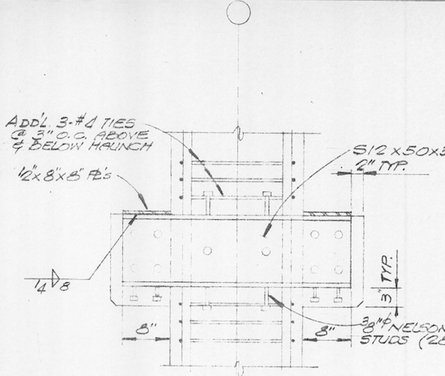
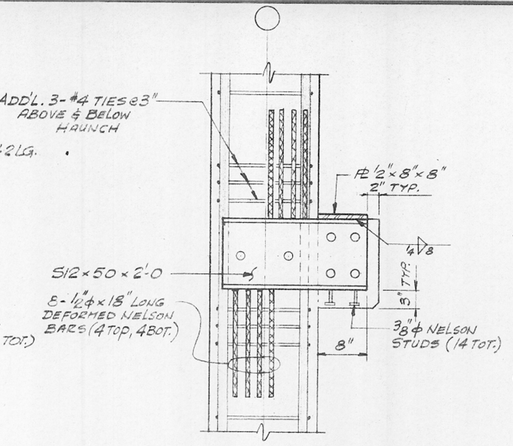
'CONCOURSE PARKING GARAGE — PHASE 4

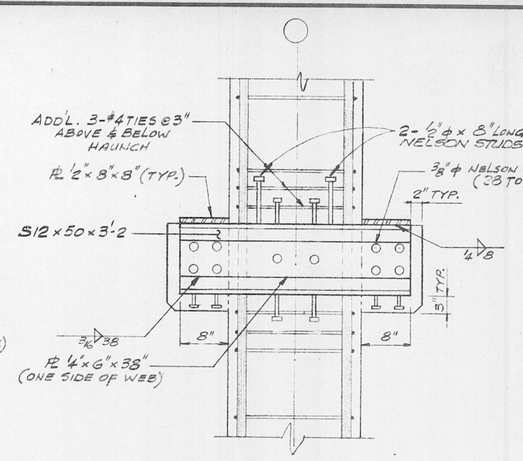
DOCUMENT DATE	DRAWING DESCRIPTION	PROJECT	SHEET
NOV. 2, 1973	BEAM DETAILS	475	S-7



INTERIOR COL'S. — TYP. FLR'S. (1/S8)



EXTERIOR COL'S. — TYP. FLR'S. (2/S8)



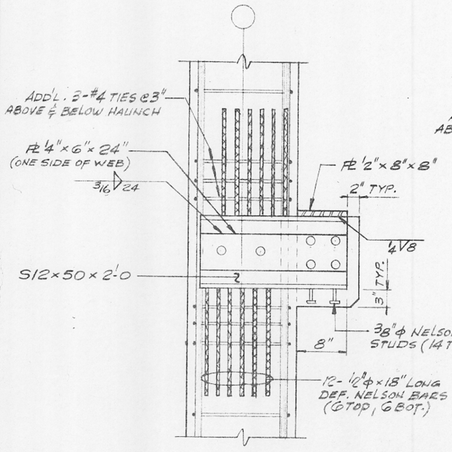
INTERIOR COL'S. — ROOF LEVEL (3/S8)

PRECAST COLUMN SCHEDULE

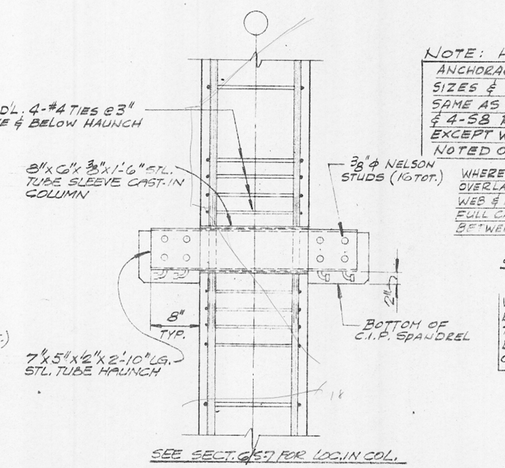
f'c = 5000 PSI

COLUMN MARK	SIZE	REINFORCING	BASE PL	REMARKS & NOTES
A2, A3, A4, A5, A6, A7, A8 A9, A10, A11, A12, A13	18"x18"	4-#9 VERT. #4 TIES @12" O.C.	1 1/8"x22"x26"	FOR ADDITIONAL REINF. AT TOP OF COL'S. SEE DET'S. 9-S8 & 10-S8.
A1.1, A1.14, B1, B14, C1, C14, D1, D14, D1.1, D14, E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13,	18"x 18"	4-#9 VERT. #4 TIES @12" O.C.	1 1/8"x26"x26"	FOR ADDITIONAL REINF. AT TOP OF COL'S. SEE DET'S. 9-S8 & 10-S8
B2, B3, B12, B13, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11. C12, C13. D2, D3, D12, D13	22"x 22"	4-#11 VERT. #4 TIES @12" O.C.	1 3/8"x30"x30"	
B4, B5, B6, B7, B8, B9, B10, B11, D4, D5, D6, D7, D8, D9, D10, D11.	22" x 22"	4-#11 VERT. 4-#7 VERT (2 AT EAST FACE, 2 AT WEST FACE) #4 TIES @12" O.C.	1 3/8"x30"x30"	ADD 2-#8x10'-0 AT TOP FOR COL'S. B4 THRU B11 & D4 THRU D11 ON "SOUTH" & "NORTH" FACE, RESPECTIVELY.

NOTES:
1. ALL COL'S. SHALL BE FULL HEIGHT, SPLICES ARE NOT ALLOWED.
2. ADEQUATE COL. BRACING REQ'D. IN BOTH DIRECTION DURING ERECTION.
3. TIE SPACING SHOULD BE @12" O.C. TYPICALLY, EXCEPT CLOSER SPACING REQ'D. AROUND HAUNCHES, POST-TENSIONING ANCHORAGES, BASE PLATES AND OTHER SPECIAL AREAS —— AS SHOWN ON DWG'S.
4. THE #7 FULL LENGTH VERT. BARS NEED NOT BE WELDED TO BASE PLATES.
5. PROVIDE INSERTS AND PIPE SLEEVES AS SHOWN ON THIS AND OTHER STRUCTURAL, ARCHITECTURAL OR MECHANICAL DWG'S.



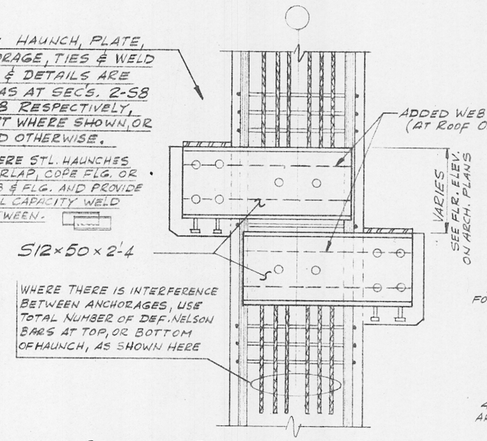
EXTERIOR COL'S — ROOF LEVEL (4/S8)



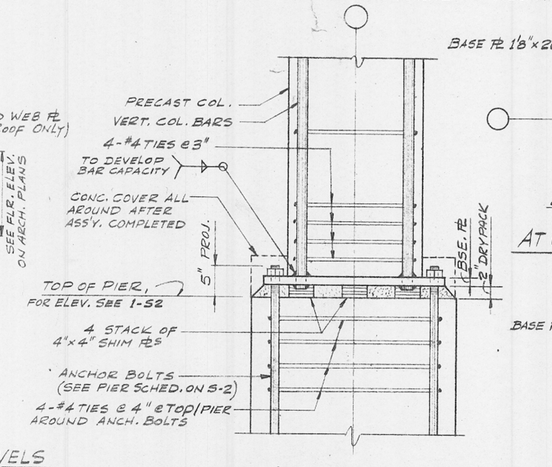
TYP. SPANDRELS — COL. LINES (1) & (14) (5/S8)

NOTE: HAUNCH, PLATE, ANCHORAGE, TIES & WELD SIZES & DETAILS ARE SAME AS AT SEC'S. 2-S8 & 4-S8 RESPECTIVELY, EXCEPT WHERE SHOWN OR NOTED OTHERWISE.

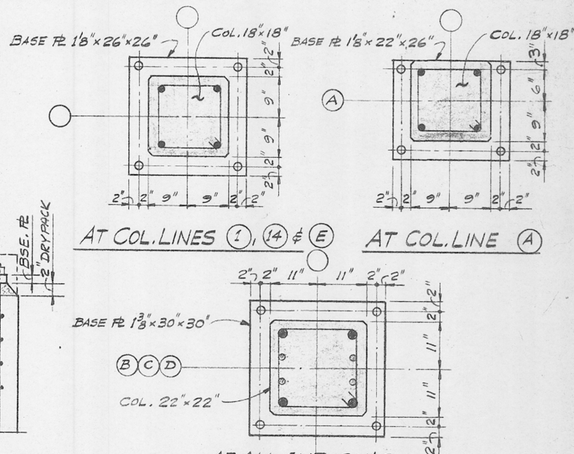
WHERE STL. HAUNCHES OVERLAP, COPE FLG. OR WEB & FLG. AND PROVIDE FULL CAPACITY WELD BETWEEN.



INTERIOR COL'S. — ALL SUPP. LEVELS
COL. LINES (B3) THRU (B12) & (D3) THRU (D12) (6/S8)



TYP. COL. BASE DET. (7/S8)
1"=1'-0

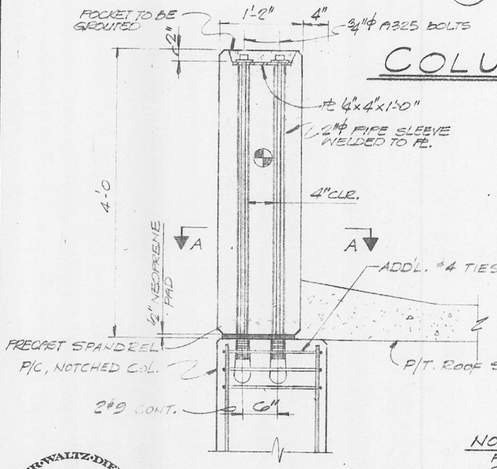


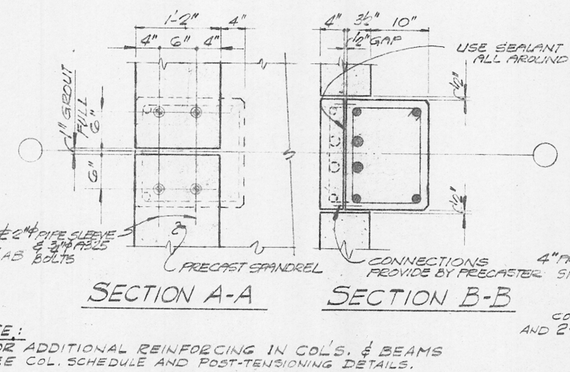
BASE PLATE DETAILS (8/S8)
3/4"=1'-0"

WORK THIS DET. w/ 2-S2 & 6-S2

COLUMN HAUNCH DETAILS

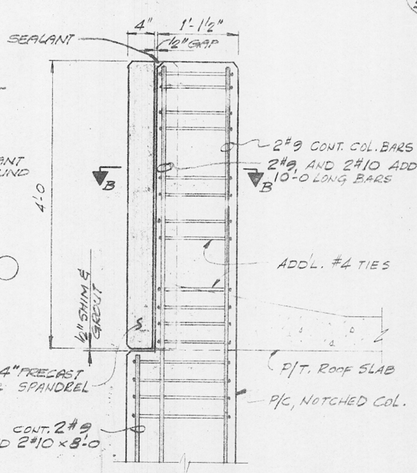
1"=1'-0"





SECTION A-A

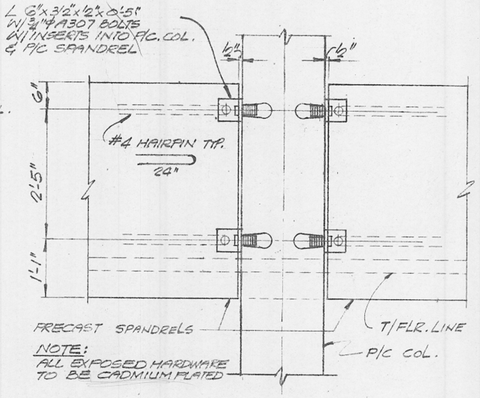
SECTION B-B



NOTE:
FOR ADDITIONAL REINFORCING IN COL'S. & BEAMS SEE COL. SCHEDULE AND POST-TENSIONING DETAILS.

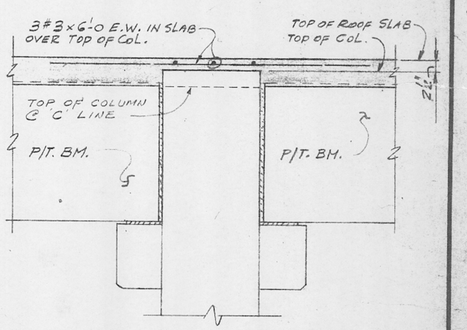
COL. TOP DET. — COL. LINES (1) & (14) (9/S8)
1"=1'-0

COL. TOP DET. — COL. LINES (A) & (E) (10/S8)
1"=1'-0



NOTE:
ALL EXPOSED HARDWARE TO BE CADMIUM PLATED

TYP. SPANDREL TO COL. CONN. (11/S-8)
3/4"=1'-0



DETAIL AT TOP of COL'S. FOR
B2, B3, B13, D2, D3 & D13
C2, C3, C4, C5, C6, C7, C8, C10, C12 & C13

DETAIL (12/S8)
3/4"=1'-0

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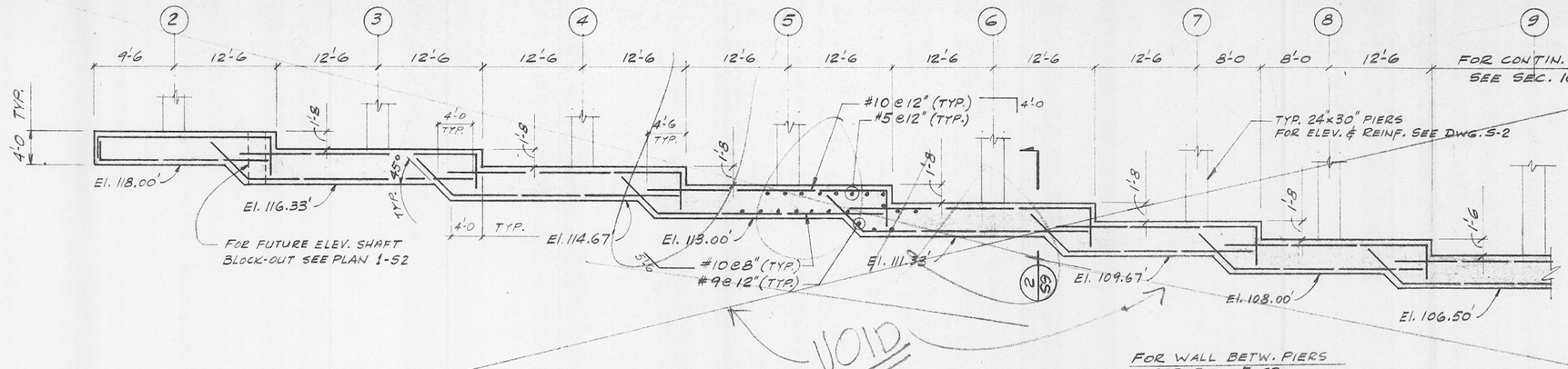
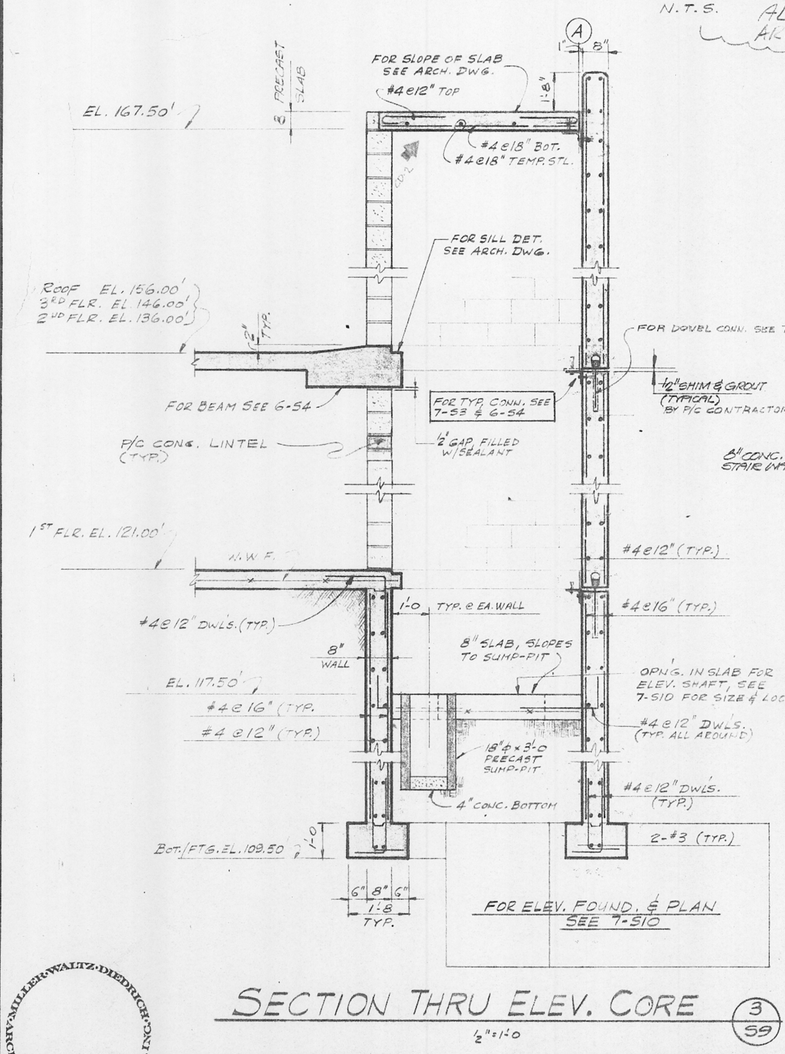
CONCOURSE PARKING GARAGE —— PHASE 4	DOCUMENT DATE	DRAWING DESCRIPTION	PROJECT	SHEET
	NOV. 2, 1973	PRECAST COL. DETAILS	475	S-8



COLUMN & WALL FTG. AT COL. LINE "A"
BETW. COL. LINES "2" & "8"

1/S-9

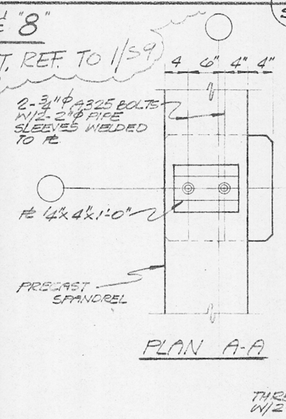
N.T.S. ALL SECT. REF. TO 1/S-9 ARE VOID



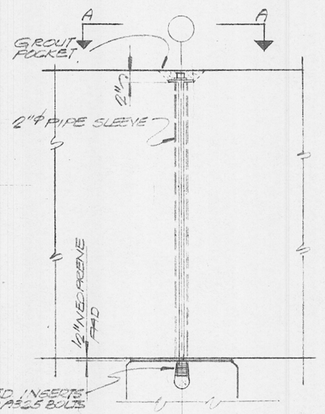
SECTION THRU ELEV. CORE

3/S9

1/2"=1'-0



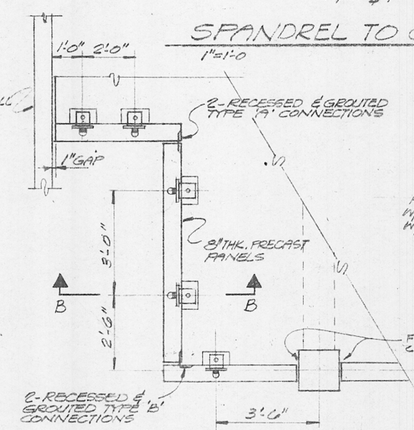
PLAN A-A



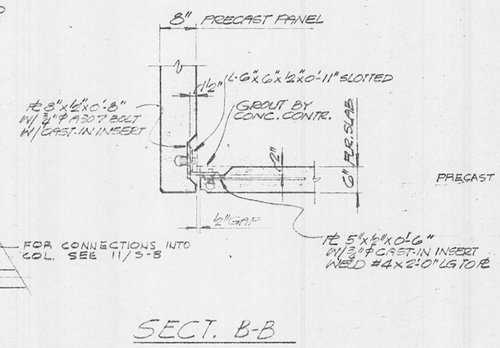
SPANDREL TO COL. TOP CONN.

4/S-9

1"=1'-0



SECT. B-B



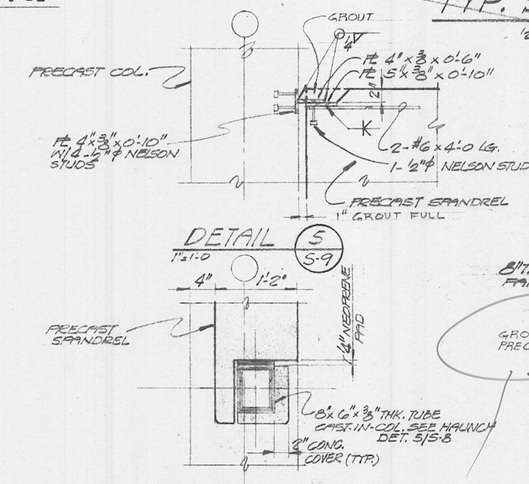
TYPE 'A' CONNECTION:
USE PL 4"x3/8"x 0'-11" W/2-3/4"ϕ A307 BOLTS INTO CAST-IN INSERTS.

TYPE 'B' CONNECTION:
USE L 6"x6"x1/2"x0'-9" LG. W/2-3/4"ϕ A307 BOLTS INTO CAST-IN INSERTS.

PRECAST PANEL CONNECTIONS

8/S-9

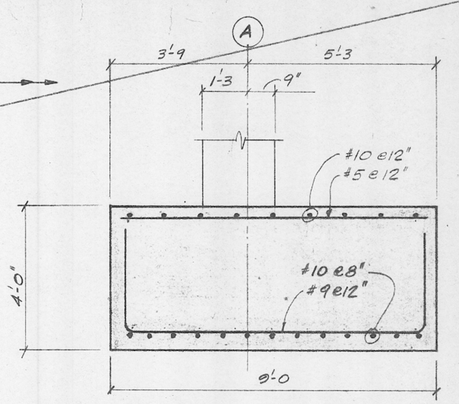
1/2"=1'-0"



TYP. SECTION

2/S9

1/2"=1'-0"



DETAIL

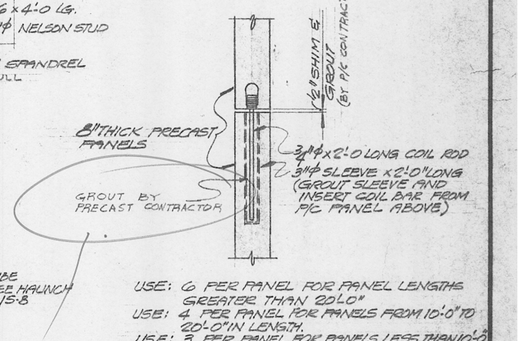
5/S-9

1"=1'-0

DETAIL

6/S-7

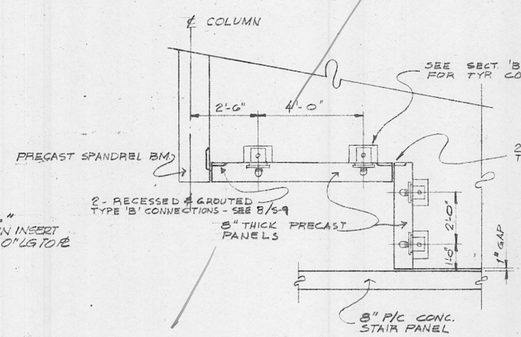
1"=1'-0"



TYP. PRECAST WALL PANEL CONN.

7/S-9

3/4"=1'-0"



PRECAST PANEL CONNECTIONS

9/S-9

1/2"=1'-0"

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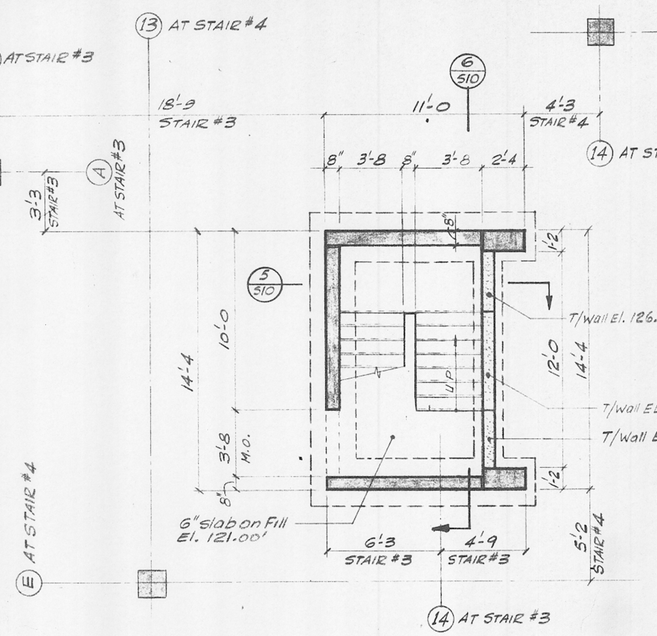
CONCOURSE PARKING GARAGE ——— PHASE A

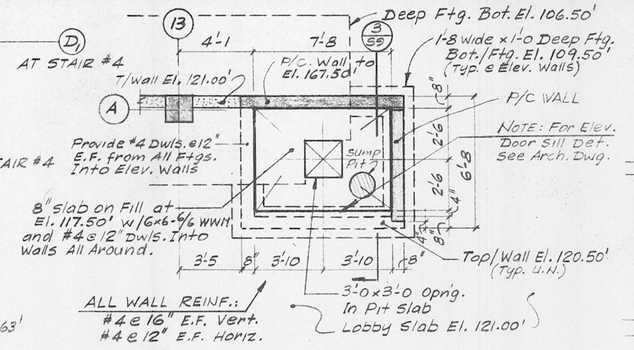
CHANGE DESCRIPTION-2	DOCUMENT DATE	DRAWING DESCRIPTION	PROJECT	SHEET
2-2 PHASE-3 10-24-73	NOV 2, 1973	SECTIONS	475	S-9



GROUND LEVEL & FOUND. PLAN STAIRS #3 & #4

1/510

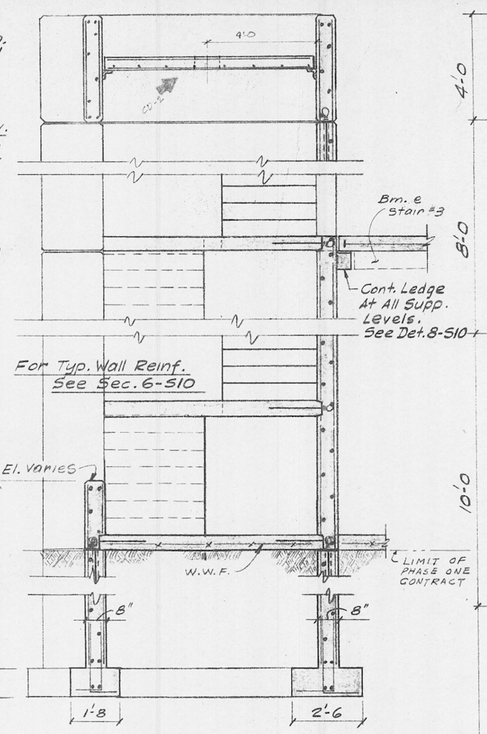
4"=1'-0"



ELEVATOR FOUND., PIT & GROUND LEVEL PLAN

7/510

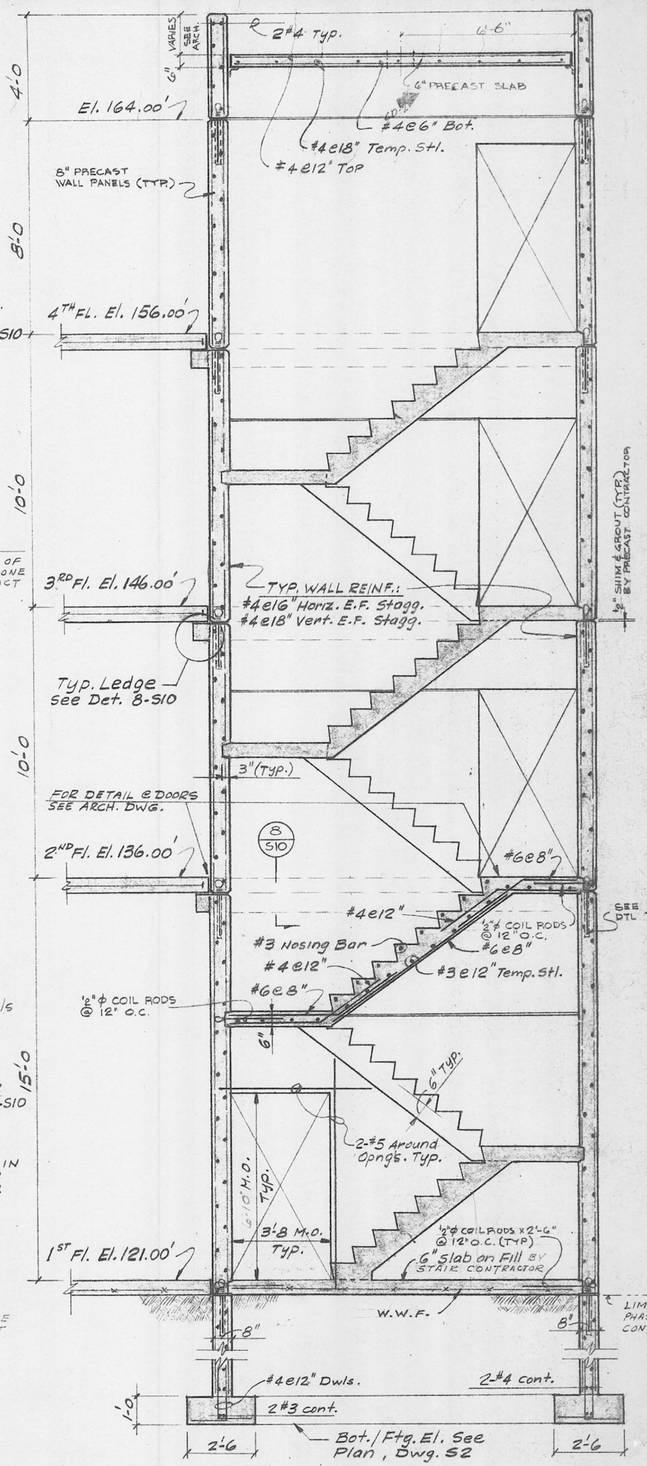
4"=1'-0"



SECTION

5/510

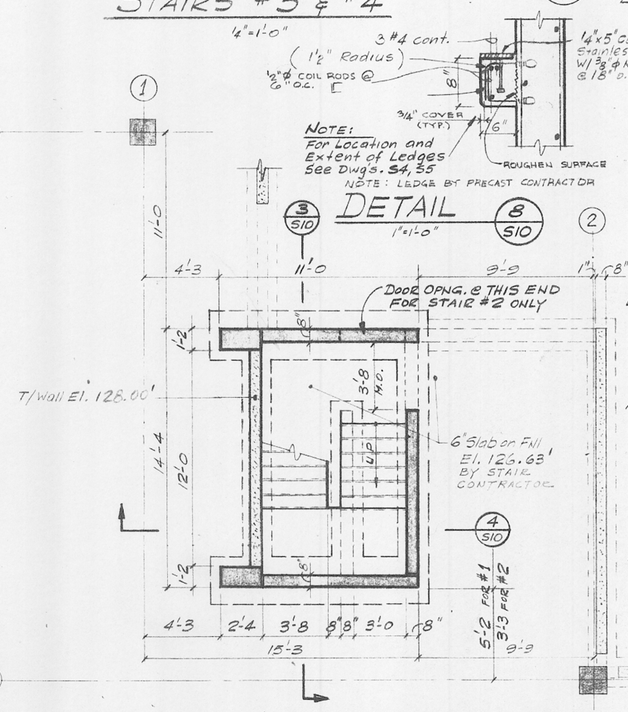
3/8"=1'-0"



SECTION

6/510

3/8"=1'-0"



GROUND LEVEL & FOUND. PLAN – STAIR #1 (AS SHOWN)

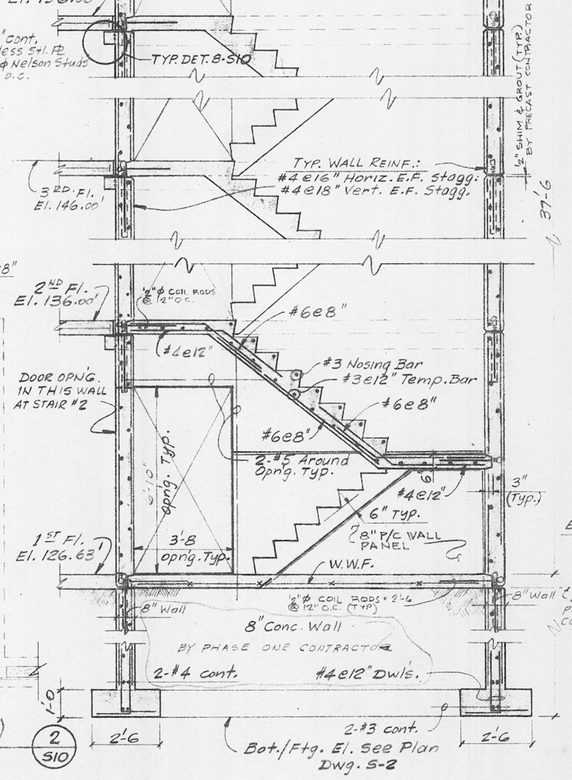
GROUND LEVEL & FOUND. PLAN – STAIR #2 (OPP. HAND AND AS NOTED)

4"=1'-0"

DETAIL

3/510 8/510

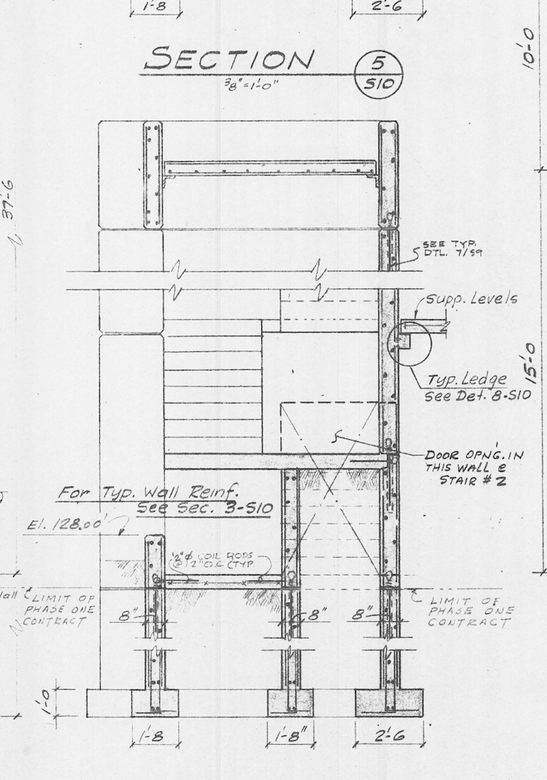
1"=1'-0"



SECTION

3/510

3/8"=1'-0"



SECTION

4/510

3/8"=1'-0"

MILLER-WALZ-DIEDRICH-NOLL ARCHITECTS & ASSOCIATES, INC.
777 N. JEFFERSON ST. ■ MILWAUKEE ■ WI. ■ 53202 ■ 414-271-1200

DRAWN BY ■ CHECKED BY ■ APPROVED BY ■

CONCOURSE PARKING GARAGE — PHASE 4

CHANGE DESCRIPTION-4 CD-2 PHASE 2 10-24-73

DOCUMENT DATE	DRAWING DESCRIPTION	PROJECT	SHEET
NOV. 2, 1973	STAIR #1, #2, #3 & #4	475	S-10