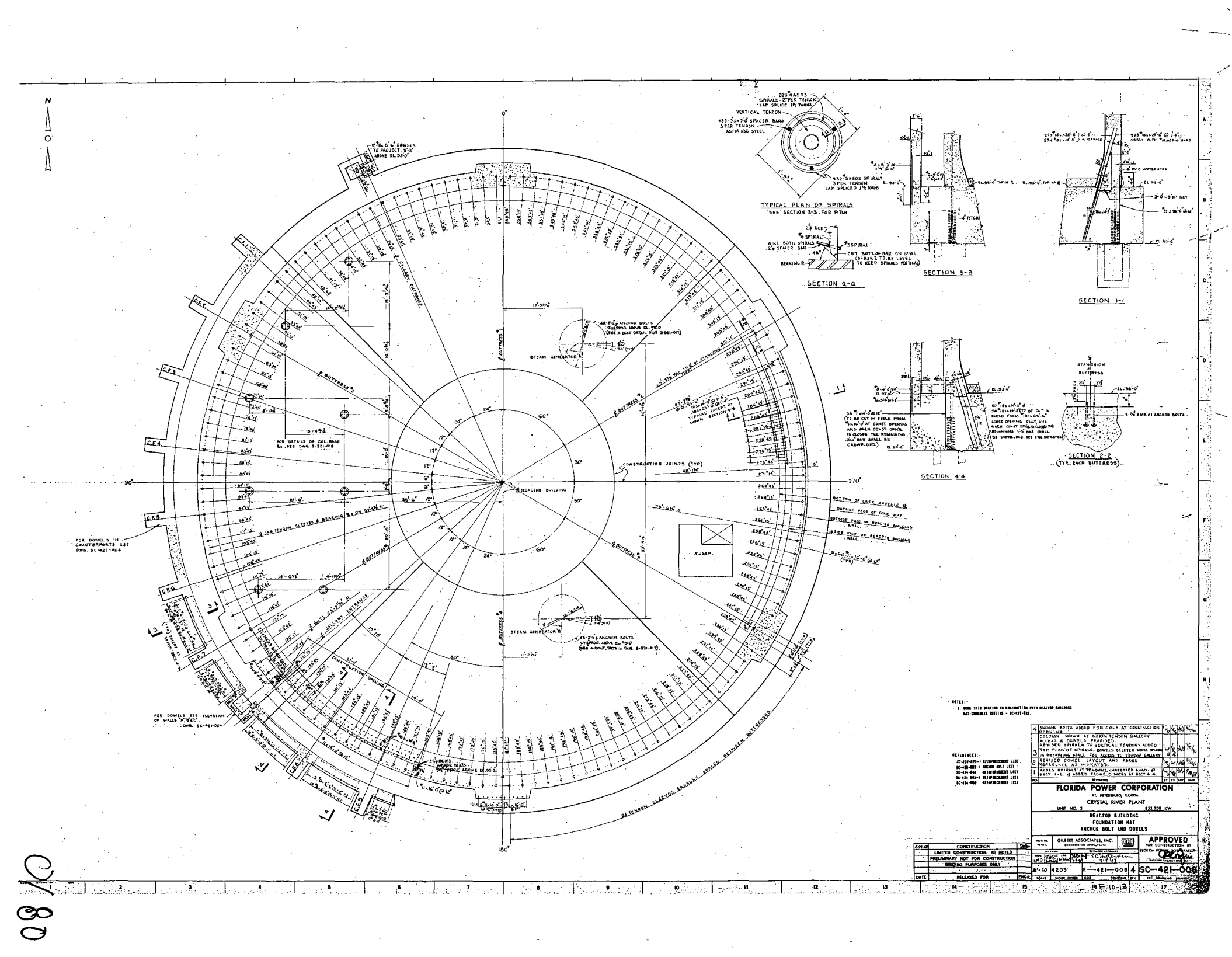


NOTES:-
1. WORK THIS DRAWING IN CONJUNCTION WITH REACTOR BUILDING MAT-CONCRETE OUTLINE - SC-421-005.

REFERENCES:-
SC-424-829-1 REINFORCEMENT LIST
SC-424-848 REINFORCEMENT LIST
SC-424-984-1 REINFORCEMENT LIST
SC-424-998 REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP	DATE
4	ANCHOR BOLTS ADDED FOR COLS AT CONSTRUCTION OPENING				
3	COLUMN SHOWN AT NORTH TENDON GALLERY W.DOG'D 4 DOWELS PROVIDED. REVISED SPIRALS TO VERTICAL TENDONS ADDED TYP. PLAN OF SPIRALS. DOWELS DELETED FROM OPNG. IN RETAINING WALL FOR ACCESS TO TENDON GALLERY				
2	REVISED DOME LAYOUT AND ADDED REFERENCE AS INDICATED.				
1	ADDED SPIRALS AT TENDONS, CORRECTED QUAN. @ SECT. 1-1. & ADDED CADWELD NOTES AT SECT. 4-4				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
FOUNDATION MAT
ANCHOR BOLT AND DOWELS

8-21-69	CONSTRUCTION	SWD	
	LIMITED CONSTRUCTION: AS NOTED		
	PRELIMINARY NOT FOR CONSTRUCTION		
	BIDDING PURPOSES ONLY		
DATE	RELEASED FOR	ENGR.	

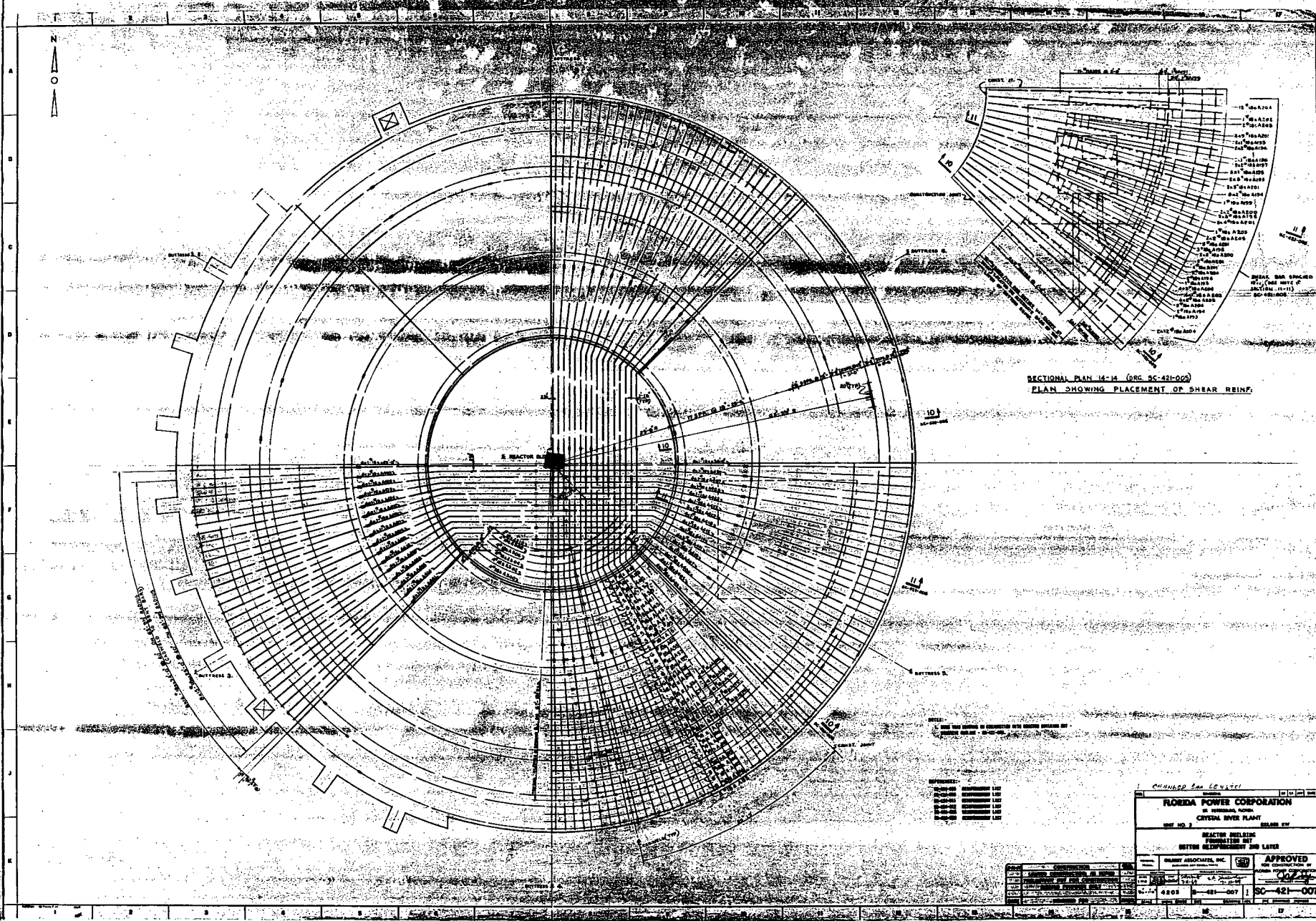
GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

LEVEL	SCALE	WORK ORDER	DRAWING	DRAWING SEQ.	PPC DRAWING	REVISION
1	1"=50'	4203	E-421-008	4	SC-421-008	

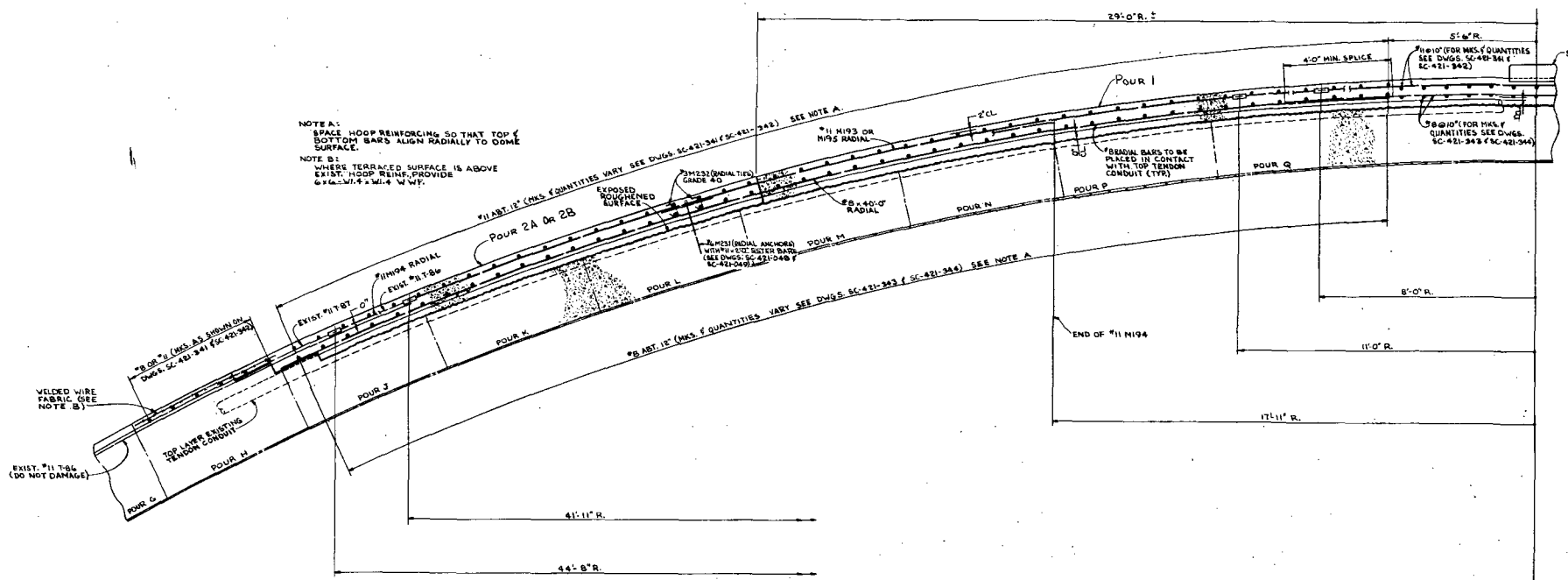
16 E-10-13

C/80

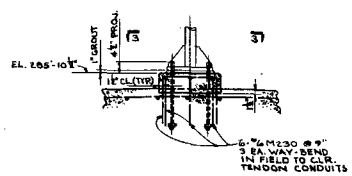


SECTIONAL PLAN 14-14 (DRG. SC-421-005)
PLAN SHOWING PLACEMENT OF SHEAR REINF.
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING
FOUNDATION MAT
BOTTOM REINFORCEMENT 2ND LAYER
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
SC-421-007

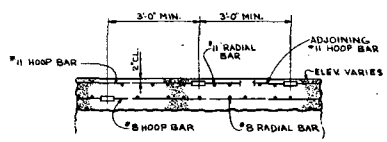
PLAN OF TOP REINF. IN SUMP
PLAN OF 2nd LAYER REINF. AT SUMP
PLAN OF BOTTOM REINF IN SUMP
FIELD NOTE: SHIFT TANGENTIAL BARS SO THE VERTICAL LEGS DO NOT REST ON THE BENDING RADIUS OF THE BOTTOM RADIAL BARS. ALL TANGENTIAL BARS MUST BE LEVEL.
FOR PLACING OF BARS AT BOLTS FOR STEAM GENERATORS "A"&"B" SEE DWG. SC-400-015.
STEAM GENERATOR "A"
STEAM GENERATOR "B"
NOTE: RADIAL BARS MAY BE COLD BENT OR RELOCATED TO CLEAR TENDON SLEEVES. BUT IN NO CASE SHALL THE SPACING OF THE BARS BE SMALLER THAN ONE BAR DIAMETER.
NOTE: BARS PLACE AT ALTERNATE RADIAL BARS OF THE 2nd LAYER OF BOTTOM REINF. (EACH SET CONSISTS OF 13 BARS).
SECTION 11-11
TENDON GALLERY
WATER STOP
NOTE: SHEAR BAR SPACING MAY BE ALTERED SLIGHTLY TO CLEAR PIPING
SECTION 10-10 (TYP)
SECTION 12-12
(TYP. @ RETAINING WALL)
TYPICAL ARRANGEMENT
BUTTRESS 1
BUTTRESS 2
BUTTRESS 3
BUTTRESS 4
BUTTRESS 5
BUTTRESS 6
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
855,000 KW
REACTOR BUILDING
FOUNDATION MAT
TOP REINFORCEMENT 1ST & 2ND LAYER
GILBERT ASSOCIATES, INC.
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
7-16-69
4203
E—421—005
SC-421-00
E-10-13



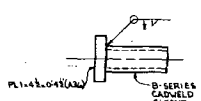
SECTION 1-1



DETAIL "A"

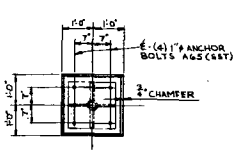


SECTION 2-2

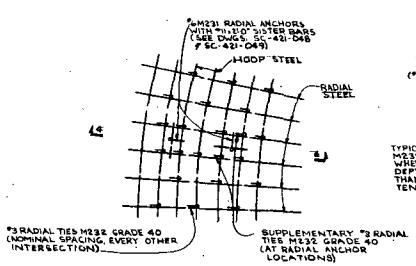


DETAIL "B"

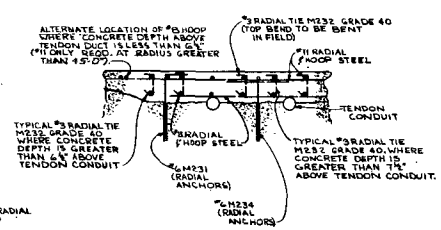
NOTE:
1 GROOVE SAWCUT IN FIELD BEFORE WELDING TO PL



SECTION 3-3



PLAN
ADDITIONAL RADIAL REINF.



SECTION 4-4

NOTES:
1. FOR NOTES AND REFERENCES, SEE DWG. SC-421-050.

NO.	REVISIONS	BY	CK	APP	DATE
1	ADDED WELDED WIRE FABRIC AND RELATED NOTE B TO SECT. 1-1, INDICATED RADIAL TIES AND ANCHORS ON SECT. 1-1 AND ADDED PLAN - ADDITIONAL RADIAL REINF. & SECT. 4-4 AS INDICATED (4 PLACES)				4/8/76

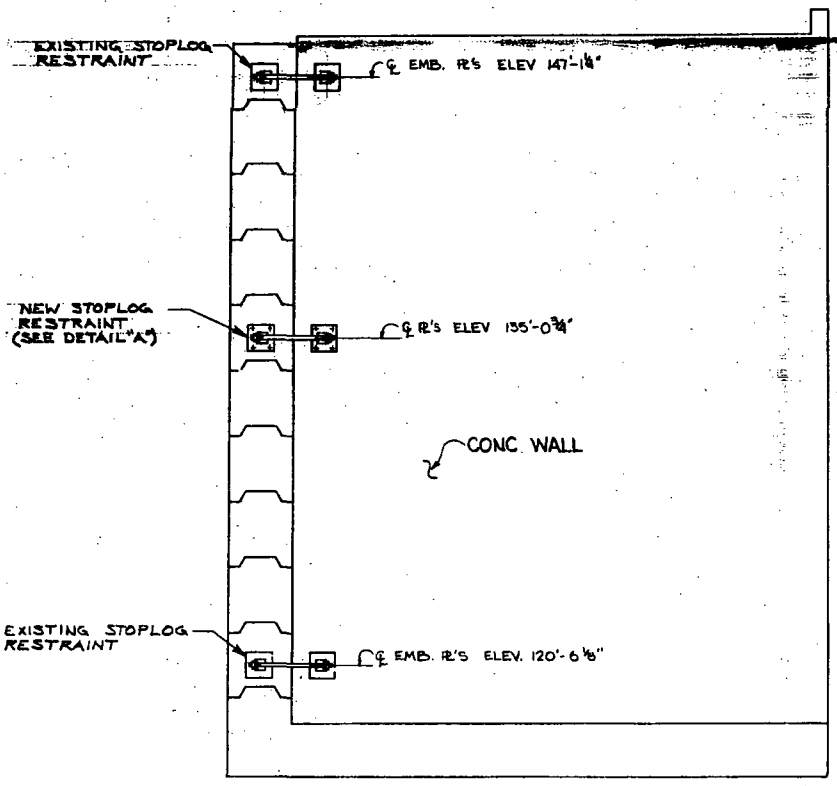
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW
REACTOR BUILDING - CONCRETE DOME REPAIR
DOME REINFORCEMENT
SECTIONS & DETAILS

GILBERT ASSOCIATES, INC.

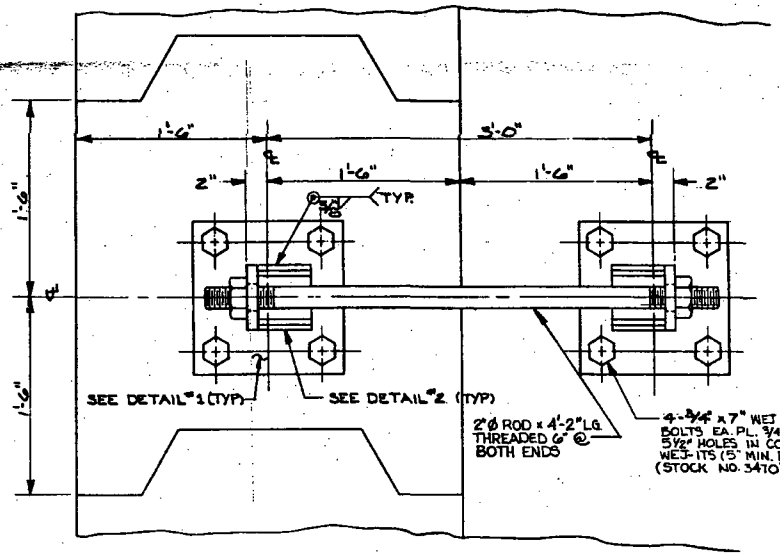
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

22E-2M	CONSTRUCTION				
8/4"=1'-0"	LIMITED CONSTRUCTION AS NOTED				
	PRELIMINARY NOT FOR CONSTRUCTION BIDDING PURPOSES ONLY	DWR	RLK	WMM	REL
DATE	RELEASED FOR	ENGR	1/4"=1'-0"	4203	E-421-345	1	SC-421-345
			SCALE	WORK ORDER	SIZE	DRAWING	REV.	FPC DRAWING NUMBER

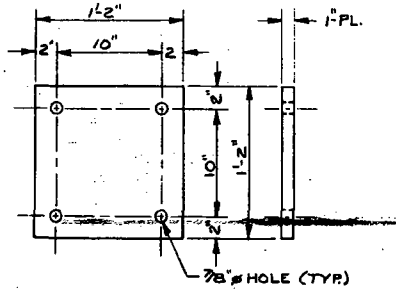
E-10-15 22



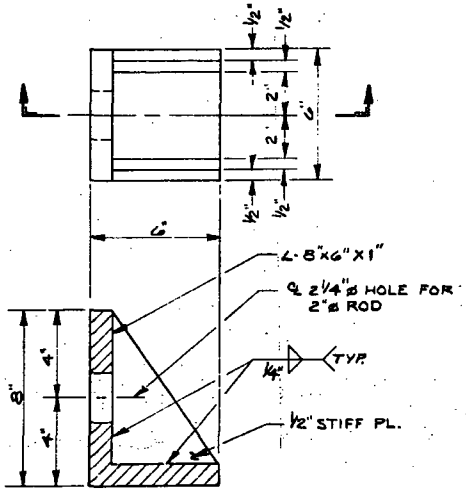
EAST ELEVATION (AS SHOWN)
WEST ELEVATION (OPP HAND)
SCALE 1/4" = 1'-0"



DETAIL "A"
SCALE: 1½" = 1'-0"



DETAIL "1
SCALE: 1½" = 1'-0"



DETAIL "2
SCALE: 3" = 1'-0"

NOTES:

1. ALL STEEL WORK SHALL COMPLY WITH AISC MANUAL OF STEEL CONSTRUCTION, EIGHTH EDITION AND CODE OF STANDARD PRACTICE.
2. STEEL PLATES, STEEL ROD TO BE ASTM-A36
3. STEEL NUT TO CONFORM TO ANSI B 18·2·2-1972
4. ALL WELDING SHALL COMPLY WITH REQUIREMENTS OF THE AISC & OF THE AMERICAN WELDING SOCIETY D1.1-79

REF. DWG. # SC-421-047

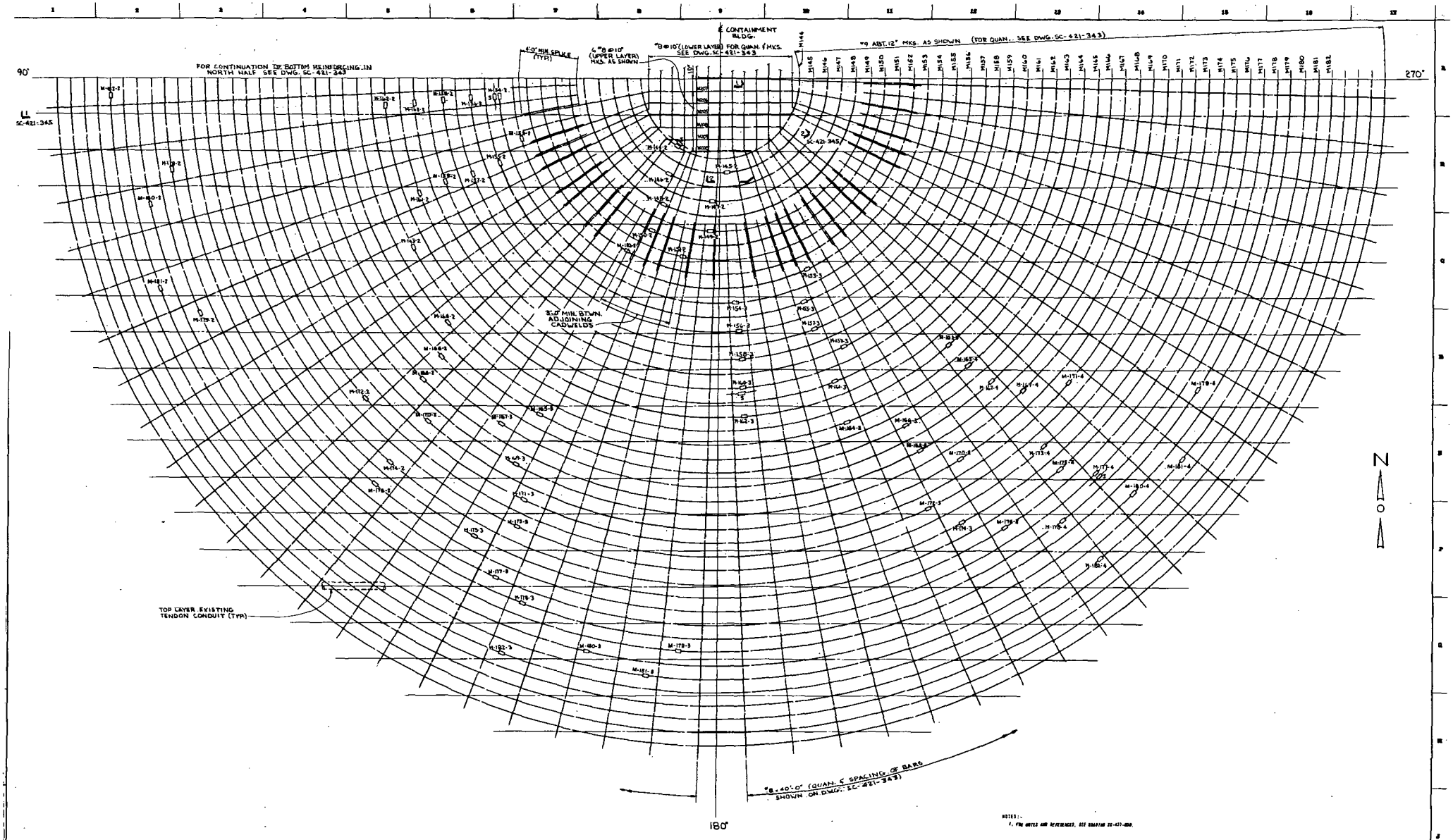
NO.	DESCRIPTION	BY	CHK.	APP.	DATE
1	AS BUILT PER MAR 80-7-20				

PRODUCTION ENGINEERING DEPARTMENT

REACTOR BLDG. EQUIPMENT HATCH STOPLOG RESTRAINT

GAI

DRAWN BY CR	DATE 8/4/80	SCALE AS NOTED	
CHECKED BY	DATE	DISCIPLINE	
APPROVED BY	DATE	PLANT/UNIT	
DATA PROCESS NO.		SHEET	
DWG. NO. SC-421-066-1			



NOTES:
1. FOR NOTES AND REFERENCES, SEE DRAWING SC-421-400.

BOTTOM REINFORCING PLAN
SOUTH HALF

8-26-76	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
8/29/76	PRELIMINARY NOT FOR CONSTRUCTION	DR
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

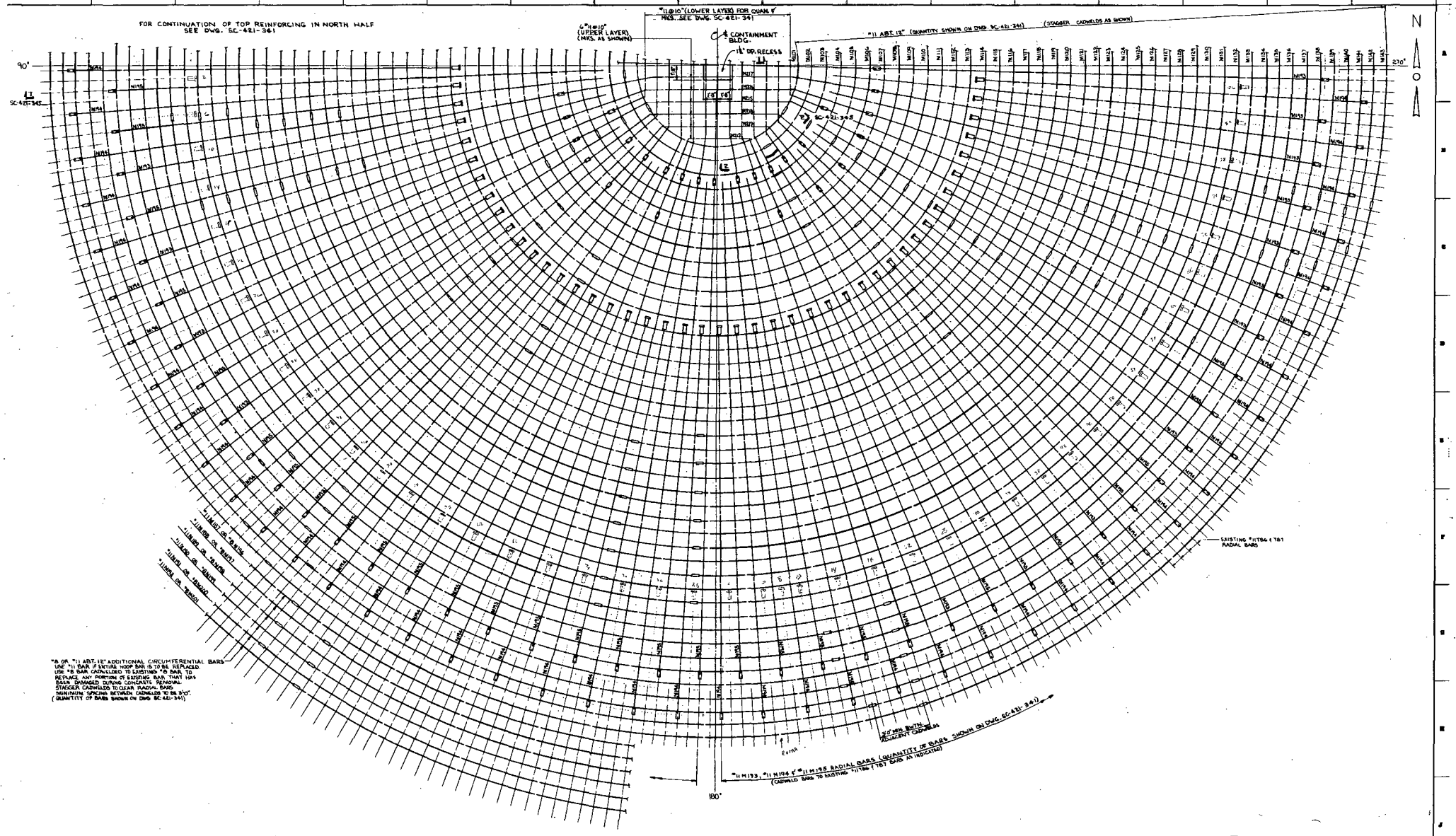
REACTOR BUILDING - CONCRETE DOME REPAIR
DOME REINFORCEMENT
SOUTH HALF - BOTTOM REINFORCEMENT

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	DRAWING NO.	REV	DRAWING NUMBER
1/2" = 1'-0"	4203	E-421-344	0 SC-421-344

E-10-15



NOTE:-
FOR ADDITIONAL RADIAL REINF. SEE PLAN ON DWG. SC-421-345

TOP REINFORCING PLAN
SOUTH HALF

NOTES:-
1. FOR NOTES AND REFERENCES, SEE DRAWING SC-421-050.

NO.	REVISIONS	BY	CK	APP	DATE
1	ADDED NOTE AS IND.	RLK	TJ	RW	4/14/76

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 2 — 855,000 KW

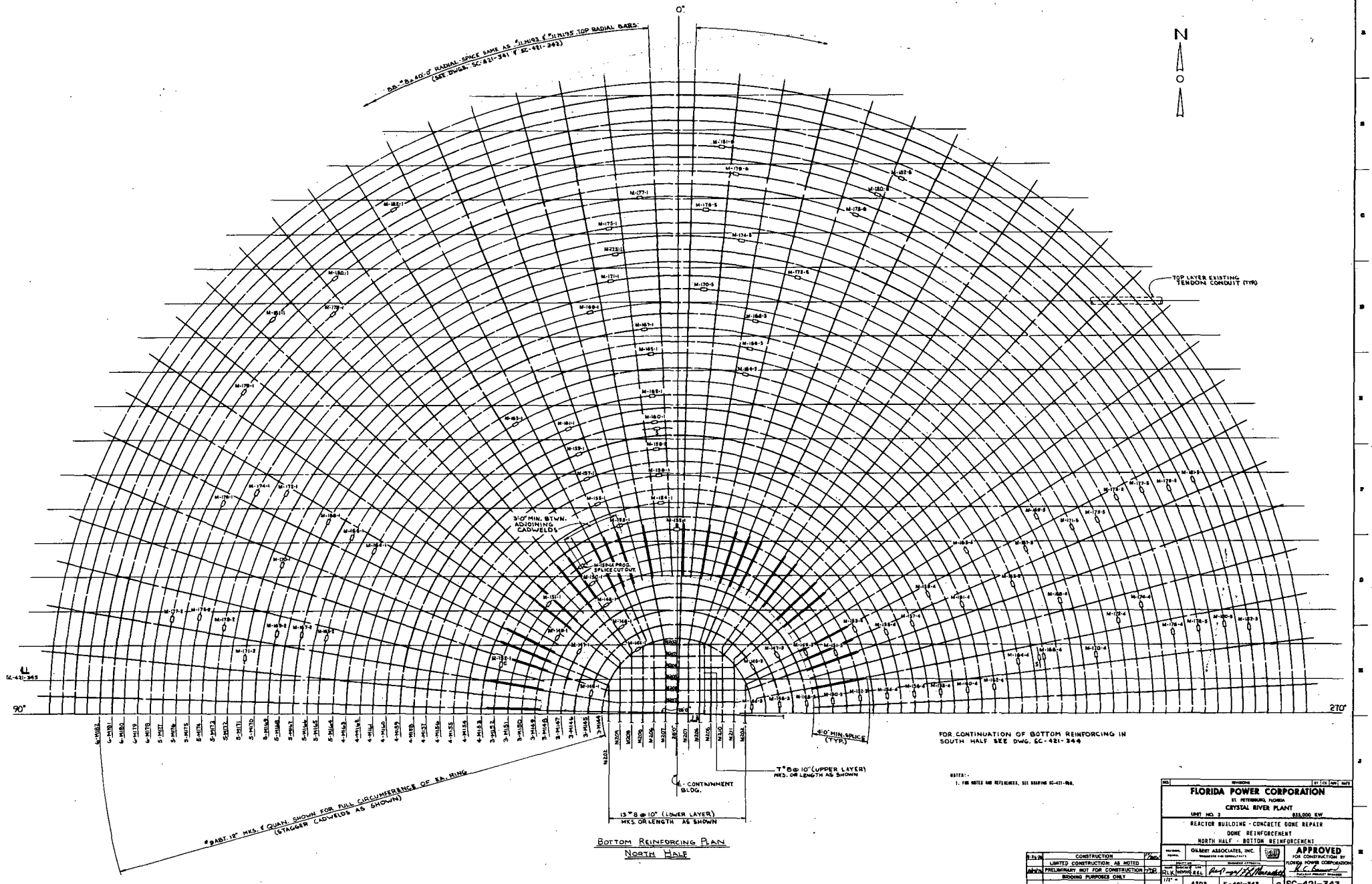
REACTOR BUILDING - CONCRETE DOME REPAIR
DOME REINFORCEMENT
SOUTH HALF - TOP REINFORCEMENT

GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
VALLEY PROJECT MANAGER

DATE	RELEASED FOR	ENGR.
8/26/76	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
8/26/76	PRELIMINARY NOT FOR CONSTRUCTION	TTR
	BIDDING PURPOSES ONLY	

SCALE: 1/4"=1'-0" | WORK ORDER: 4203 | SIZE: E-421-342 | DRAWING NO.: 1 | SC-421-342
FPC DRAWING NUMBER: E-10-15



Bottom Reinforcing Plan
North Half

NOTES:-
1. FOR NOTES AND REFERENCES, SEE DRAWING SC-421-1166.

NO.	REVISIONS	BY	CK	APP	DATE
3-24-76	CONSTRUCTION				
2-17-76	LIMITED CONSTRUCTION: AS NOTED				
1-27-76	PRELIMINARY NOT FOR CONSTRUCTION				
	BIDDING PURPOSES ONLY				

DATE RELEASED FOR ENGR. M.H.S. MODEL ZONES DES. DRAWING KEY FPC DRAWING NUMBERS

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW
REACTOR BUILDING - CONCRETE DOME REPAIR
DOME REINFORCEMENT
NORTH HALF - BOTTOM REINFORCEMENT

GILBERT ASSOCIATES, INC. — ENGINEERS AND CONSULTANTS

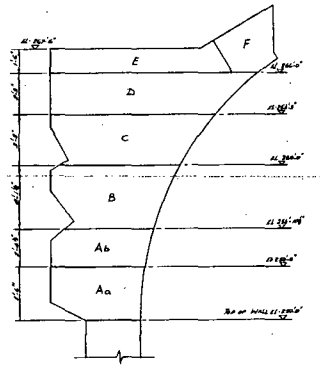
DESIGNED M.H.S. | DRAWN R.L.K. | CHECKED M.H.S. | E.E.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
K.C. Bowers
NUCLEAR PROJECT ENGINEER

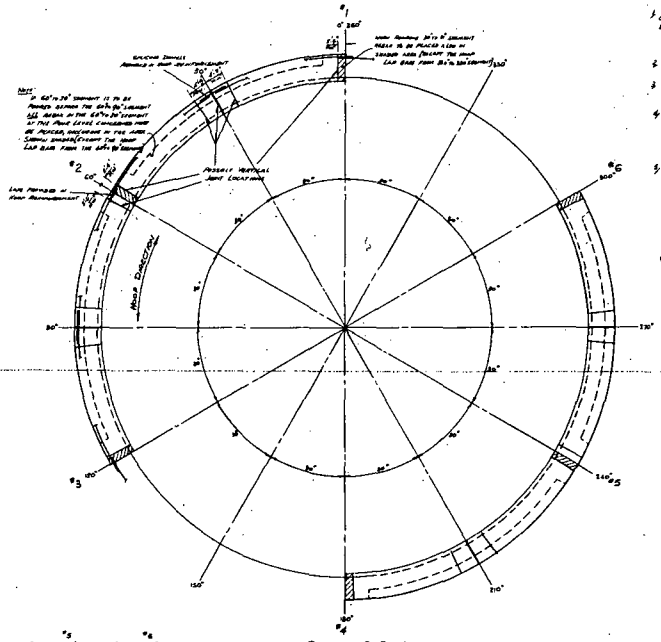
DATE 1/27/76 | JOB NO. 4203 | DES. E-421-343 | DRAWING NO. SC-421-343 | REV. 0

T.E. 84218-171

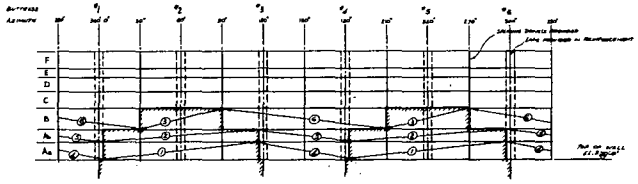
E-10-15



TYPICAL SECTION



PLAN ON POUR 'Ab'
(ASSUMING WALLS NOT CONSTRUCTED UP TO EL 250'-0" IN SEGMENTS 300° TO 360° & 120° TO 180°)



STRETCH ELEVATION (NOT TO SCALE)

POURING SEQUENCE RULES

1. a) ALL POURS ARE TO BE MADE IN 30° OR 60° SEGMENTS.
   b) WITHIN A GREEN POUR LEVEL THE SEGMENTS MAY BE POURED IN ANY SEQUENCE, PROVIDED A MINIMUM OF THREE HAS ELAPSED BETWEEN ADJACENT SEGMENTS TO REDUCE THE EFFECTED SHRINKAGE.
2. NO COMBINING OF POURS IS PERMITTED THAT WILL INCREASE THE NET POUR HEIGHT OF CONCRETE.
3. POUR HEIGHTS MAY BE ADJUSTED A MINIMUM OF 24" LOCALLY AROUND THE TENDON PROCESS IN ORDER TO STREAMLINE THE PROPOSED L. JOINT PACE.
4. IF RING GIRDER CONCRETING IS COMMENCED BEFORE WALLS HAVE BEEN COMPLETED UP TO EL 250'-0 BETWEEN 0°-300° & 180°-120°, CONCRETING SHALL BE LIMITED TO TO THE JOINTS ① THRU ② SHOWN BELOW ON THE STRETCH ELEVATION. ON COMPLETION OF WALLS CONCRETING SHALL THEN PROCEED FROM ① THRU ⑥.
5. a) THERE SHALL NOT BE MORE THAN TWO POUR HEIGHTS DIFFERENCE BETWEEN THE LOWEST CONCRETED SEGMENT & THE HIGHEST ANYWHERE AROUND THE RING GIRDER EXCEPT AS DESCRIBED IN 4.
   b) STAPPED CONSTRUCTION MAY BE USED BUT THERE MUST BE A MINIMUM OF 60" BETWEEN OUTWARD STEPS EXCEPT UNDERDESCRIBED IN 4.

GENERAL NOTES:-
1. THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF DETERMINING THE SEQUENCE OF POURING USING THE RULES 1 THRU 5 ABOVE.
2. FOR FULL DETAILS AND DIMENSIONAL POSITION OF JOINTS SEE RING GIRDER PLAN AND SECTIONS DETAIL DRAWINGS.

FOR GENERAL NOTES & REFERENCES SEE DRAWING SC-421-301.

NO.	REVISIONS	BY	CK	APP	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 853,000 KW

REACTOR BUILDING
RING GIRDER
CONCRETE POURING SEQUENCE

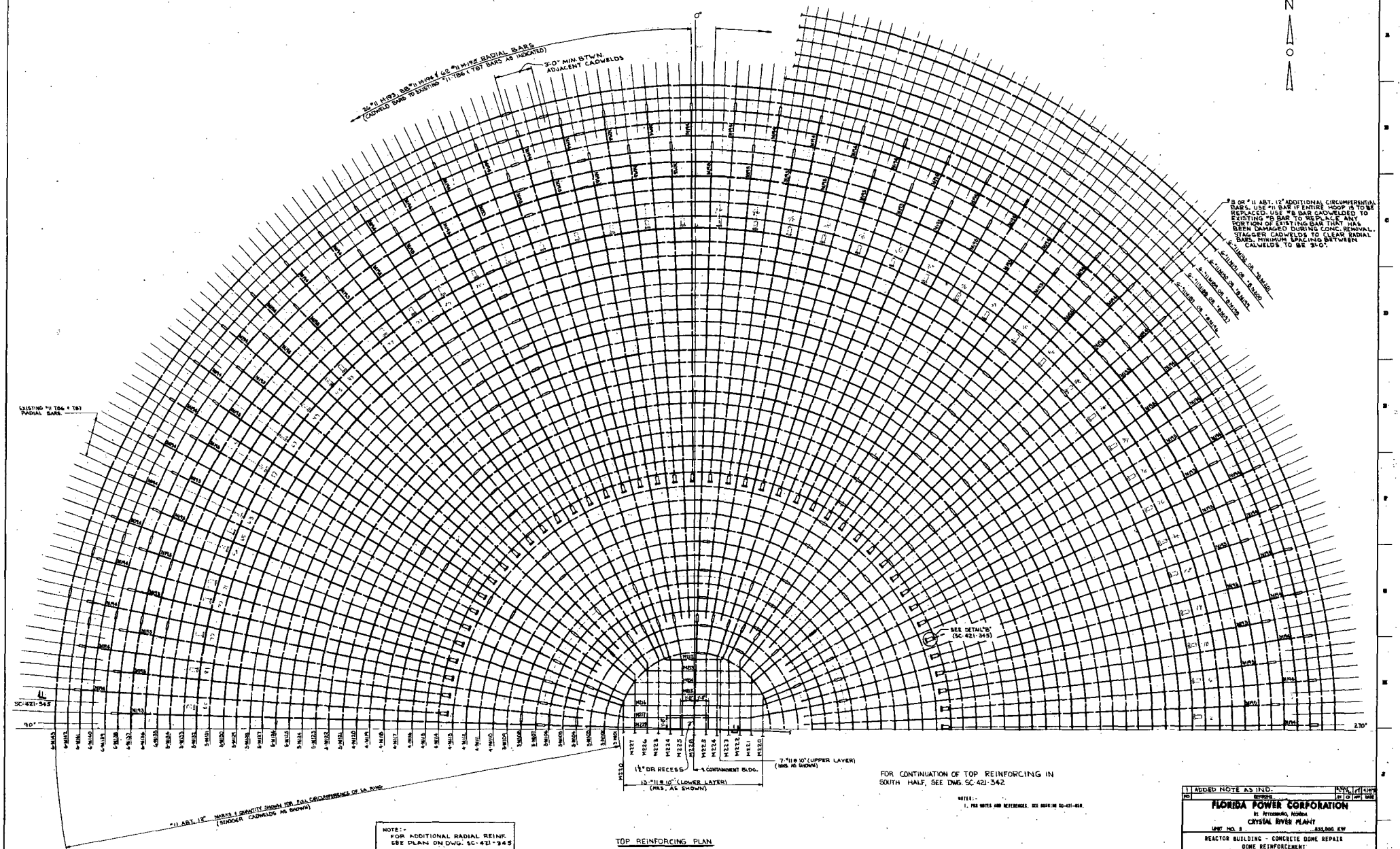
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	RELEASED FOR	ENGR.
1-15-75	CONSTRUCTION	JB
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

SCALE	DRAWN	CHECKED	DATE	DRAWING	REV.	FPC DRAWING NUMBER
NO SCALE	4203			E-421-336	0	SC-421-336

E-10-B 17



FOR CONTINUATION OF TOP REINFORCING IN SOUTH HALF, SEE DWG. SC-421-342

NOTES:-
1. FOR NOTES AND REFERENCES, SEE DRAWING SC-421-459.

NOTE:-
FOR ADDITIONAL RADIAL REINF. SEE PLAN ON DWG. SC-421-345

TOP REINFORCING PLAN
NORTH HALF

NO.	REVISIONS	BY	CK	APP	DATE
1	ADDED NOTE AS IND.				4/9/75

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING - CONCRETE DOME REPAIR
DOME REINFORCEMENT
NORTH HALF - TOP REINFORCEMENT

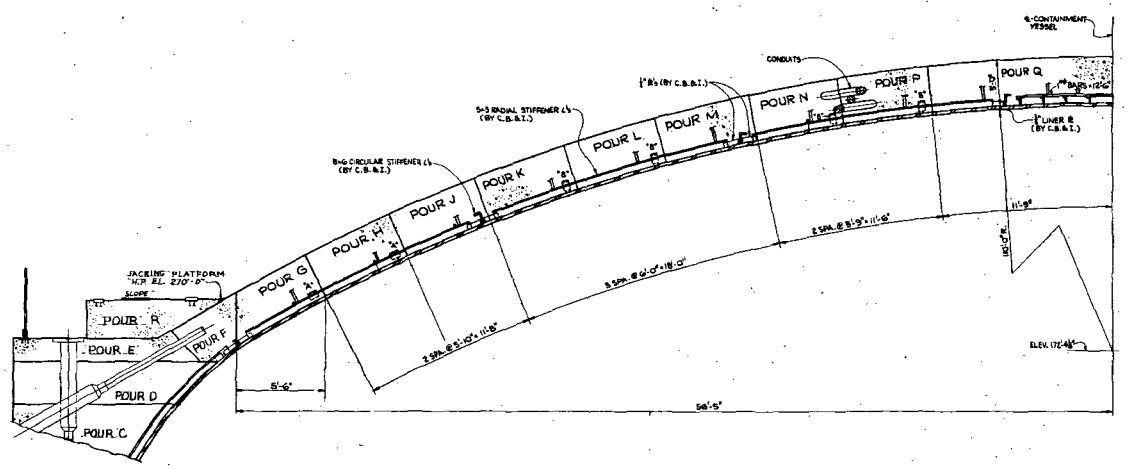
GILBERT ASSOCIATES, INC. — ENGINEERS AND CONSULTANTS

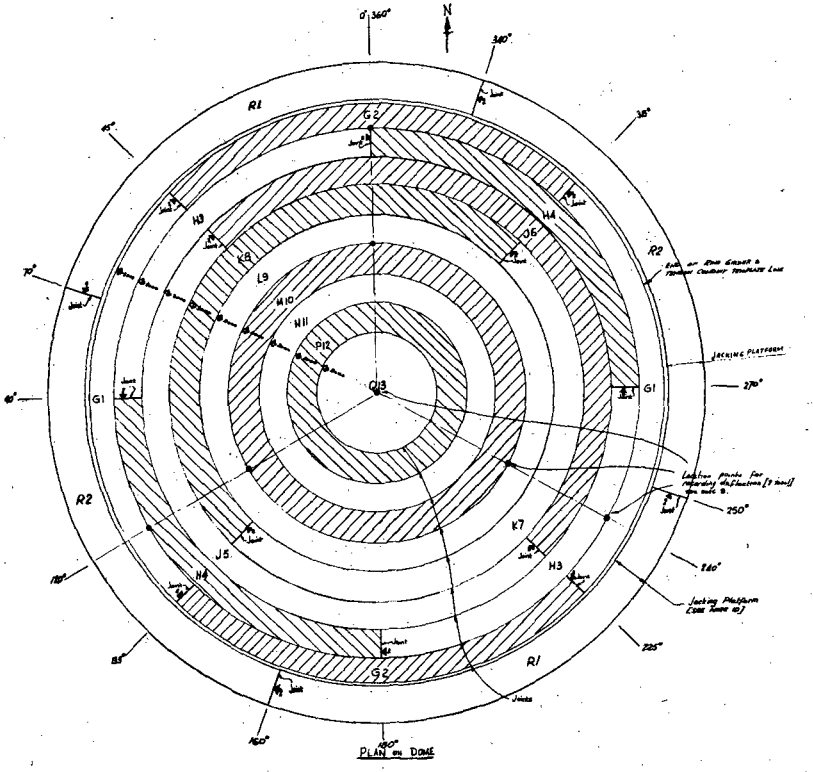
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DRAWING NO.
SEA	4-9-75	LEL		1"=1'-0"	SC-421-341

A	CONSTRUCTION	7/1/75
B	LIMITED CONSTRUCTION AS NOTED	
C	PRELIMINARY NOT FOR CONSTRUCTION	7/1/75
D	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ERDR

E-10-15





POUR DESIGNATION	WIDTH OF POUR	ANGULAR LOCATION	APPROX. CU. YDS. CONCRETE VOLUME
G1	6'-0½"	45°-115° & 225°-315°	2 @ 49 = 98 CU YDS
G2	6'-0½"	135°-295° & 315°-45°	2 @ 49 = 98 CU YDS
H3	5'-10"	0°-90° & 180°-270°	2 @ 43 = 86 CU YDS
H4	5'-10"	90°-180° & 270°-360°	2 @ 43 = 86 CU YDS
J5	5'-10"	45°-225°	86 CU YDS
J6	5'-10"	225°-45°	86 CU YDS
K7	6'-0"	135°-225°	76 CU YDS
K8	6'-0"	225°-135°	76 CU YDS
L9	6'-0"	0°-360°	129 CU YDS
M10	6'-0"	0°-360°	105 CU YDS
M11	5'-9"	0°-360°	82 CU YDS
P12	5'-9"	0°-360°	56 CU YDS
Q13	11'-5" DIAM.	0°-360°	544 CU YDS

POUR 'K' MAY COMMENCE WHEN POUR 'H' IS 7 DAYS AFTER POUR 'G' IS COMPLETED

POUR SEQUENCE & NOTES

1. DOME MUST BE POURED IN THE ORDER TABULATED, THAT IS G1, G2, H3 - - - Q13
2. WHERE POUR DESIGNATION IS BIFURCATED, IN TWO DIFFERENT ANGULAR LOCATIONS, IT DENOTES THEY MAY BE POURED SIMULTANEOUSLY.
3. POUR G1 MUST NOT BE COMMENCED UNTIL CONCRETE IN POUR 'F' OF RING GIRDER HAS REACHED 3000 P.S.I. OR 28 DAYS SINCE LAST POUR OF LOWER [300mm] SLAB ⊕.
4. RINGS WHICH HAVE MORE THAN ONE (1) POUR, A MINIMUM OF 3 DAYS MUST ELAPSE BETWEEN ADJACENT POUR IN SAME RING IS COMMENCED [300mm] ⊕.
5. BETWEEN EACH RING OR POUR THE CONCRETE MUST HAVE REACHED 3000 P.S.I. MINIMUM OR 7 DAYS WHICHEVER IS LESS [300mm] 3000 ⊕.
6. L9 & Q13 EACH RING TO BE MADE IN ONE CONTINUOUS POUR STARTING FROM ONE OF THOSE POINTS, SO THAT FRESH CONCRETE IS ALWAYS PLACED AGAINST SET OF HARDENED CONCRETE IN THE SAME RING [THAT IS, NO RADIAL CONSTRUCTION JOINTS TO BE USED IN THESE POURS].
7. POUR Q13 MUST BE COMMENCED AT ITS OUTER EDGE FOR FULL 360° RADIUS PROGRESSIVELY TOWARDS THE CENTRE.
8. ALL CONSTRUCTION JOINT FACES MUST BE COATED WITH EPOXY ADHESIVE IN ACCORDANCE WITH SPECIFICATION SP-5C48 ADDENDUM D
9. DEFLECTION OF THE LINER TO BE MEASURED AND RECORDED AT THE LOCATIONS SHOWN THUS ⊕ ON THE PLAN IMMEDIATELY BEFORE AND AFTER THE FOLLOWING POURS:- G1, G2, L9 & Q13. THE ENGINEER MUST BE CONSULTED IMMEDIATELY IF ANY RECORDED DEFLECTIONS ARE IN EXCESS OF 2" & ANY FURTHER CONCRETING IS TO PROCEED UNTIL APPROVED BY THE ENGINEER.
10. CONCRETING OF JACKING PLATFORM, POUR 'R' MUST NOT COMMENCE EARLIER THAN 7 DAYS AFTER COMPLETION OF POUR Q13, THAT IS, AFTER 360° OF POUR RING Q IS COMPLETED.
11. THE VALIDITY OF THE DOME DESIGN BASIS TEMPORARY ENCROACHMENT IS DEPENDENT ON THE POUR SHAPE & SEQUENCE. ANY CHANGE WHICH MAY BE PROPOSED MUST BE MADE IN CONSULTATION WITH THE ENGINEER.

THIS DRAWING SUPERSEDES SK-JL-040 & SK-JL-908

FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-301.

NO.	REVISIONS	BY	CK	APP'D	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
DOME - CONCRETE POURING SEQUENCE AND PROCEDURE

GILBERT ASSOCIATES, INC. — READING, PENNSYLVANIA

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

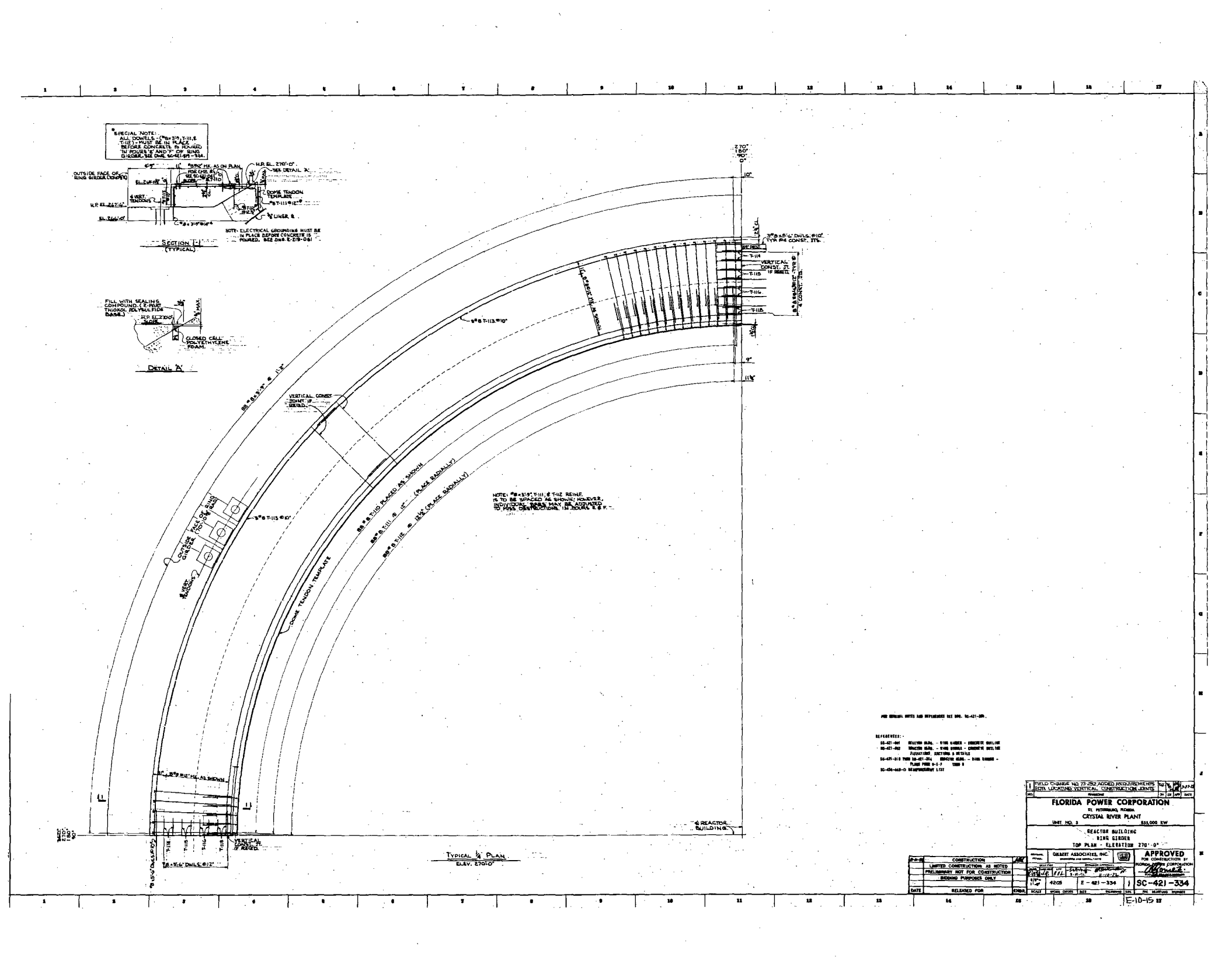
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED
D.C.	W.L.	P.R.L.	J.W.C.	E.W.H.

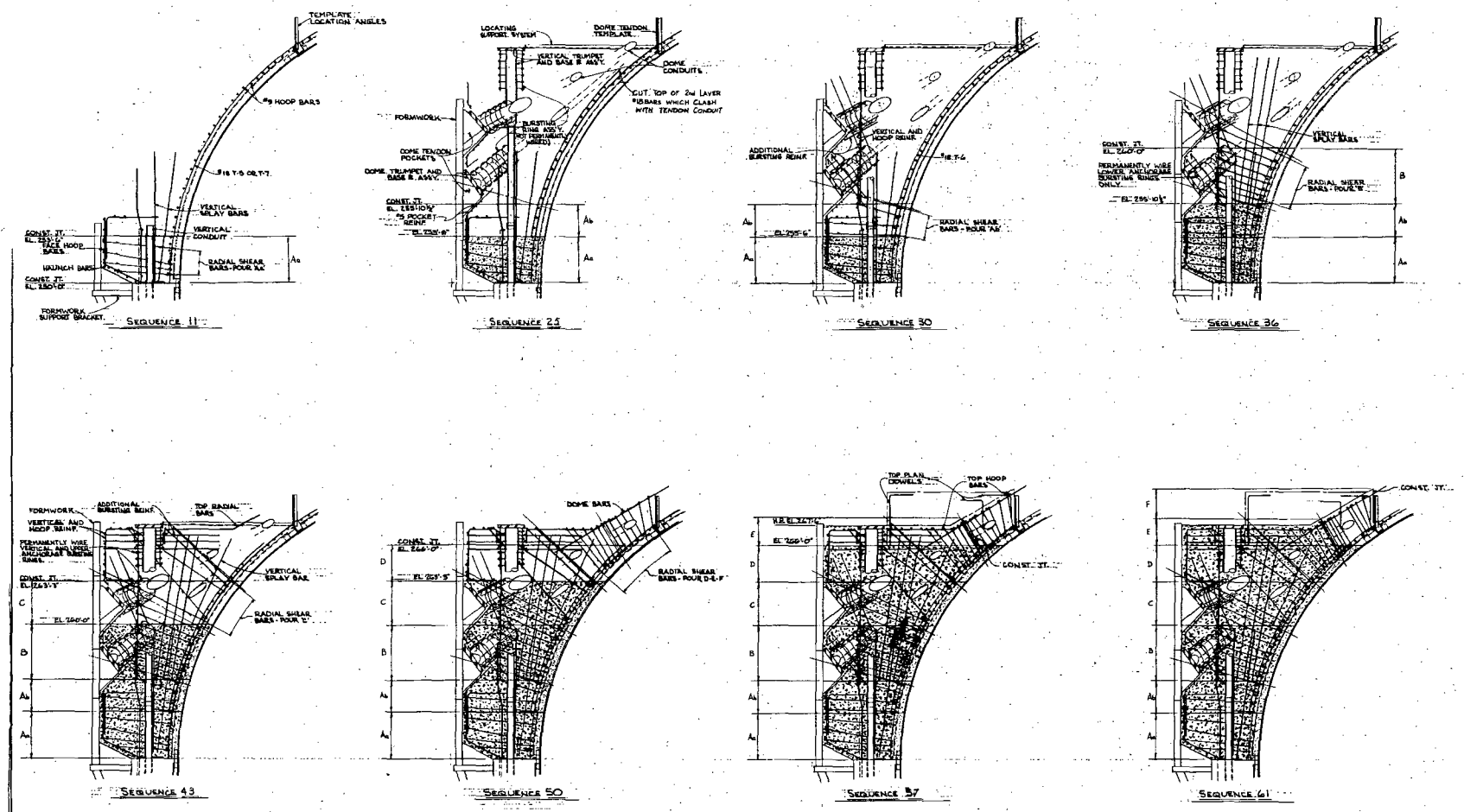
JOB NO. 4203 — DRAWING NO. E-421-337 — REV. O — SC-421-337

DATE	CONSTRUCTION	BY
1-19-74	LIMITED CONSTRUCTION: AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
	RELEASED FOR	

ENGR. — SCALE — WORK ORDER — SIZE — DRAWING REV. — NPC DRAWING NUMBER

E-10-15


SPECIAL NOTE:
ALL DOWELS - (*8 @ 3'-9", T-111, & T-112) - MUST BE IN PLACE BEFORE CONCRETE IS POURED IN POURS 'E' AND 'F' OF RING GIRDER, SEE DWG. SC-421-315 - 334.
OUTSIDE FACE OF RING GIRDER (TOP)
4 VERT. TENSIONS
N.P. EL. 267'-6"
EL. 266'-10"
11" *8 @ 6" MK. AS ON PLAN
FINE CWS. BY SEE SC-421-341 & 342
N.P. EL. 270'-0"
SEE DETAIL 'A'
DOME TENDON TEMPLATE
*8 @ T-111 @ 12"
*8 @ 3'-9" @ T-112
1/4" LINER, &
NOTE: ELECTRICAL GROUNDING MUST BE IN PLACE BEFORE CONCRETE IS POURED, SEE DWG. E-219-061
SECTION 1-1 (TYPICAL)
FILL WITH SEALING COMPOUND, (2 PART THIKOL POLYSULFIDE BASE.)
N.P. EL. 270'-0" SLOPE
CLOSED CELL POLYETHYLENE FOAM.
DETAIL 'A'
270'
180°
90°
0°
10"
2'-6"
3/4" @ 6'-6" DWLS. @ 10" TYP. IN CONST. JTS.
T-114
T-113
T-112
T-111
T-110
VERTICAL CONST. JT. IF REQ'D.
3/4" @ 6'-6" DWLS. TYP. @ CONST. JTS.
11'-6" RAD. FIL. AS SHOWN
*8 @ T-113 @ 10"
9"
11'-6"
VERTICAL CONST. JOINT IF REQ'D.
*8 @ 3'-9" @ 1'-6"
OUTSIDE FACE OF RING GIRDER
4 VERT. TENSIONS
*8 @ T-113 @ 10"
*8 @ T-110 PLACED AS SHOWN
*8 @ T-111 @ 12" (PLACE RADIALLY)
*8 @ T-112 @ 12'-6" (PLACE RADIALLY)
DOME TENDON TEMPLATE
NOTE: *8 @ 3'-9" T-111, & T-112 REINF. IS TO BE SPACED AS SHOWN; HOWEVER, INDIVIDUAL BARS MAY BE ADJUSTED TO MISS OBSTRUCTIONS, IN DOURS E & F.
11" *8 @ 6" MK. AS SHOWN
VERTICAL CONST. JT. IF REQ'D.
*8 @ 6'-6" DWLS. @ 12"
90°
180°
270°
0°
REACTOR BUILDING
TYPICAL ¼ PLAN
ELEV. 270'-0"
REFERENCES:-
SC-421-301 REACTOR BLDG. - RING GIRDER - CONCRETE OUTLINE
SC-421-302 REACTOR BLDG. - RING GIRDER - CONCRETE OUTLINE FABRICATION, SECTIONS & DETAILS
SC-421-315 THRU SC-421-334 REACTOR BLDG. - RING GIRDER - PLANS THRU 1-1-7 THRU 8
SC-434-449-0 REINFORCEMENT LIST
AND GENERAL NOTES AND REFERENCES SEE DWG. SC-421-301.
1 FIELD CHANGE NO. 73-252 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW
REACTOR BUILDING
RING GIRDER
TOP PLAN - ELEVATION 270'-0"
GILBERT ASSOCIATES, INC.
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
4208
E - 421 - 334
SC-421-334
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
E-10-15



NOTES:

1. THIS DRAWING IS AS USED IN CONNECTION WITH ——— "SUBSTITUTION OF CONSTRUCTION" SUBSTITUTION 1" DATED DEC. 28 1972

NO.	REVISIONS	BY	CK	APP	DATE
1	DRWG. UPDATED TO AGREE WITH REVISED SEQUENCE OF CONSTRUCTION DOCUMENT, REMAINED SUBSTITUTION 1				11-19-76

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 855,000 KW

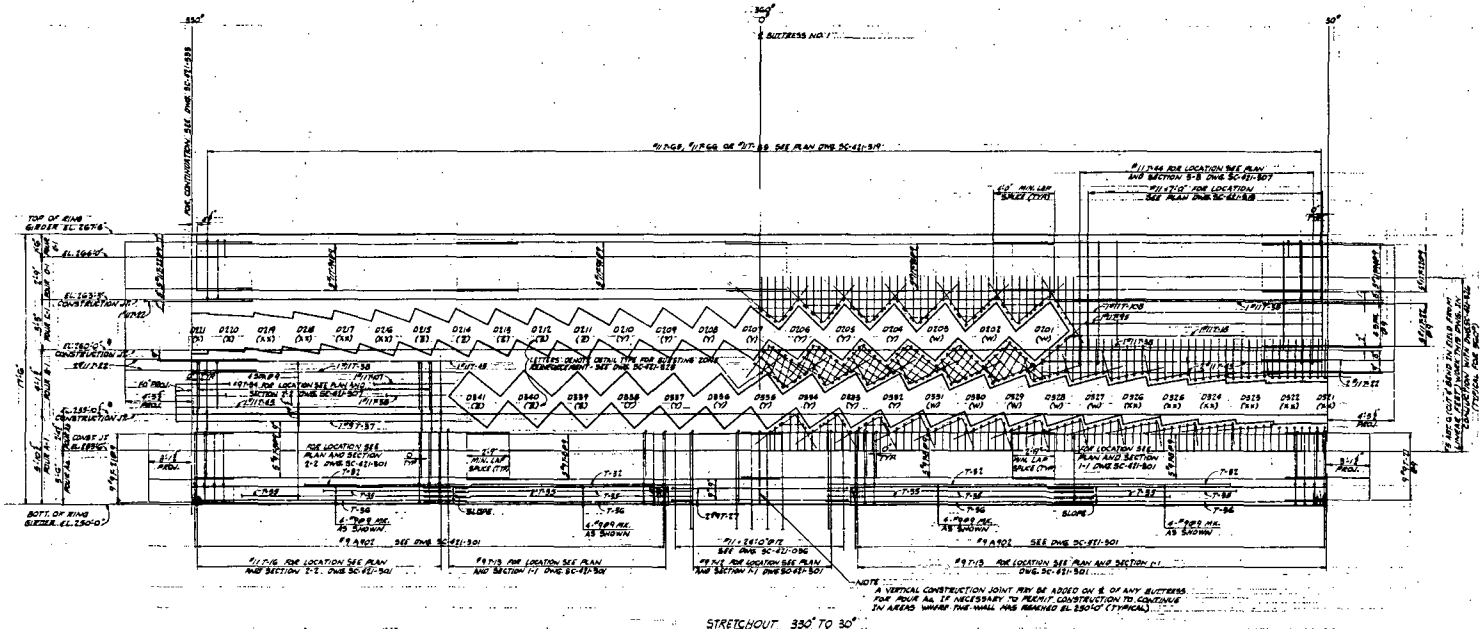
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.	PC DRAWING NUMBER
	4203		E-421-335	1	SC-421-335

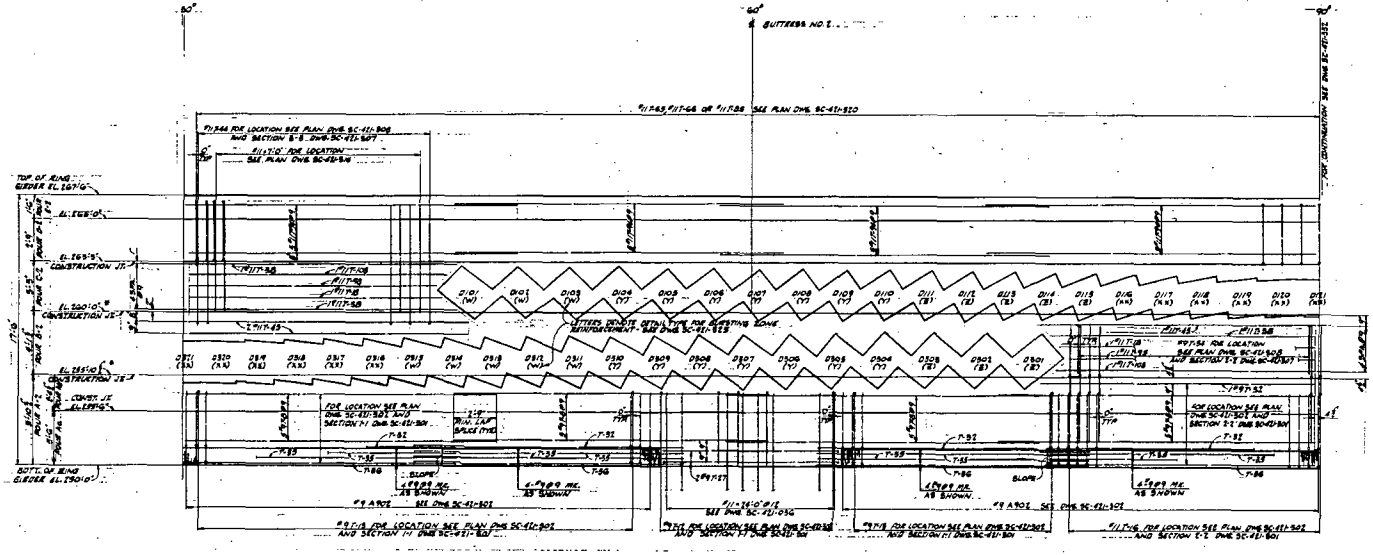
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
INFORMATION ONLY
DESIGNED FOR

5-10-6



STRETCHOUT 330° TO 30°
OUTSIDE FACE REINFORCING

* CONSTRUCTION JOINTS MAY BE ADJUSTED ± 6" IN LEVEL LOCAL TO TENDON ANCHORAGE BASE PLATES.



STRETCHOUT 30° TO 90°
OUTSIDE FACE REINFORCING

NOTES:-
FOR GENERAL NOTES SEE DWG. SC-421-301.

REFERENCES:-

SC-421-332	STRETCHOUT 90° TO 210°
SC-421-333	STRETCHOUT 210° TO 330°
SC-424-[illegible]	REINFORCEMENT LIST (A-1) (A-2)
SC-424-[illegible]	REINFORCEMENT LIST (B-1) (B-2)
SC-424-[illegible]	REINFORCEMENT LIST (B-3) (B-4)
SC-424-[illegible]	REINFORCEMENT LIST (B-5-1) (B-5-2)
SC-421-[illegible]	[illegible] REINFORCEMENT ANCHOR TENDON ANCHORAGES

NO.	REVISIONS	BY	CK	APP	DATE
2	FIELD CHANGE NO. 73-252, ADDED NOTE 8 AND INDICATED AFFECTED CONSTRUCTION JOINTS				
1	CORRECTED DRAWING, ADDED CONST. JT. & REVISED [illegible]				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
RING GIRDER
STRETCHOUT OF B.F. 330° TO 90°

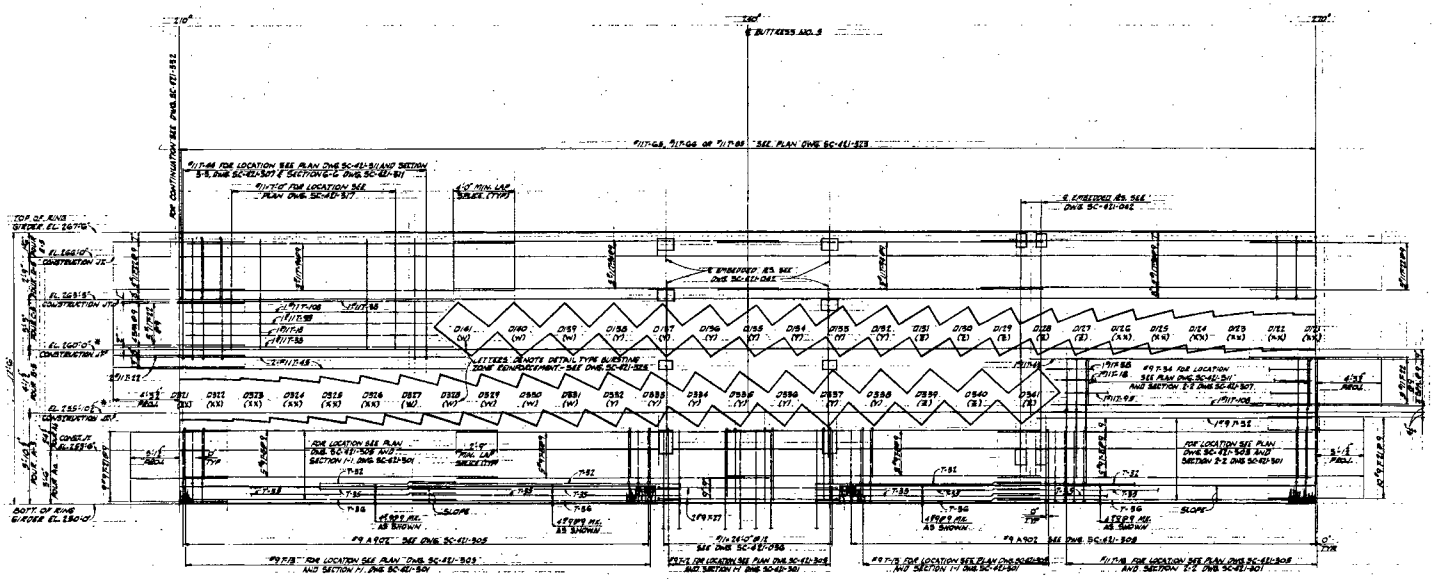
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	RELEASED FOR	ENGR.
4-8-75	CONSTRUCTION	
3-17-72	LIMITED CONSTRUCTION: AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

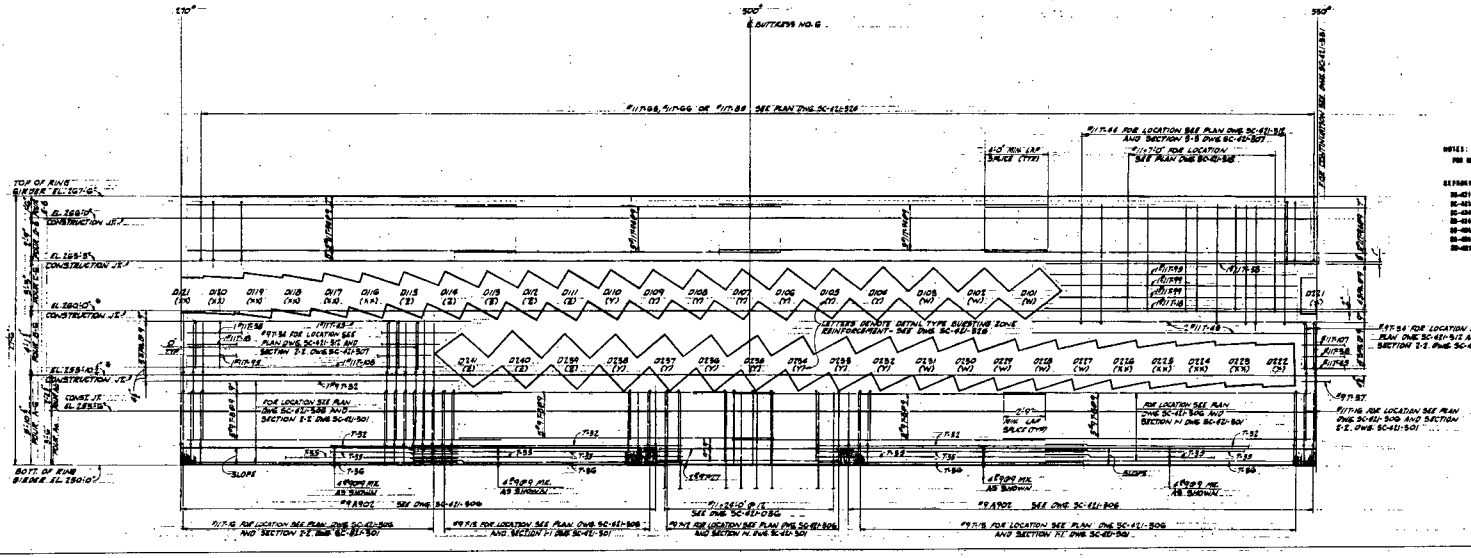
SCALE	WORK ORDER	SIZE	DRAWING	REV.	PFC DRAWING NUMBER
	4203	E-421-331		2	SC-421-331

E-10-15



STRETCHOUT 210° TO 270°
OUTSIDE FACE REINFORCING

*CONSTRUCTION JOINTS MAY BE ADJUSTED 2'-6" IN LEVEL LOCAL TO TENDON ANCHORAGE BASE PLATES.



STRETCHOUT 270° TO 330°
OUTSIDE FACE REINFORCING

NOTES:

FOR GENERAL NOTES SEE DWG. SC-421-301.

REFERENCES:

NO.	REVISIONS	BY	CK	APP	DATE
2	FIELD CHANGE NO. 73-232 ADDED NOTED AND INDICATED AFFECTED CONSTRUCTION JOINTS				
1	COMPLETED DRAWING ADDED CONST. JT. & REVISED REF.				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 835,000 KW

REACTOR BUILDING
RING GIRDER
STRETCHOUT OF O.F. 210° TO 330°

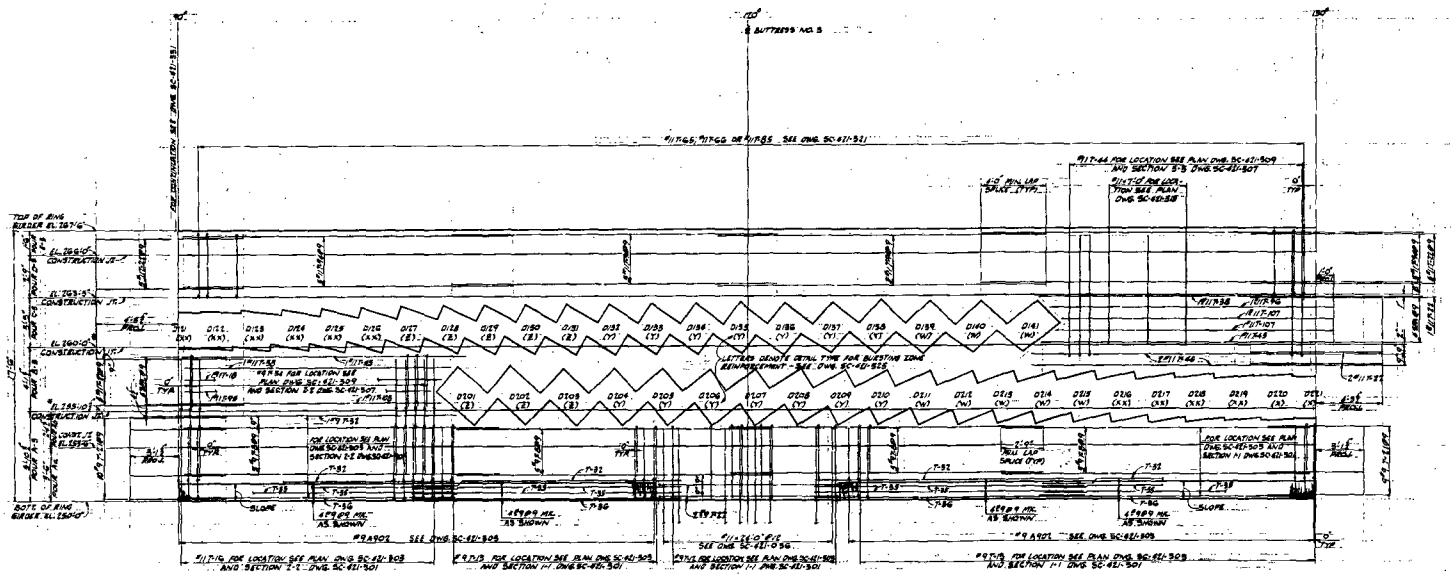
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

DATE	RELEASED FOR	ENGR.
1-2-73	CONSTRUCTION	
1-17-73	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

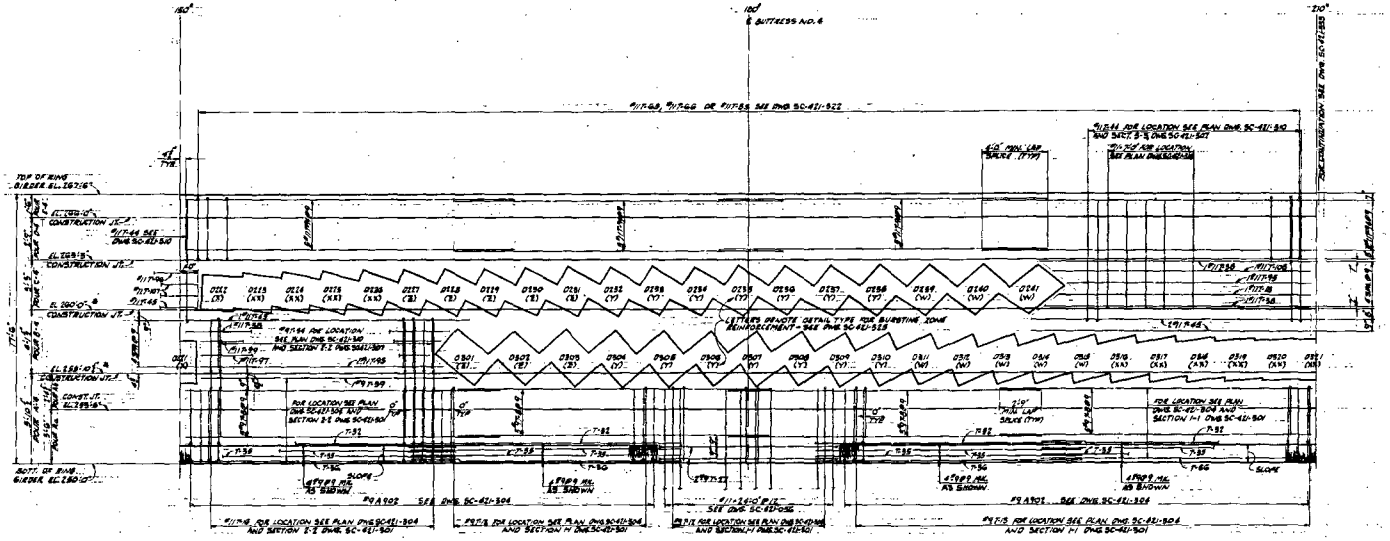
SCALE	WORK ORDER	SIZE	DRAWING	REV.	FPC DRAWING NUMBER
	4203	E-421-333		2	SC-421-333

E-10-15



STRETCHOUT 90° TO 150°
OUTSIDE FACE REINFORCING

* CONSTRUCTION JOINTS MAY BE ADJUSTED ±6'
IN LEVEL LOCAL TO TENDON ANCHORAGE
BASE PLATES.



STRETCHOUT 150° TO 210°
OUTSIDE FACE REINFORCING

NOTES:
FOR GENERAL NOTES SEE DWG. SC-421-201.

REFERENCES:
SC-421-201 STRETCHOUT 330° TO 30°
SC-421-503 STRETCHOUT 210° TO 330°
SC-421-503-1 REINFORCEMENT LIST (A-D) (1-4)
SC-421-503-2 REINFORCEMENT LIST (E-D) (5-8)
SC-421-503-3 REINFORCEMENT LIST (E-D) (5-8)
SC-421-511-3 REINFORCEMENT LIST (A-A-D) (1-4-8)
SC-421-520 [illegible]

NO.	REVISIONS	BY	CK	APP	DATE
A	FIELD CHANGE NO. 73-202, APPLIED NOTE 9 AND ...	DLS	WL		1-17-74
B	RECKOTELS AFFECTED : CONSTRUCTION JOINTS ...				
1	APPLIED 7/1/72 ZONE OF 90°	EAK	WL		8-17-72
2	COMPLETED DRAWING AND CHECK IF ANCHOR REQ.	EAK	WL		8-17-72

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
RING GIRDER
STRETCHOUT OF E.F. 90° TO 210°

	CONSTRUCTION
L.E.R.	
L.A.R.	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY
DATE	RELEASED FOR ENGR.

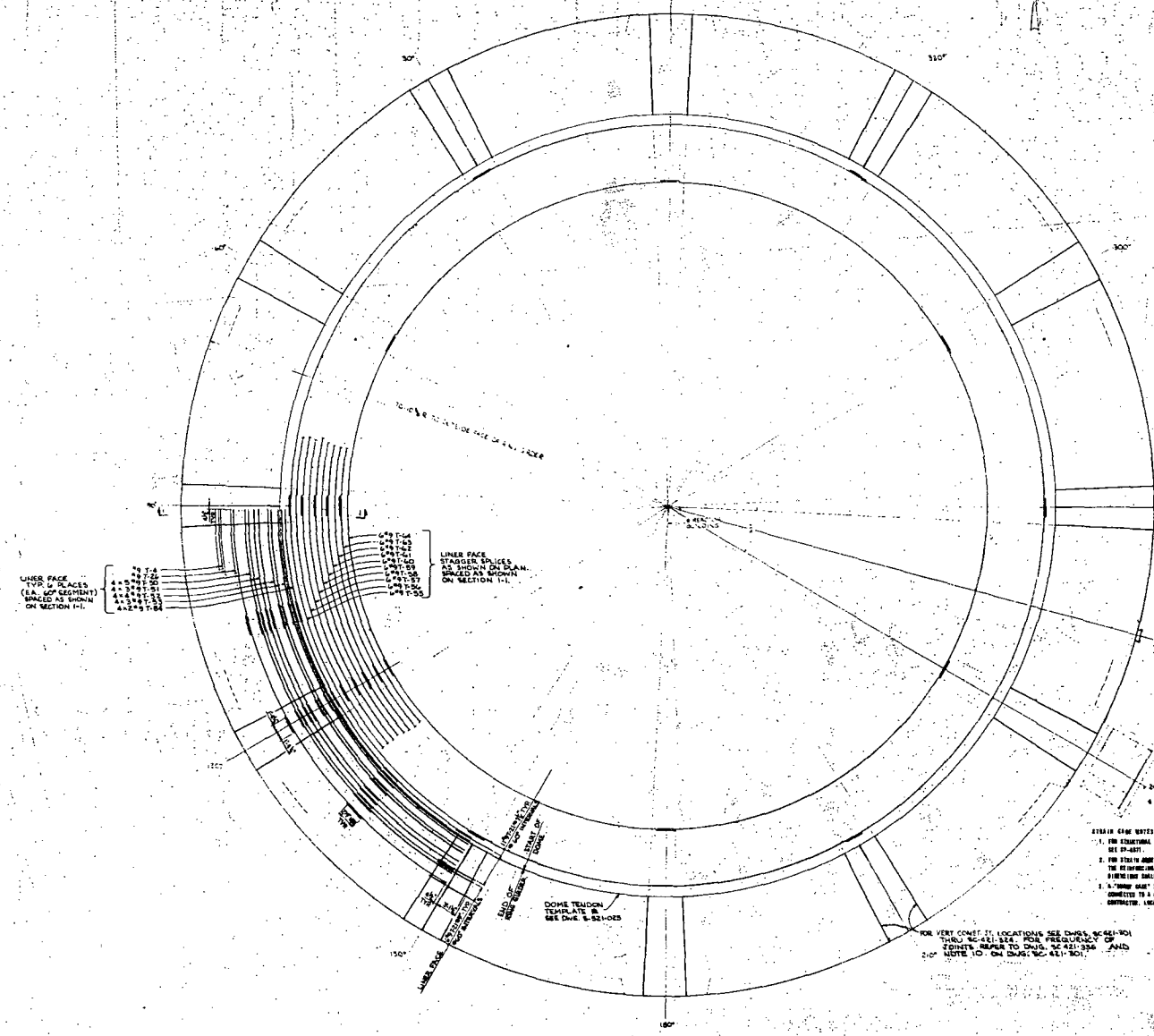
GILBERT ASSOCIATES, INC.
READING, PENNSYLVANIA

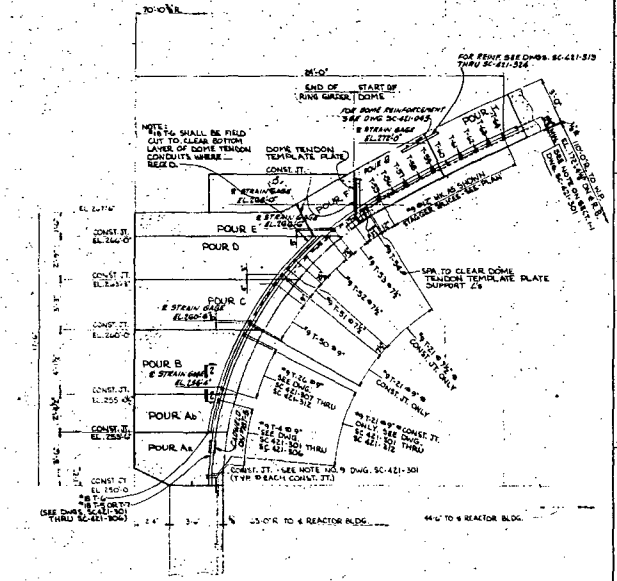
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

DESIGNED L.E.R. | DRAWN L.E.R. | CHECKED [illegible] | DATE 1-17-72

JOB NO.	SCALE	WORK ORDER	FILE	DRAWING NO.	REV.	NO. DRAWINGS THIS SHEET
4203		E-421-332		SC-421-332	3	

E-10-15 U





STRAIN GAGE LOCATION SCHEDULE

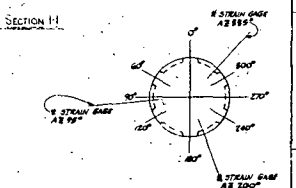
STRAIN GAGE MARK	LOCATION AZ.	ELEV.	STRAIN GAGES SEE TO BE CONN. TO THE FOLLOWING GAGES	CLIMATE STRAIN GAGE MK. SEE SECTION D-E
H58	98°	286'-6"	H 57 T-G	H 59 O
H59	93°	286'-6"	H 58 T-G	H 59 O
H56	353°	286'-6"	H 57 T-G	H 55 O
H55	110°	276'-6"	H 57 T-G	H 54 O
H57	88°	276'-6"	H 58 T-G	H 57 O
H 77	53°	266'-6"	H 58 T-G	H 57 T
H 78	98°	260'-0"	H 58 T-G	H 58 O
H 58	98°	260'-0"	H 59 T-G	H 58 O
H 59	108°	260'-6"	H 58 T-G	H 59 O
H 79	253°	260'-6"	H 59 T-G	H 79 O
H 60	343°	260'-6"	H 61 T-G	H 60 O
H 60	358°	260'-6"	H 59 T-G	H 60 O
H 61	93°	266'-6"	H 60 T-G	H 61 O
H 61	93°	266'-6"	H 57 T-G	H 61 O
H 61	100°	266'-6"	H 61 T-G OF T-7	H 61 O
H 61	240°	266'-6"	H 59 T-G	H 61 O
H 63	333°	266'-6"	H 61 T-G OF T-7	H 63 O
H 63	338°	266'-6"	H 59 T-G	H 63 O
H 64	93°	268'-0"	H 61 T-G OF T-7	H 64 O
H 64	93°	268'-0"	H 59 T-G	H 64 O
H 65	104°	268'-0"	H 61 T-G OF T-7	H 65 O
H 65	104°	268'-0"	H 59 T-G	H 65 O
H 66	338°	268'-0"	H 61 T-G OF T-7	H 66 O
H 66	338°	268'-0"	H 59 T-G	H 66 O
H 67	93°	272'-0"	H 61 T-G	H 67 O
H 67	93°	272'-0"	H 59 A-SE	H 67 O
H 68	104°	272'-0"	H 61 T-SE	H 68 O
H 68	104°	272'-0"	H 59 A-SE	H 68 O
H 69	338°	272'-0"	H 61 T-SE	H 69 O
H 69	338°	272'-0"	H 59 A-SE	H 69 O

STRAIN GAGE NOTES:-

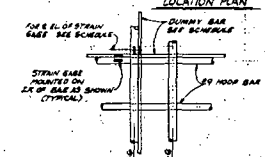
1. FOR STRUCTURAL INTEGRITY TESTING AND STRAIN GAGE SPECIFICATIONS SEE SP-4871.
2. FOR STRAIN GAGE LOCATIONS SEE THIS DRAWING. IF THE LOCATIONS OF THE REINFORCING BARS VARY FROM THE LOCATIONS SHOWN, AS-BUILT DIMENSIONS SHALL BE OBTAINED BY THE S.E.T. CONTRACTOR.
3. A "DUMMY GAGE" SEE DET. AAA AS SPECIFIED IN SPEC. SHALL BE CONNECTED TO A #4 BAR 31'-0" LONG, SUPPLIED BY THE S.E.T. CONTRACTOR, LOCATED ADJACENT AND PARALLEL TO EACH STRAIN GAGE.
4. STRAIN GAGES ARE MARKED THUS H58 ⊕ H58A OR H58 ⊕ H58 ⊕ H58B ETC. "H" INDICATES A STRAIN GAGE ORIENTED IN THE HOOP DIRECTION. "V" INDICATES A STRAIN GAGE ORIENTED IN THE MERIDIONAL DIRECTION "B" INDICATES A "DUMMY GAGE". THE NUMBER (58) REFERS TO THE ASSIGNED NUMBER OF THE STRAIN GAGE IN SP-4871.
5. STRAIN GAGE CABLE JUNCTION BOXES TO BE LOCATED AT OUTER FACE OF RING GIRDER. LOCATION TO BE ADDED IN THE FIELD WITH F.P.C. CONTRACTOR.

REFERENCES:
SC-421-301 THRU SC-421-324 RING GIRDER - PLAN "AA & AB"
SC-421-501 THRU SC-421-512 RING GIRDER - PLAN "B"
SC-421-845 REACTOR BLDG. CONCRETE MIX
SC-426-445 REINFORCEMENT LIST

Section H



STRAIN GAGE LOCATION PLAN



SECTION E-E (TYPICAL)

NO.	REVISION	BY	CK	APP	DATE
3	CHANGE DWG. REFERENCE NO. IN NOTE LOCATED AT (2-H)				
2	FIELD CHANGE AM-3P-98 SIDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
1	ADDED CONST. JT. @ EL. 255'-0"; ADDED NOTES; ADDED DOME TENDON TEMPLATE PLATE; STRAIN GAGE LOC. PLAN, SCHEDULE & SECTION E-E				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
PLACING ARRANGEMENT OF #9 REINFORCING BARS ON INSIDE FACE OF RING GIRDER

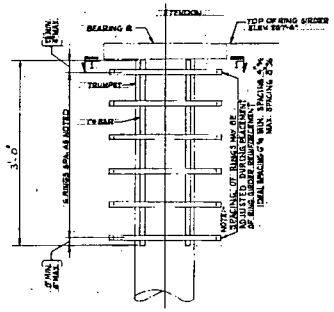
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

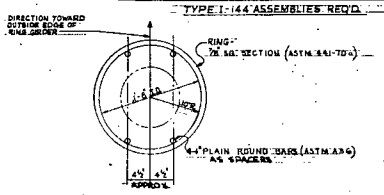
DATE	RELEASED FOR
	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY

4203 | E-421-330 | 3 | SC-421-330

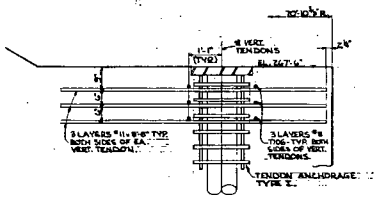
E-10-15



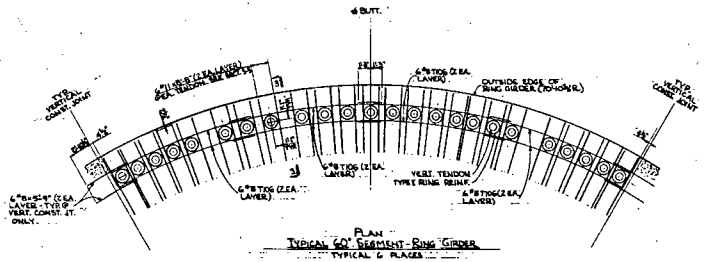
ELEVATION-TYPICAL VERTICAL TENDON ANCHORAGE
TYPE I-144 ASSEMBLIES REQ'D.



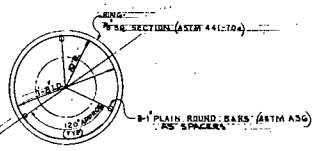
SECTION 1-1



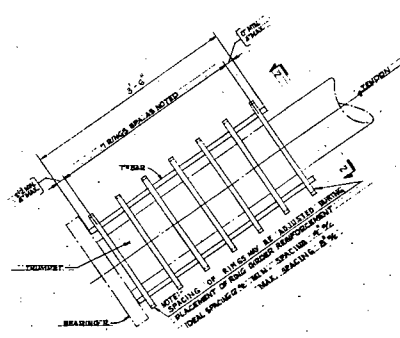
SECTION 3-3



PLAN
TYPICAL 60° SEGMENT-RING GIRDER
TYPICAL 6 PLACES



SECTION 2-2



ELEVATION-TYPICAL DOME TENDON ANCHORAGE
TYPE II-246 ASSEMBLIES REQ'D

NOTES:-

1. FOR GENERAL NOTES & DEFORMANCE SEE DWG. SC-421-[illegible].
2. FOR MINIMUM REINFORCEMENT AROUND TENDONS SEE DWG. SC-421-[illegible].
3. FOR LOCATIONS OF DOME TENDON ANCHORAGES, SEE DWG. SC-421-[illegible], THRU SC-421-[illegible].
4. FOR LOCATIONS OF VERTICAL TENDON ANCHORAGES, SEE DWG. SC-421-[illegible] THRU [illegible].

REFERENCES:-

SC-[illegible]-1 REINFORCEMENT LIST
SC-[illegible]-1 REINFORCEMENT LIST
SC-421-[illegible] RING GIRDER - TYP. DETAILS OF REINF. AROUND TENDON POCKETS.
SC-[illegible]-2 REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP	DATE
1	FIELD CHANGE NO. 73-257 REVISED AS INDICATED (5 PLACES).	[illegible]	[illegible]	[illegible]	[illegible]

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR [illegible] - RING GIRDER
ARRANGEMENT OF [illegible] REINFORCEMENT
[illegible]

GILBERT ASSOCIATES, INC.

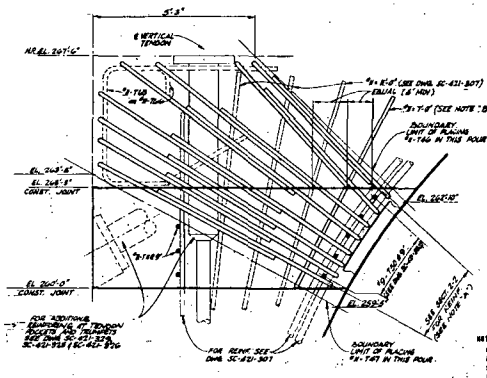
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	RELEASED FOR	ENGR.
4-17-76	CONSTRUCTION	[illegible]
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

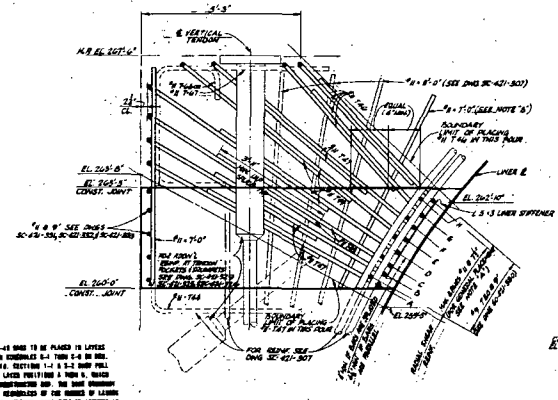
SCALE	WORK ORDER	SIZE	DRAWING	REV.
4203	E-421-329		1	

SC-421-329

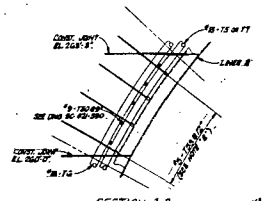
E-10-15

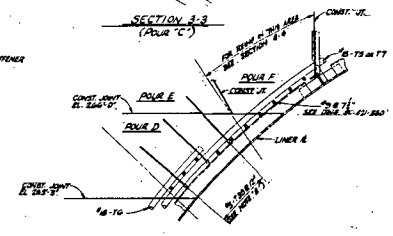


SECTION 1-1
(POUR "C")

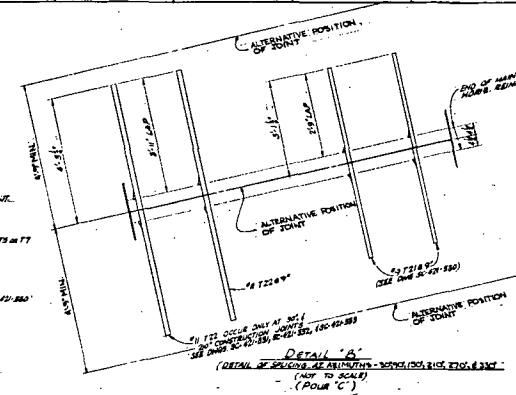


SECTION 2-2
(POUR "C")

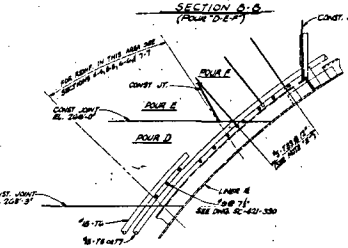




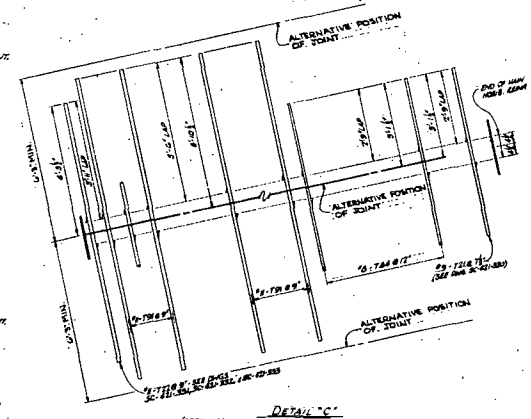
SECTION 4-8
(POUR "C")



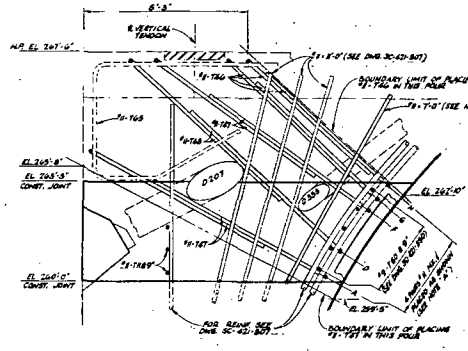
DETAIL "B"
(DETAIL OF SPLICING AT AZIMUTHS - 30°, 150°, 210°, 270°, & 330°)
(NOT TO SCALE)
(POUR "C")



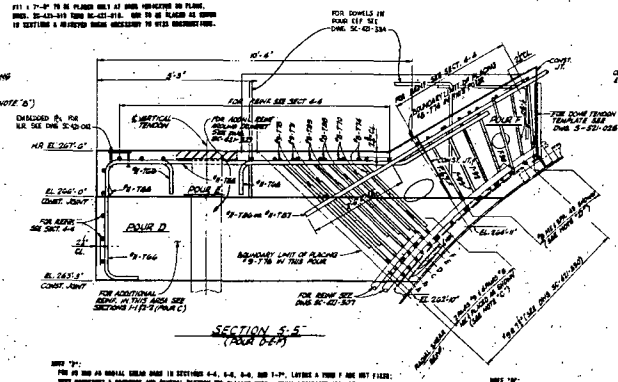
SECTION 6-6
(POUR "D-E-F")



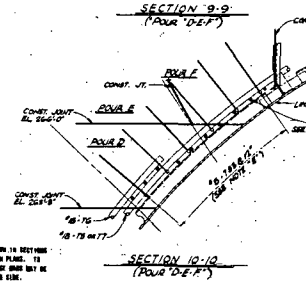
DETAIL "C"
(DETAIL OF SPLICING AT AZIMUTHS - 30°, 90°, 150°, 210°, 270°, & 330°)
(NOT TO SCALE)
(POUR D-E-F)



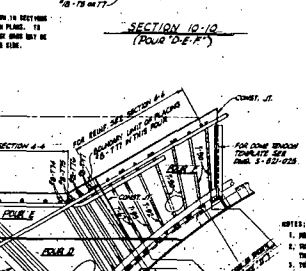
SECTION 1A-1A*
(POUR "C")



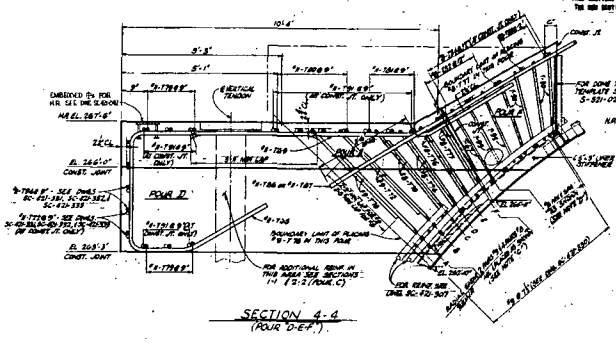
SECTION 5-5
(POUR D-E-F)



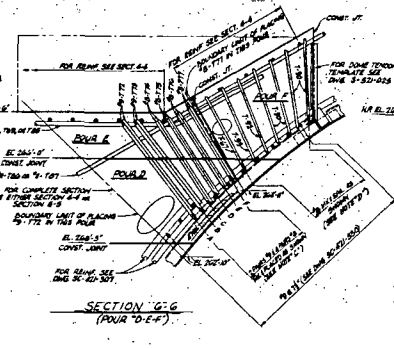
SECTION 9-9
(POUR "D-E-F")



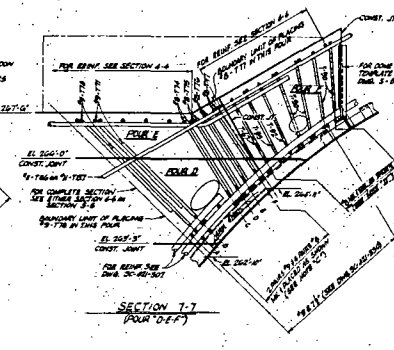
SECTION 10-10
(POUR "D-E-F")



SECTION 4-4
(POUR "D-E-F")



SECTION "G"-G
(POUR "D-E-F")



SECTION 7-7
(POUR "D-E-F")

NOTE "A":
(11) T-40, T-41, T-42 & T-45 SHALL TO BE PLACED IN LAYERS A THEN B, AS INDICATED IN DRAWINGS S-1 THRU S-8 OF DWG. SC-421-313 THRU SC-421-318. SECTIONS 1-1 & 2-2 SHOW FULL 8 DWG DOME STYLE PEN ALL LAYER POSITIONS & THEN B, WHICH IS POSSIBLE ONLY TO AN UNDER-TENSIONED DOME. THE SAME DIMENSIONS & LIMITS APPLY TO ALL DOMES REGARDLESS OF THE NUMBER OF LAYERS UTILIZED FOR PLACING DOME. CONCRETE. DOME SHALL BE CONSIDERED AS CALLED FOR IN THE DRAWINGS WHERE THE GENERAL "TYPE OF ARRANGEMENT" AND AS SHOWN IN THE "TYPICAL ARRANGEMENT" KEY SECTION. BACK AND SHALL HAVE THE SAME GENERAL CHARACTERISTICS AND ARRANGEMENT AS INDICATED IN THE DRAWINGS. LAYERS & PENS & ARE NOT FIXED; THEY REPRESENT A SEQUENCE AND DIRECTION POSITION FOR PLACING THE DOME - FINAL LOCATIONS ARE DEPENDENT ON POSITIONING SPACE AT THE REINFORCED DOME. (SEE SECTION "15-16" FOR TYP. EXAMPLE for A DOME WITH LESS THAN 8 FULL 8 LAYERS OF DOME.)

NOTE "B":
(11) T-7'-9" TO BE PLACED ONLY AT DOME HIGH-POINT ON PLANS, DWGS. SC-421-313 THRU SC-421-318. CAN TO BE PLACED AS SHOWN IN SECTIONS & ELEVATIONS WHERE NECESSARY TO MEET REQUIREMENTS.

NOTE "C":
FOR #5 BAR AS RADIAL REBAR SHOWN IN SECTIONS 4-4, 5-5, 6-6, AND 7-7*, LAYERS A THRU F ARE NOT FIXED; THEY REPRESENT A SEQUENCE AND GENERAL PATTERN FOR PLACING REBAR - FINAL LOCATIONS ARE DEPENDENT ON INSTALLABLE SPACES AT THE REINFORCED BAR. REBAR SHALL BE SPACED AS EVENLY AS POSSIBLE IN THE AVAILABLE SPACE DESIGNATED ON THE DRAWINGS & NEXT BY AS CONSTRUCTION DETAILS THE DRAWINGS LIMITS SHOWN. RODS MAY BE SPLICED IN THE DESIGNED LOCATIONS BY LAPPING THE LAP SPLICE BY EACH SIDE OF RODS, BUT NOT LESS LAP SPLICES OF 1'-0" FOR #5 RODS AND 2'-0" FOR #8 RODS MUST BE MAINTAINED.

* (FOR SECTIONS INDICATED ON PLANS ARE ONLY FOR ARRANGEMENT OF RADIAL REBAR... OTHER REBAR, IN THE DOME SHOWN MAY NOT BE AS SHOWN.)

NOTE "D":
#8 - T-42', T-40, T-41, & T-45, TO BE SPACED AS SHOWN IN SECTIONS AT EACH (#1 - T-40 & #11 - T-42) AS LOCATED ON PLANS. TO OBTAIN INSTRUCTIONS AND ADDITIONAL SPACING, THESE RODS MAY BE CURVED AROUND THE #10 EMBEDDED RODS FROM EITHER SIDE.

NOTE "E":
#5-E-22 ARCHBRACE REINF. IS DEPENDENT UPON FABRICATOR ON PLANS TO PROVIDE ARRANGER FOR #14 RODS WHERE THEY ARE NOT EXTENDED BY A ROD OF RADIAL BREAK-RAND. THESE RODS MAY BE SPACED AROUND THE #10 RODS RECOMMENDED ON PLANS, FROM EITHER SIDE AS NECESSARY TO CLEAR OBSTRUCTIONS.

NOTES:-
1. FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-301.
2. THIS DWG. IS AS SHOWN AS COLLECTED-WITH DWGS. SC-421-313 THRU SC-421-318 FOR PENS A, B, C, & D.
3. THIS DWG. IS TO BE SHOWN IN COLLECTION WITH DWGS. SC-421-319 THRU SC-421-324 FOR PENS D-E-F.
FOR REINFORCING - DWGS. SC-421-301 AND SC-421-302.

NO.	REVISIONS	BY	CK	APP	DATE
3	REMOVED HOLES IN SECTIONS 4-4 & 5-5 AS SHOWN ADDED TO NOTE #3				
2	FIELD CHANGE NO. 13-282, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
1	ADDED NOTES, SECTIONS AND DETAIL AND PAGES 2-2 & 4-4 ADDED REFERENCE TO POUR C SECTIONS				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
DOME GIRDER
SECTIONS & DETAILS - POUR C & POUR D-E-F

GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

CONSTRUCTION	
LIMITED CONSTRUCTIONS AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

4203 | E-421-328 | 3 | SC-421-328

NOTES:-
1. #11 RE-BAR TO EXTEND 4'-3" MIN. BEYOND CENTER LINE OF ANY TENDON.
2. #8 RE-BAR TO EXTEND 3'-0" MIN. BEYOND CENTER LINE OF ANY TENDON.
3. FOR BARS IN RADIAL DIRECTION, THE ABOVE EXTENSIONS MAY BE REDUCED WHERE THEY REACH THE RING GIRDER OUTER FACE. THESE BARS ARE PROVIDED WITH A STANDARD HOOK AND THIS END IS TO BE ROTATED TO LIE ALONG RING GIRDER FACE.
4. THESE BARS LIE IN A GENERAL RADIAL DIRECTION IN PLAN AND EXTEND BEYOND THE MIDDLE ROW OF VERTICAL RE-BAR THEY ARE TO BE ROTATED PARALLEL TO THE PLANE OF RADIAL SHEAR BARS OF THE RING GIRDER REINFORCEMENT. THIS IS TO AVOID CLASH WITH VERTICAL ROWS OF RADIAL SHEAR RE-BAR. (FOR DIRECTION KEY SEE BELOW)

TYPE X & XX

NOTE: REINF. NOT INDICATED (X) OR (XX) IS TYPICAL FOR BOTH TYPES. TYPE (X) OCCURS AT END DOME TENDON, TOP & BOTT. ROW. TYPE (XX) OCCURS AT SINGLE CONTINUOUS ROW OF DOME TENDONS, TOP OR BOTT. ROW

TYPE W

DETAIL OF LAYER SPACING

KEY PLAN

RING GIRDER
RADIAL SHEAR RE-BAR SKETCH
(REF. FOR NOTE 4)

SCHEMATIC DIAGRAMS FOR CONTINUOUS HOOP DIRECTION REINFORCEMENT

TYPE Z

TYPE Y

GENERAL NOTES (CONTINUED)-
5. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-301.
6. FOR LOCATION OF VARIOUS DETAIL TYPES W, X, XX, Y & Z SEE DWG. SC-421-331 THRU 333.
7. FOR ADDITIONAL DETAILS OF BURSTING ZONE REINF. SEE DWG. SC-421-320.
8. FOR TYPICAL DETAILS OF REINFORCEMENT AROUND TENDON POCKETS SEE DWG. SC-421-[illegible].
9. ALL DETAILS ARE AS VIEWED FROM CENTER OF REACTOR BUILDING.
10. NUMBER OF BARS IN EACH LAYER AROUND EACH TRUMPET MUST BE AS SHOWN. SPACING CAN BE ADJUSTED TO SUIT CLEARANCES.

REFERENCES:-
SC-424-[illegible] REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP	DATE
1	FIELD CHANGE NO. 73-202 CLARIFIED NOTE 4 AND ADDED NOTE 10				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 855,000 KW

REACTOR BUILDING - RING GIRDER
ARRANGEMENT OF BURSTING REINFORCEMENT
AROUND TENDON ANCHORAGES

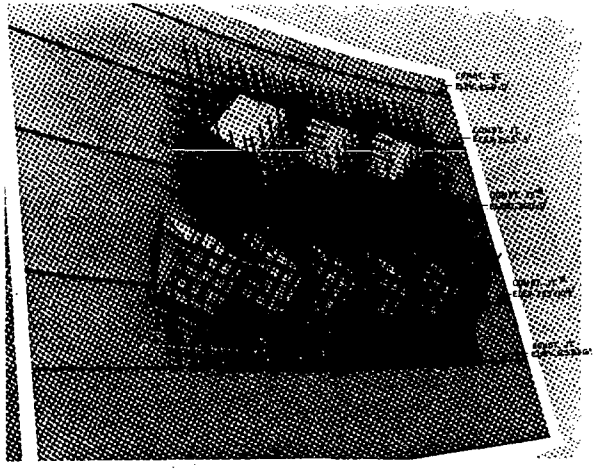
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

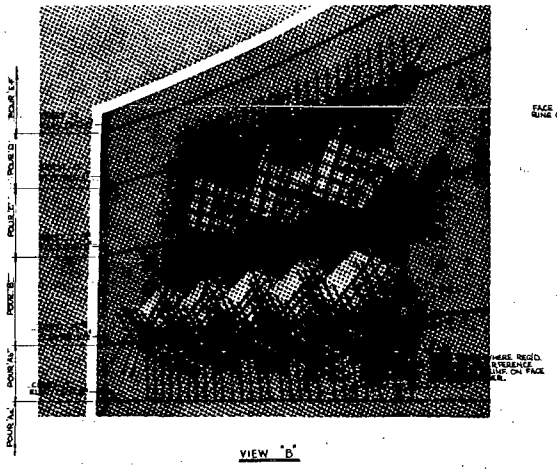
DATE	RELEASED FOR	ENGR.
5-17-71	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

SCALE	WORK ORDER		REV.	
NONE	4203	E-421-325	1	SC-421-325

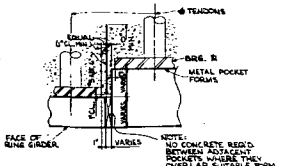
5-10-15



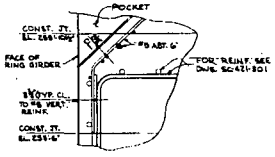
VIEW "A"



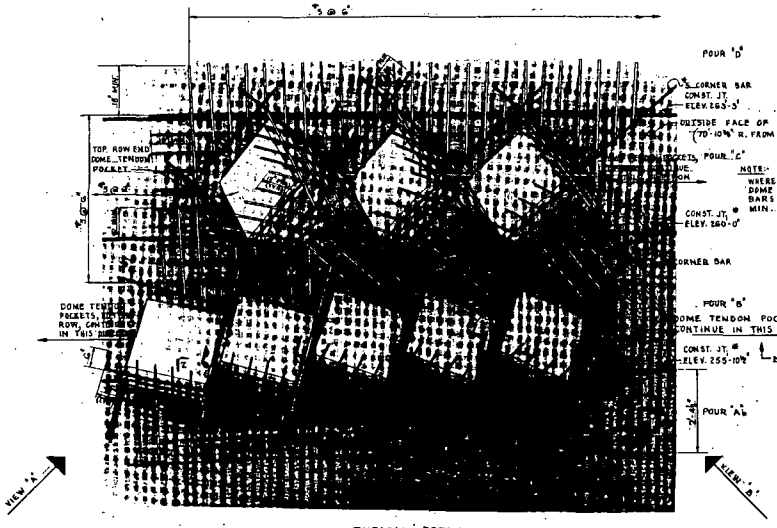
VIEW "B"



SECTION 1-1
(HORIZ.)
NO SCALE



SECTION 2-2



TYPICAL DETAIL
MODEL TYPE "V" *
(REINFORCEMENT AROUND DOME TENDON POCKETS THROUGHOUT 360°)

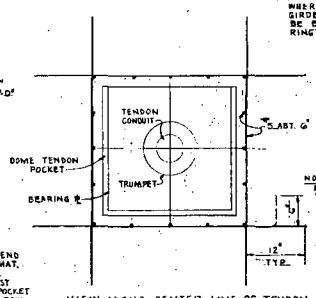
* REFERS TO MODEL AS DELIVERED TO FIELD.

* CONSTRUCTION JOINTS MAY BE ADJUSTED 3'-6" IN LEVEL LOCAL TO TENDON ANCHORAGE BASE PLATES.

NOTE:-
WHERE THERE ARE ONLY TOP ROW DOME TENDON POCKETS #5 VERT. BARS @ 6" SHALL EXTEND 2'-3" MIN. BELOW CONST. JT. ELEV. 260'-0"

NOTE:-
DETAIL AT BOTTOM ROW END POCKET IS SIMILAR TO THAT OF TOP ROW END POCKET. FIRST VERTICAL #5 BAR PAST CORNER OF END BOTTOM POCKET SHALL EXTEND FROM TOP ROW POCKETS TO 2'-4½" BELOW CONST. JT. ELEV. 255'-10½".

NOTE:
WHERE BARS REACH THE RING GIRDER OUTER FACE, THEY SHALL BE BENT TO LIE ALONG THE RING GIRDER FACE.



NOTE:
BEND WHERE NECESSARY TO CLEAR OBSTRUCTION.

VIEW ALONG CENTER LINE OF TENDON
IDEAL SPACING OF RE-BAR AROUND POCKETS

NOTES:-
1. FOR GENERAL NOTES AND REFERENCES SEE DRAWING SC-421-301.
2. THIS DRAWING IS TO BE ORDERED IN CONJUNCTION WITH DRAWINGS SC-421-329, SC-421-329, AND SC-421-331 THRU 333.
3. ALL VIEWS ARE AS VIEWED FROM CENTER OF REACTOR BUILDING (FOR CLARITY - DOME TENDON MARKINGS IS NOT SHOWN.)
4. ALL REINFORCEMENT SHOWN ON THIS DRAWING IS TO BE CUT AND BENT IN THE FIELD FROM LINEAL FOOTAGE. LAPS IN REBAR MAY BE MADE WHERE NECESSARY - MINIMUM LAP = 18".
5. SPACING OF #5 REBAR MAY VARY ± 1" FROM APPROX. SPACING GIVEN.

REFERENCES:-
SC-426-324-D REINFORCEMENT LIST

E-R.P.	CONSTRUCTION		
	LIMITED CONSTRUCTION AS NOTED		
	PRELIMINARY NOT FOR CONSTRUCTION		
	BIDDING PURPOSES ONLY		
DATE	RELEASED FOR	ENGR.	

1	FIELD CHANGE NO. 73-256, NOTED NOTE 4 AND INDICATED LIMITS OF AFFECTED REBAR "B" NOTE A AND NOTED NOTE 5		2-20-74	
NO.	REVISIONS	BY	CK	APP'D DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
RING GIRDER
TYPICAL DETAILS OF REINFORCEMENT AROUND TENDON POCKETS

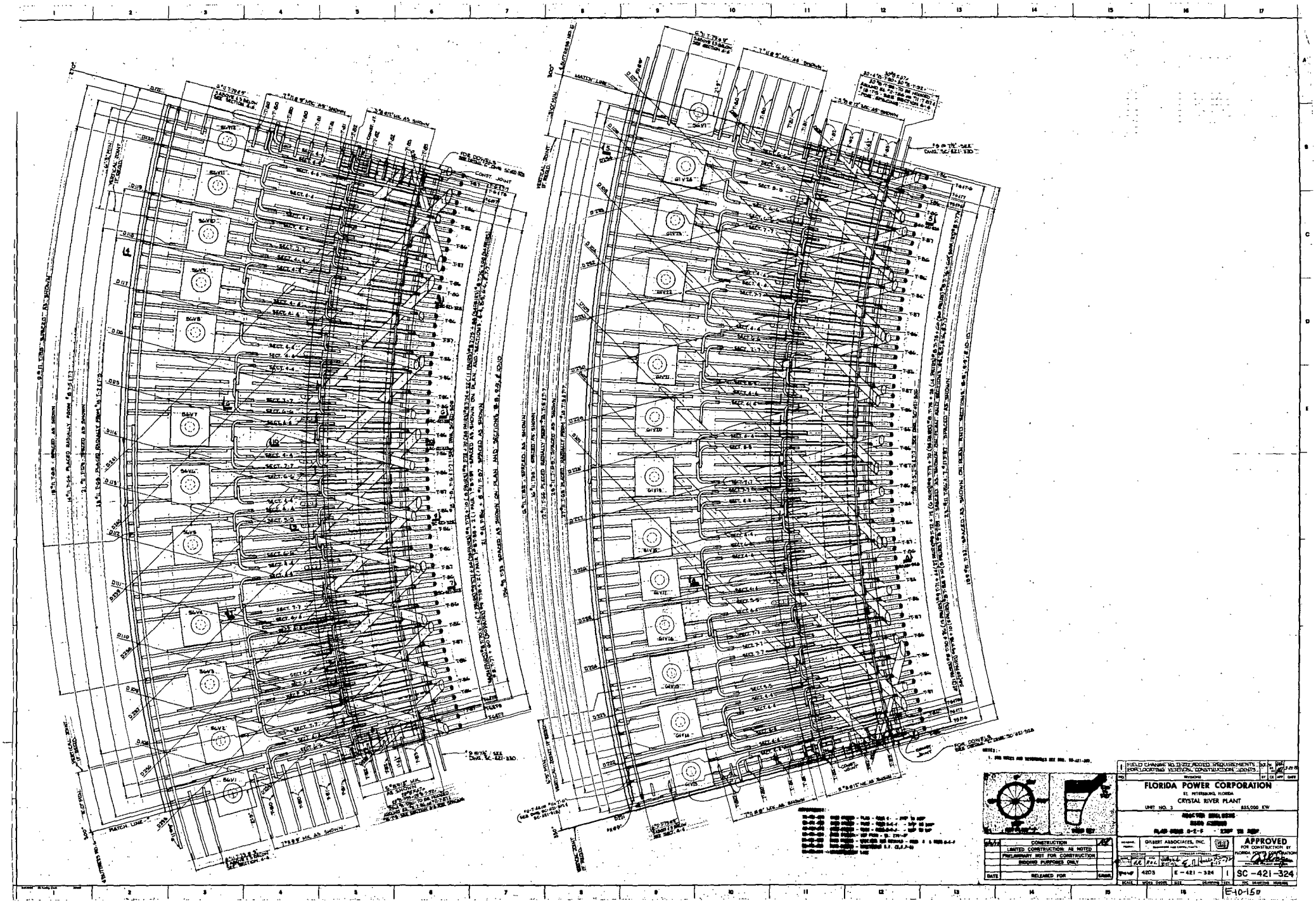
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

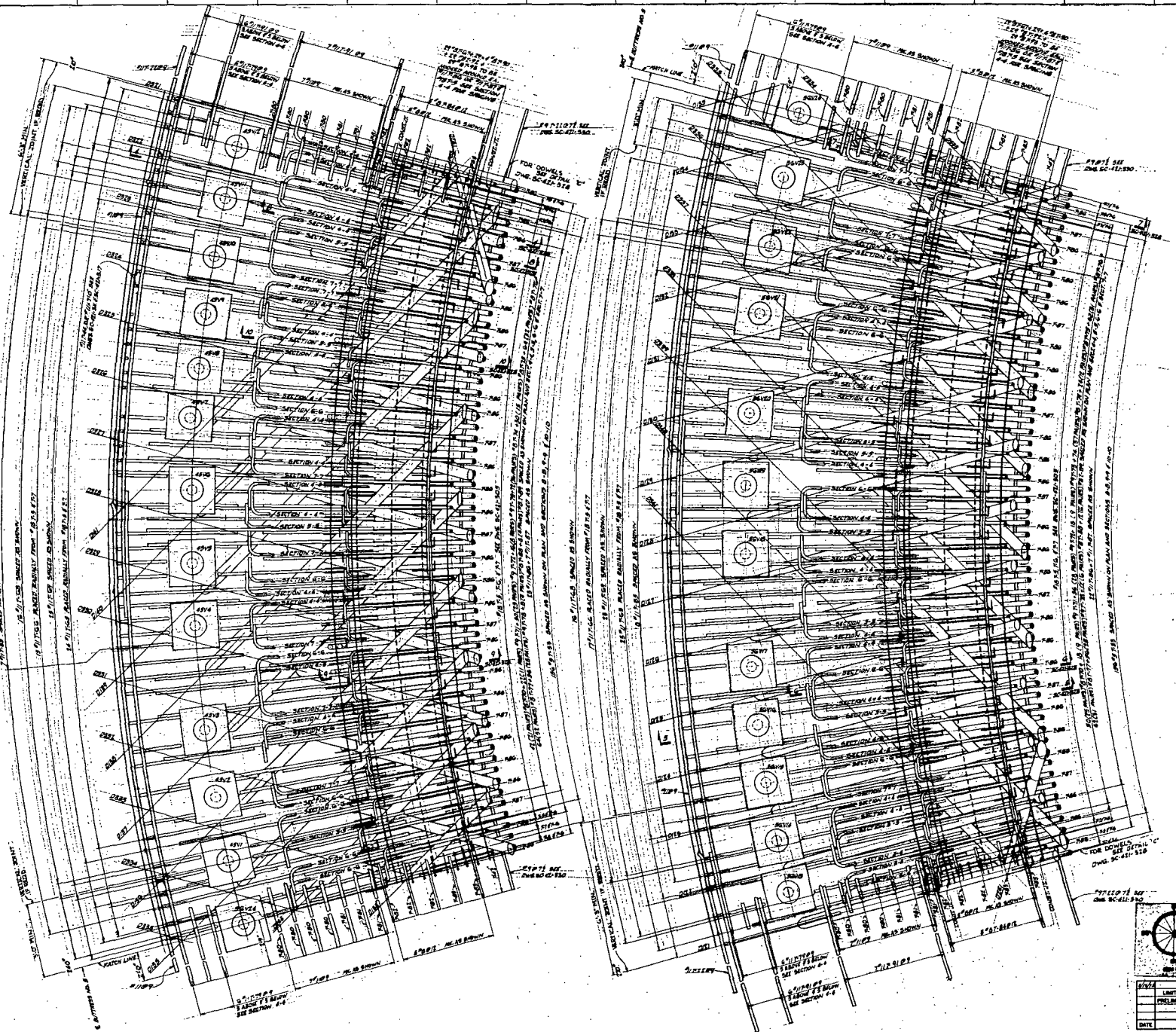
DRAWN	CHECKED	ENGR.	SUPV.	DATE
IND				

NONE	4803	E-421-326	1	SC-421-326
SCALE	WORK ORDER	DATE	DRAWING NO.	REV. DRAWING NUMBER

E-10-15



FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
855,000 KW
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
4203
E-421-324
1
SC-421-324
E-10-150



NOTES:

1. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-301.

REFERENCES:

SC-421-317	[illegible]
SC-421-323	[illegible]
SC-421-324	[illegible]
SC-421-324	[illegible]
SC-421-325	[illegible]
SC-421-326	[illegible]
SC-421-326-D	[illegible]

NO.	REVISIONS	BY	CK	APP	DATE
1	FIELD CHANGE NO. 73-232 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 855,000 KW

REACTOR BUILDING

RING GIRDER

PLAN - POUR B-E-F 210° TO 270°

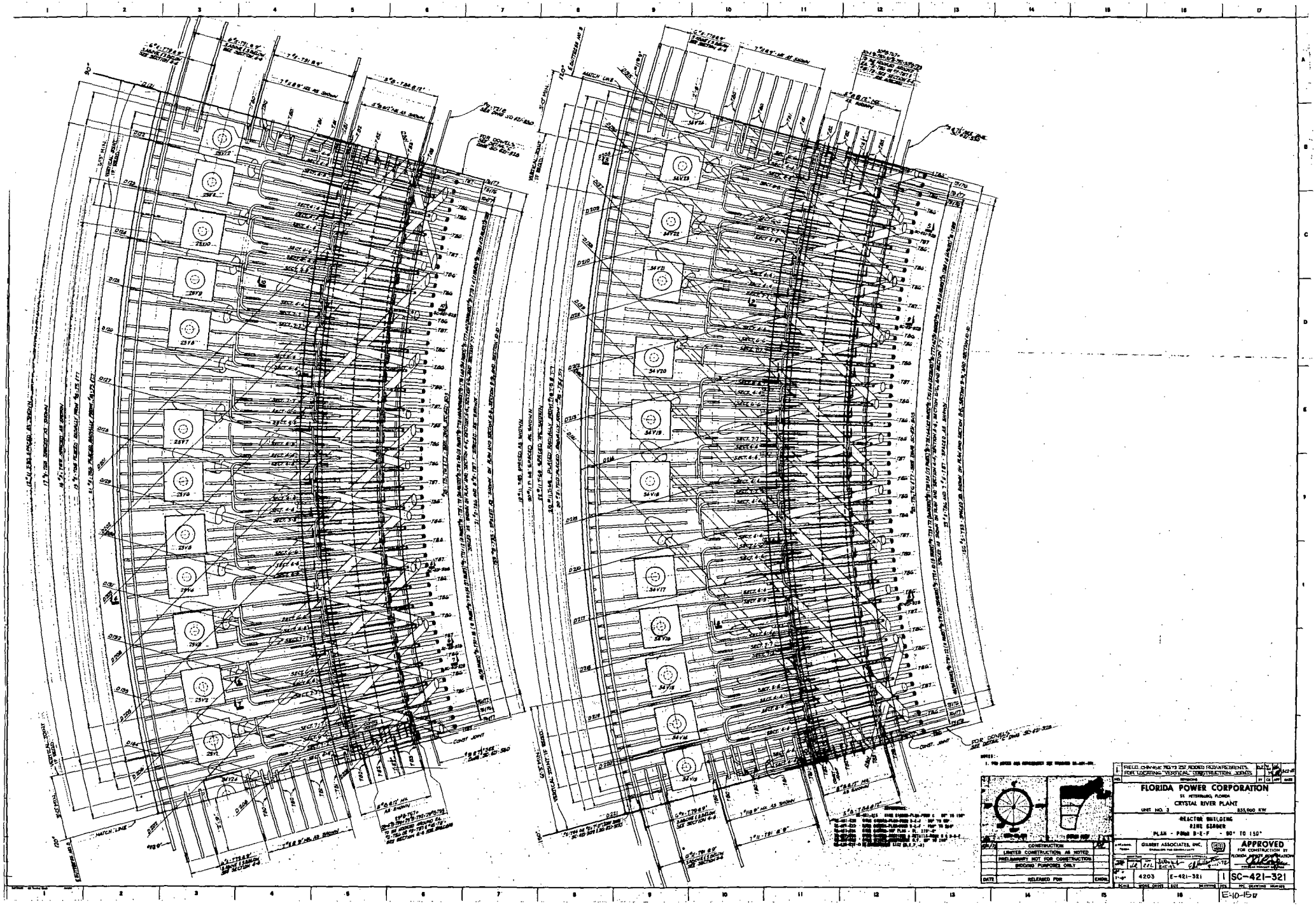
CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

GILBERT ASSOCIATES, INC.

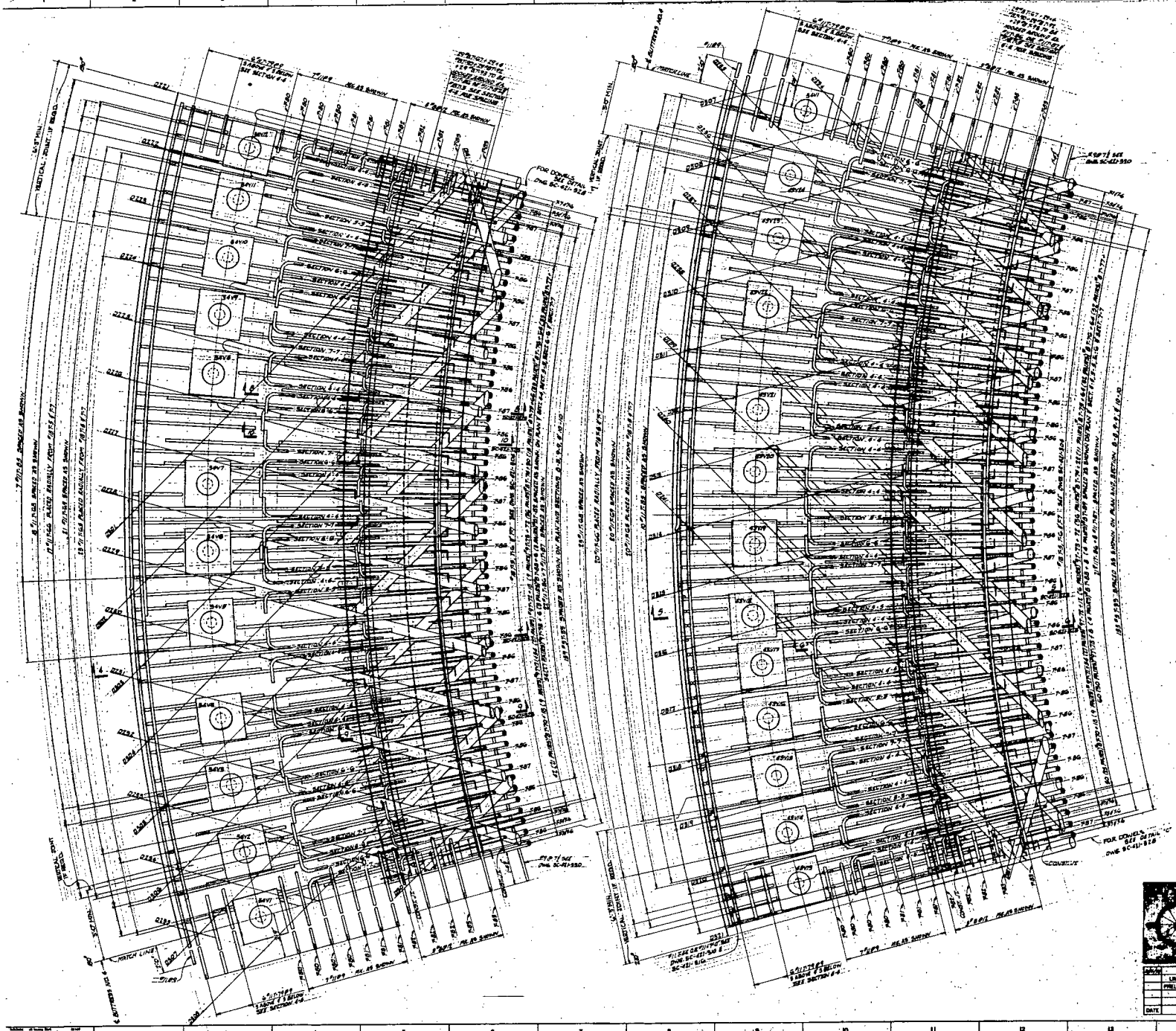
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	SIZE	DRAWING	REV.	NPC DRAWING NUMBER
1/4"=1'-0"	4203	E	E-421-323	1	SC-421-323

E-10-15 D



FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
835,000 KW
REACTOR BUILDING
RING GIRDER
PLAN - POND B-E-F - 90° TO 150°
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-321
1
SC-421-321
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
DATE
ENGR.
MATCH LINE
CONST. JOINT
FOR DOWELS SEE DETAIL "C" DWG SC-421-328



NOTES:

1. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-320.

REFERENCES:

SC-421-320	[illegible]
SC-421-321	[illegible]
SC-421-322	[illegible]
SC-421-323	[illegible]
SC-421-324	[illegible]
SC-421-325	[illegible]
SC-421-326	[illegible]
SC-421-327-0	[illegible]

NO.	REVISIONS	BY	CK	APP	DATE
1	FIELD CHANGE NO. 73-252 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				3-22-79

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 855,000 KW

REACTOR BUILDING

RING STRUCT

PLAN - POUR D-E-F 150° TO 210°

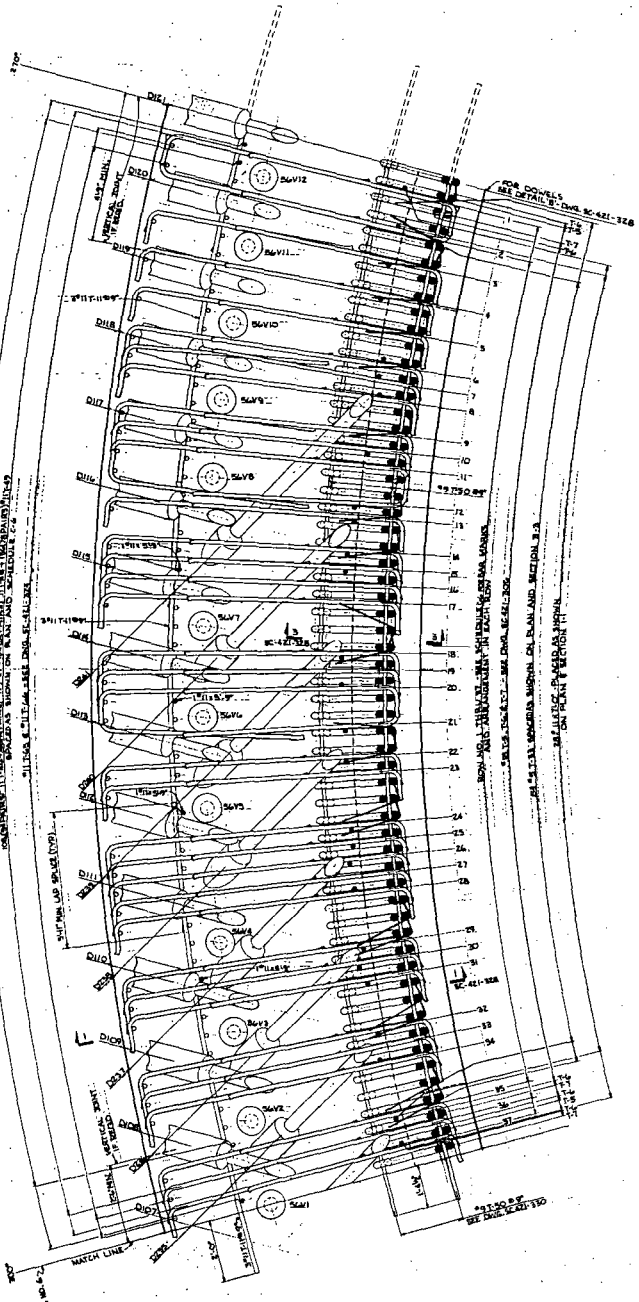
CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

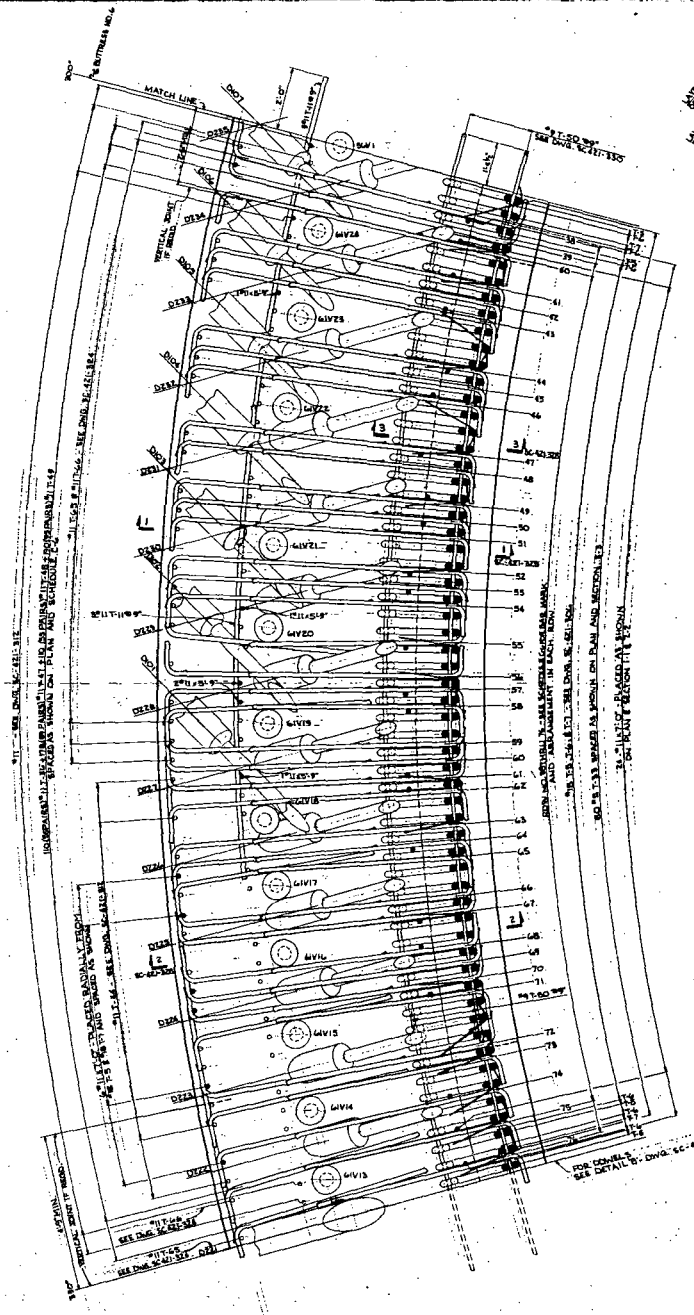
GILBERT ASSOCIATES, INC.

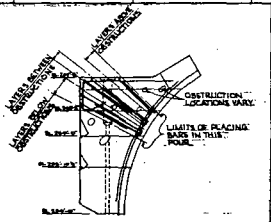
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.	PIC DRAWING NUMBER
1"=1'-0"	4203	E-421-322		1	SC-421-322

E-10-15







TYPICAL ARRANGEMENT
(NOT TO SCALE)

	A	B	C	D	E	F	G	H
1	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4
2	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4
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73	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4
74	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4
75	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4
76	-	5	-	1-42	1-42	1-42	1-42	1-42	1-42	1-42	1-42	2	3	4

*SEE TYPICAL ARRANGEMENT

1	FIELD CHANGE NO. TS 252, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS	5-2-72
NO.	REVISION	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
RING GIRDER
PLAN - QUAD C - 270° TO 330°

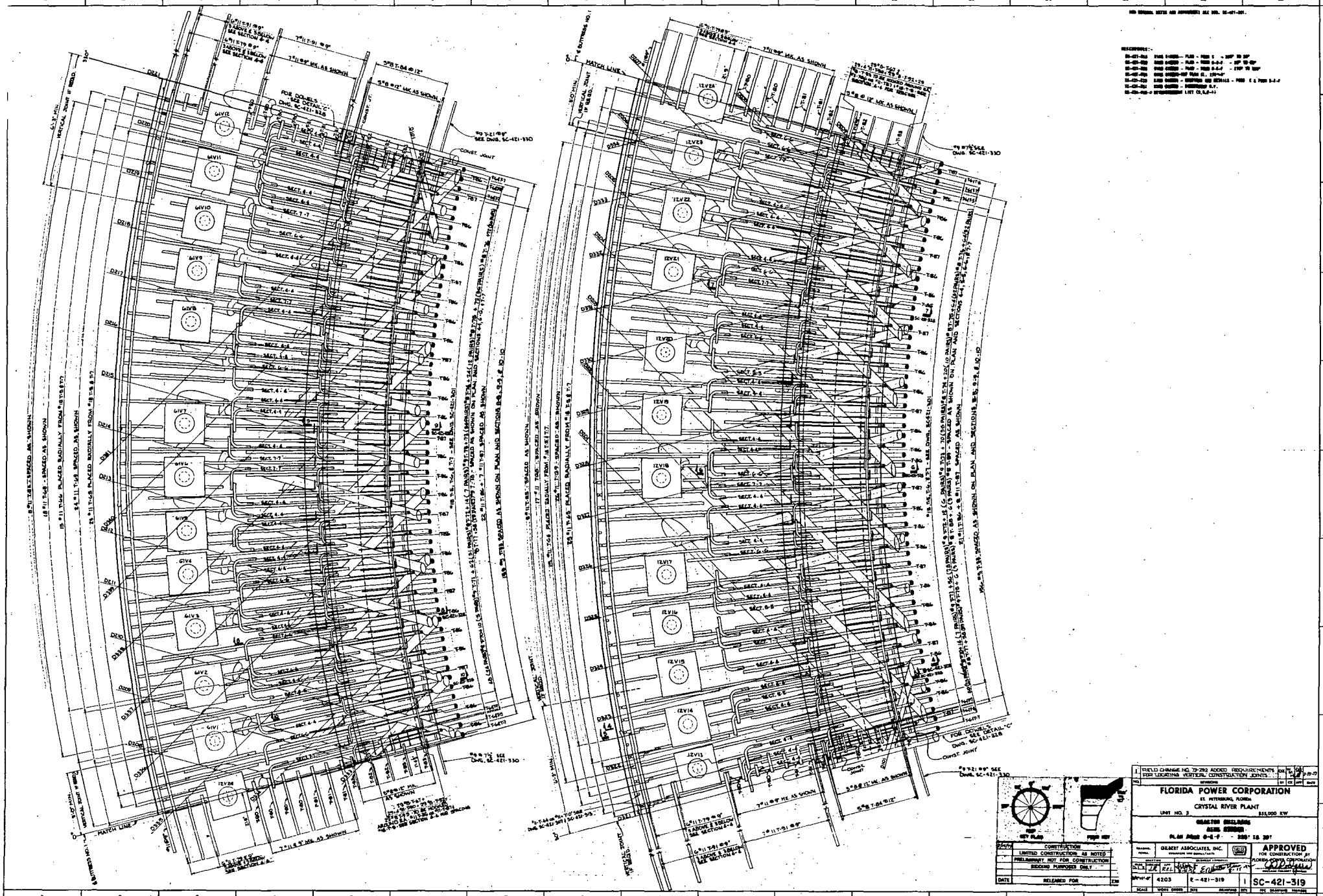
5-8-72	CONSTRUCTION	AJT
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	BY

GILBERT ASSOCIATES, INC.
Engineers and Constructors
P.O. BOX 1498, READING, PENNSYLVANIA

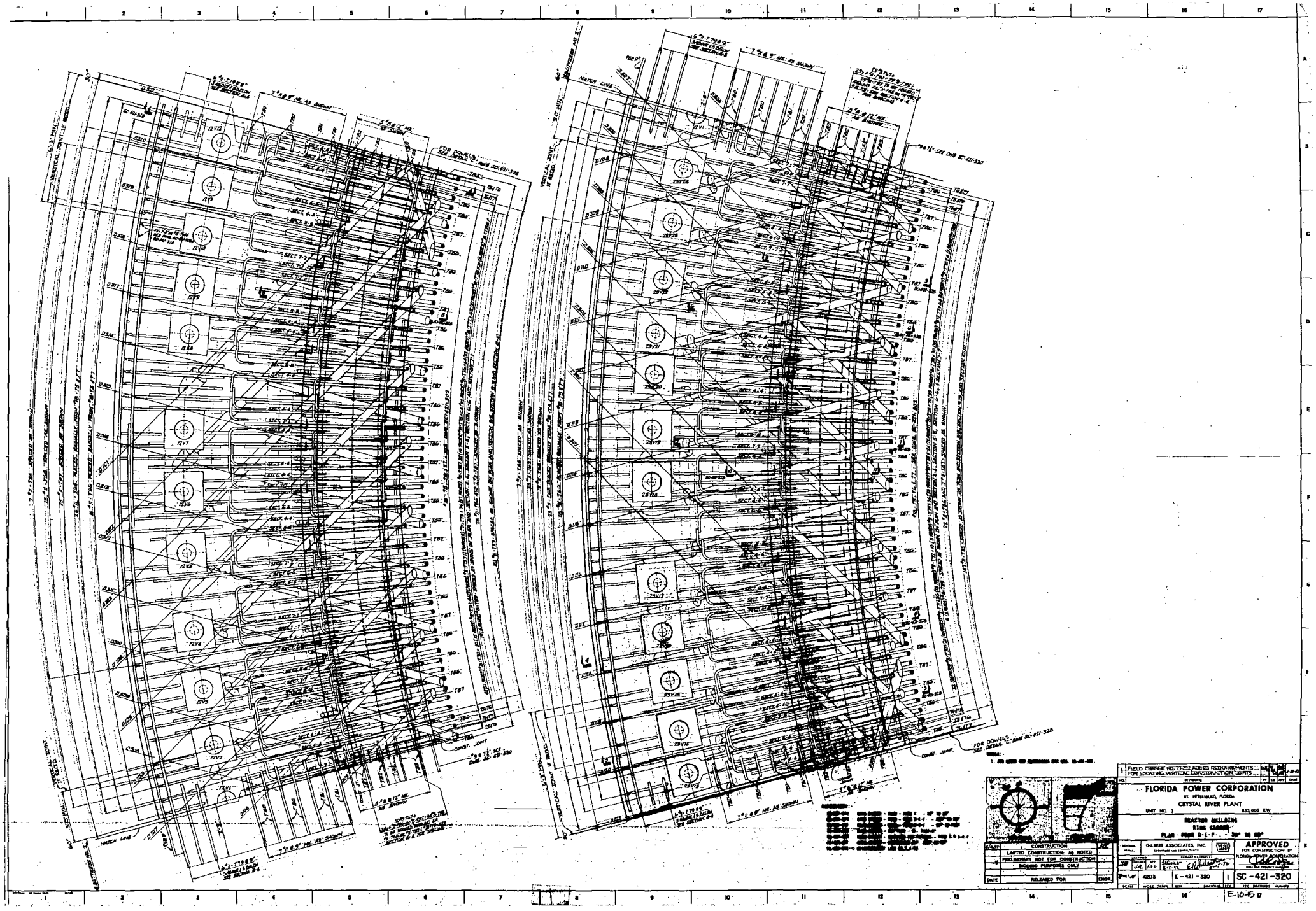
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

DESIGNED	DRAWN	TRACED	CHECKED	APPROVED
SCALE	WORK ORDER	FILE	DRAWING	REV.
1"=1'-0"	4203	E-421-318	1	SC-421-318

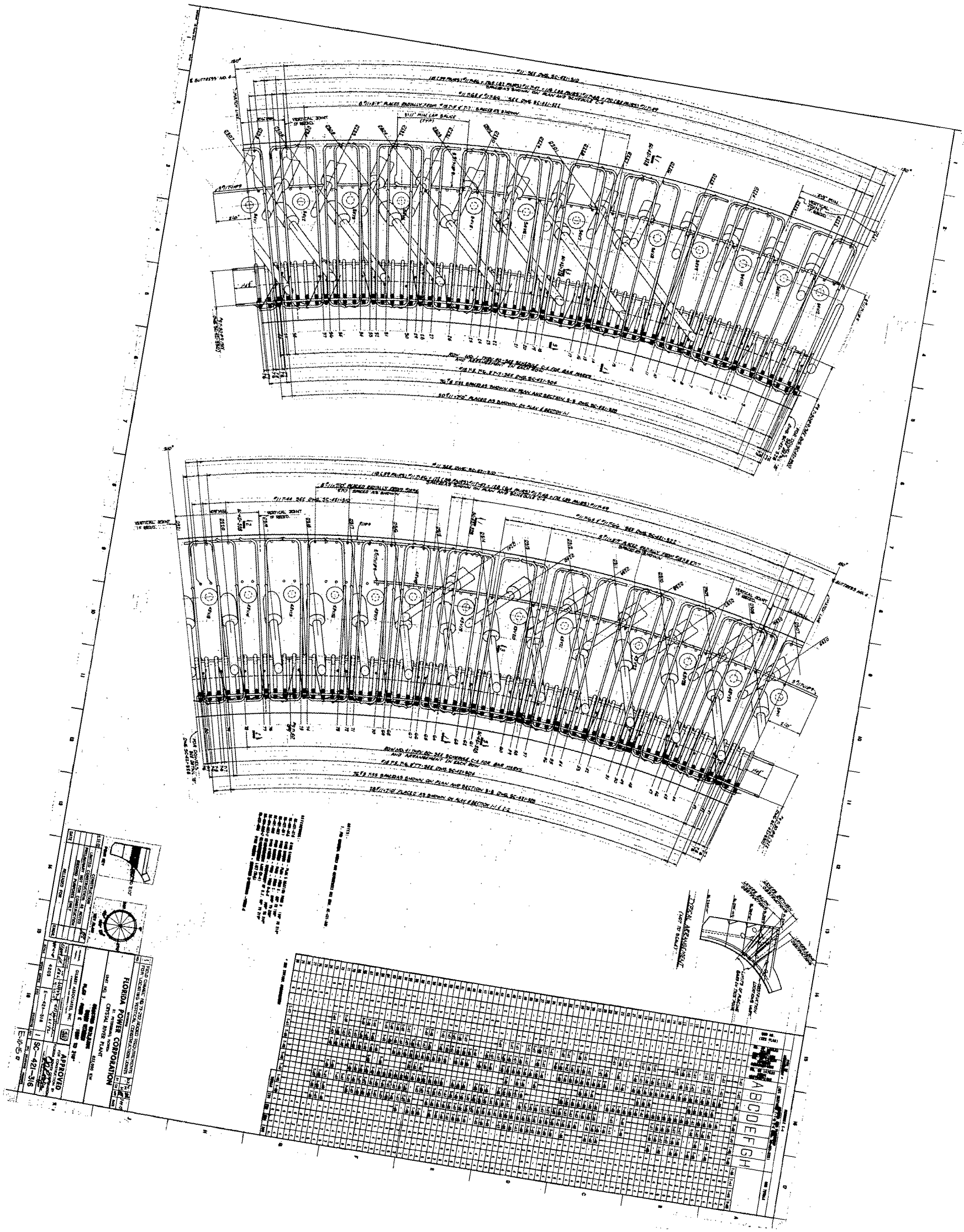
E-10-B17

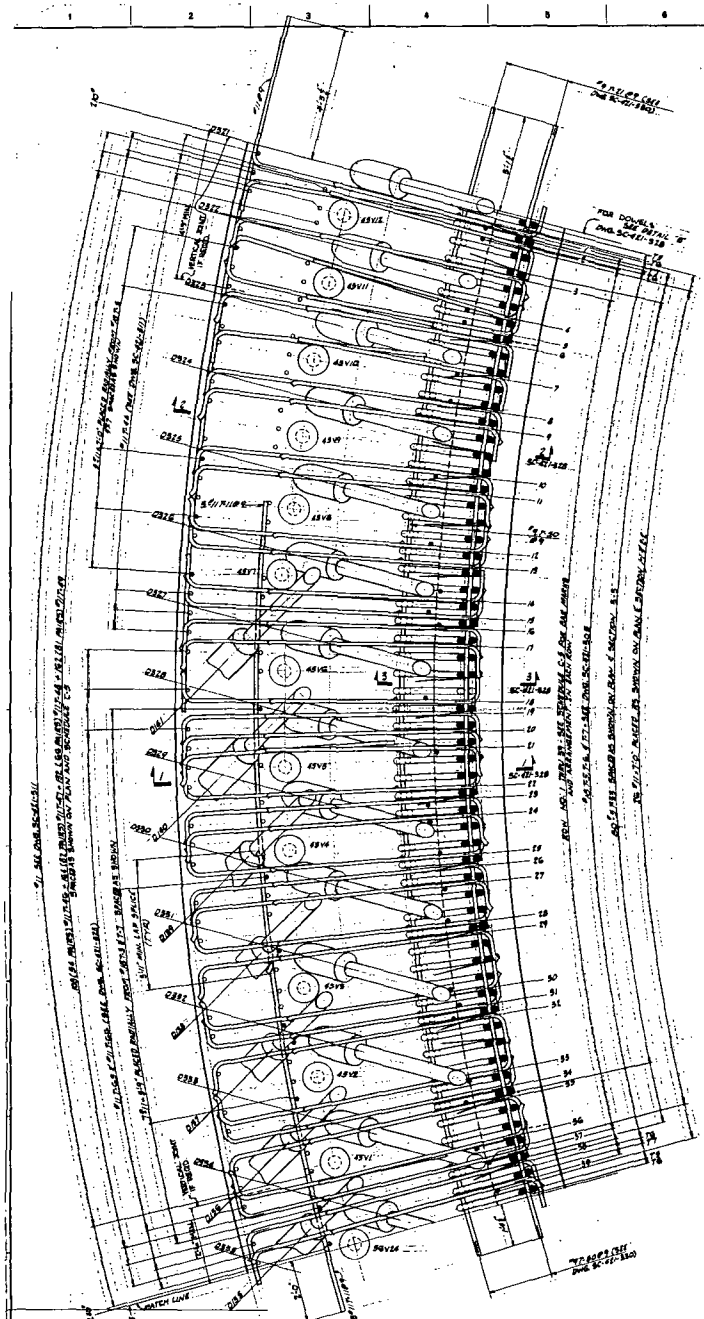


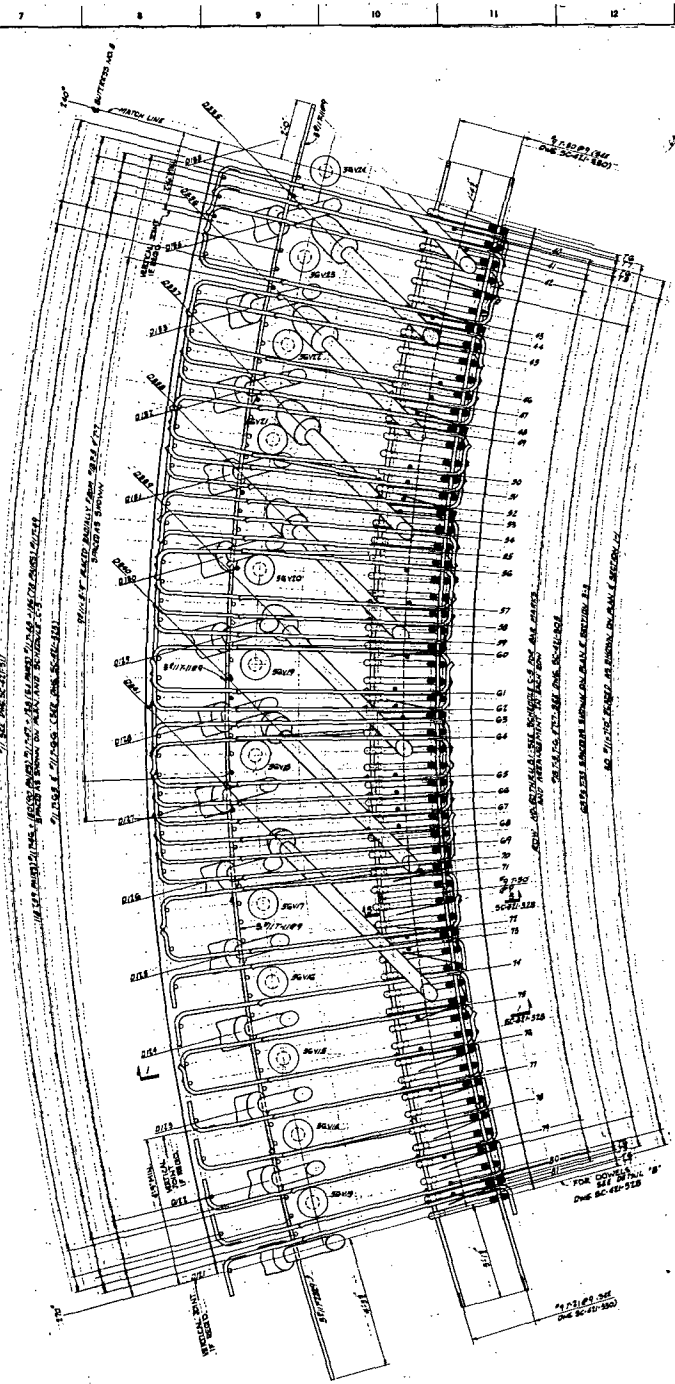
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
855,000 KW
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-319
1
SC-421-319
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
MATCH LINE
CONST. JOINT

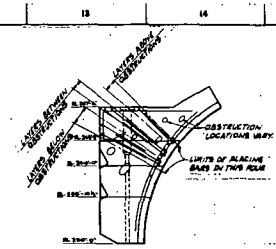


FOR DOWELS SEE DETAIL C-DWG SC-421-328
CONST. JOINT
MATCH LINE
VERTICAL JOINT IF REQD.
FIELD CHANGE NO. 73-292, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
855,000 KW
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
4203
E-421-320
SC-421-320
E-10-15


FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
SC-421-316
APPROVED
A B C D E F G H







TYPICAL ARRANGEMENT
(NOT TO SCALE)

	A	B	C	D	E	F	G	H
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2	-	-	1-41	1-41	1-48	1-48	1-41	1-48
3	-	-	1-41	1-41	1-48	1-48	1-41	1-48
4	-	-	1-41	1-41	1-48	1-48	1-41	1-48
5	-	-	1-41	1-41	1-48	1-48	1-41	1-48
6	-	-	1-41	1-41	1-48	1-48	1-41	1-48
7	-	-	1-41	1-41	1-48	1-48	1-41	1-48
8	-	-	1-41	1-41	1-48	1-48	1-41	1-48
9	-	-	1-41	1-41	1-48	1-48	1-41	1-48
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11	-	-	1-41	1-41	1-48	1-48	1-41	1-48
12	-	-	1-41	1-41	1-48	1-48	1-41	1-48
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14	-	-	1-41	1-41	1-48	1-48	1-41	1-48
15	-	-	1-41	1-41	1-48	1-48	1-41	1-48
16	-	-	1-41	1-41	1-48	1-48	1-41	1-48
17	-	-	1-41	1-41	1-48	1-48	1-41	1-48
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68	-	-	1-41	1-41	1-48	1-48	1-41	1-48
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74	-	-	1-41	1-41	1-48	1-48	1-41	1-48
75	-	-	1-41	1-41	1-48	1-48	1-41	1-48
76	-	-	1-41	1-41	1-48	1-48	1-41	1-48
77	-	-	1-41	1-41	1-48	1-48	1-41	1-48
78	-	-	1-41	1-41	1-48	1-48	1-41	1-48
79	-	-	1-41	1-41	1-48	1-48	1-41	1-48
80	-	-	1-41	1-41	1-48	1-48	1-41	1-48
81	-	-	1-41	1-41	1-48	1-48	1-41	1-48
82	-	-	1-41	1-41	1-48	1-48	1-41	1-48
83	-	-	1-41	1-41	1-48	1-48	1-41	1-48
84	-	-	1-41	1-41	1-48	1-48	1-41	1-48
85	-	-	1-41	1-41	1-48	1-48	1-41	1-48
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93	-	-	1-41	1-41	1-48	1-48	1-41	1-48
94	-	-	1-41	1-41	1-48	1-48	1-41	1-48
95	-	-	1-41	1-41	1-48	1-48	1-41	1-48
96	-	-	1-41	1-41	1-48	1-48	1-41	1-48
TOTALS								

NOTES:
1. FOR GENERAL NOTES AND REFERENCES SEE DRAWING SC-421-301. SEE TYPICAL ARRANGEMENT

REFERENCES:
SC-421-311 BASE GARDEN - PLAN & SECTION - ITEM 3 270° TO 270°
SC-421-312 BASE GARDEN - PLAN - ITEM 5 135° TO 315°
SC-421-313 BASE GARDEN - PLAN - ITEM 15 270° TO 180°
SC-421-314 BASE GARDEN - PLAN - ITEM 9-A-A-A 270° TO 270°
SC-421-315 BASE GARDEN - REINFORCING OF E.F. 270° TO 225°
SC-421-316 ELEVATIONS LINE (A-H)
SC-421-317 ELEVATIONS LINE (A-A)
SC-421-318 BASE GARDEN - SECTIONS & DETAILS - ITEM 5

FIELD CHANGE NO. 73-232 ADDED REQUIRE MENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS — 4-24-73

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW
REACTOR BUILDING
RING GIRDER
PLAN - POUR C 210° TO 270°

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION — 4-25-73

CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR

4803 — E-421-317 — SC-421-317

E-10-15 17

TYPICAL ARRANGEMENT
(NOT TO SCALE)

SCHEDULE C-3

ROW NO.	TYPE OF ARRANGEMENT			A	B	C	D	E	F	G	H	BAR TOTALS T-46	T-47	T-48	T-49
1	–	8	–	T-47	T-47	T-48	T-48	T-48	T-47	T-48	T-48	4	9	2	4
2	–	–	8	T-48	T-48	T-48						4	2	4	8
3	–	8	–	T-47	T-47	T-48						4	8	2	4
4	–	8	–				T-48	T-48				4	8	2	4
5	4	–	4				T-48	T-48				4	8	8	–
6	–	8	–	T-47	T-47	T-48	T-48	T-48	T-47		T-48	4	8	2	4
7	–	8	–	–	–	–	–	T-47	T-48	T-48	–	4	2	–	–
8	4	–	–	T-47	T-47	T-48	T-48	–	–	–	–	–	4	4	–
9	4	–	4	T-47	T-47	T-48	T-48	T-48	T-47	T-48	T-48	4	8	2	4
10	–	–	8	–	–	–	T-48	T-48	T-47	T-48	T-48	4	8	2	2
11	2	–	–	T-47	T-47	–	–	–	–	–	–	–	4	–	–
12	–	8	–	T-47	T-48	T-48	T-48	T-48	T-48	T-47	T-48	2	4	8	4
13	–	8	8	–	T-48	T-48	T-48	T-48	T-47	–		2	2	2	8
14	8	8	–	T-48	T-48	T-48	T-48	T-48	T-48	T-48		2	8	4	4
15	2	–	2	T-47	T-47	T-48	T-48	T-48	T-47	T-48		4	8	2	4
16	–	1	7	T-48	T-48	T-48	T-48	T-48	T-48	T-48		4	3	4	8
17	–	–	4	–	–	–	–	T-48	T-47	T-48	T-48	4	2	2	–
18	–	4	–	T-47	T-47	T-48	T-48	–	–	–	–	–	4	4	–
19	–	8	3	T-48	T-48	T-48	T-48	T-48	T-47	T-48	T-48	4	2	4	4
20	–	–	8	–	–	–	T-48	T-47	T-47	T-48		4	4	2	–
21	2	–	2	T-47	T-47	T-47	–	–	T-48	T-48		4	8	–	–
22	–	8	–	T-47	T-48	T-48	T-48	T-48	T-48	T-48		2	4	4	4
23	–	4	1	–	–	T-48	T-48	T-47	T-47	–		2	4	2	2
24	2	–	3	T-47	T-47	–	–	–	T-47	T-48		4	8	–	–
25	3	–	1	T-47	T-48	T-48	T-48	T-48	–	–		1	4	4	2
26	–	–	8	T-48	T-48	T-48	T-48	T-48	T-48	T-48		4	2	2	4
27	–	–	8	–	–	–	T-48	T-48	T-47	T-48	T-48	4	2	2	2
28	4	2	–	T-48	T-47	T-48	T-48	T-48	T-48	T-47	T-47	–	8	4	4
29	–	3	1	T-48	T-48	T-48	T-48	T-48	T-48	T-48	T-48	4	2	4	4
30	–	–	2	–	T-48	T-48	T-48	T-48	T-47	T-48	T-48	4	2	2	8
31	–	1	4	–	T-47	–	–	T-48	T-47	T-48	T-48	4	4	8	–
32	–	8	–	T-47	T-47	T-48	T-48	T-48	T-48	T-48	T-48	–	4	4	8
33	–	3	3	–	T-48	T-48	T-48	–	T-47	T-48	T-48	4	2	–	4
34	–	–	8	–	–	–	T-48	T-48	T-47	T-48	T-48	4	2	2	2
35	1	1	4	T-47	–	T-47	–	T-48	T-47	T-48	T-48	4	8	2	–
36	–	4	–	T-47	T-48	T-48	T-48	T-48	T-48	T-48	T-47	–	4	4	8
37	–	2	2	–	–	T-48	T-48	T-48	–	T-48	T-48	4	–	8	4
38	1	–	4	T-47	–	–	–	T-48	T-47	T-48		4	4	2	–
39	–	7	1	T-47	T-48	T-48	T-48	T-48	T-48	T-47		2	4	8	4
40	–	8	–	T-48	T-48	T-48	T-48	T-48	T-48	T-47		2	2	8	4
41	–	3	2	–	–	T-48	T-48	T-47	–	T-48		4	2	2	2
42	1	–	4	T-47	T-47	–	–	T-48	T-47	T-48		4	8	2	–
43	–	7	1	T-47	T-48	T-48	T-48	T-48	T-47	T-47	T-48	2	8	2	8
44	–	8	–	T-48	T-48	T-48	T-48	T-48	T-48	T-47	T-47	–	4	4	8
45	–	4	–	–	–	T-48	T-48	T-48	T-47	–	–	–	2	–	4
46	2	–	3	T-47	T-47	–	–	–	T-47	T-48	T-48	4	8	–	–
47	–	8	1	T-47	T-48	T-48	T-48	T-48	T-48	T-48	T-48	4	4	4	4
48	–	7	–	–	T-48	T-48	T-48	T-48	T-47	T-47	T-47	–	4	4	8
49	2	–	3	T-47	T-48	–	–	–	T-47	T-48	T-48	4	8	–	–
50	–	8	2	T-47	T-48	T-48	T-48	T-48		T-48	T-48	4	4	4	4
51	–	7	–	T-48	T-48	T-48	T-48	T-48		T-48	–	–	4	4	2
52	–	8	–	–	T-48	T-48	T-48	T-48		–	–	–	2	2	8
53	2	–	4	T-47	T-47	–	–	T-48	T-47	T-48	T-48	4	8	2	–
54	–	4	2	T-47	T-47	T-48	T-48	T-48	T-48	T-48		4	4	2	8
55	–	7	1	T-48	T-48	T-48		T-48	T-48	T-47		2	2	8	4
56	–	–	4	–	–	T-48		T-48	T-47	T-48		4	2	2	4
57	–	2	8	T-47	T-47	–		T-48	T-47	T-48		4	8	2	2
58	–	7	–	–	T-48	T-48		T-48	T-48	T-47	T-48	2	2	4	8
59	–	8	–	–	–	T-48		T-48	T-47	T-48	–	2	2	2	4
60	2	–	8	T-47	T-47	T-48					T-48	4	8	2	4
61	2	–	8	T-47	T-47	T-48					T-48	4	8	4	2
62	–	8	2	T-48	T-48	T-48		T-48	T-47	T-48	T-48	4	2	4	8
63	1	8	–	T-47	–	T-48		T-48	T-48	T-48	T-47	–	4	2	8
64	2	8	–	T-47	T-47	T-47	T-48		T-48	T-47	T-48	2	8	2	4
65	–	4	3	–	T-47	T-48	T-48		T-47	T-48		4	4	4	2
66	–	8	2	T-47	T-48	T-48	T-48	T-48		T-48		4	4	2	4
67	–	8	8	T-48	T-48	T-48		T-48		T-48	T-48	4	2	4	8
68	1	4	–	T-47	–	T-48		T-48		–	–	–	4	2	4
69	3	–	8	T-47	T-47	T-48		T-48		T-48	T-48	4	8	4	2
70	4	–	4	T-47	T-47	T-48		T-48		T-48		4	8	2	4
71	–	8	2	T-48	T-48	T-48		T-48	T-47	T-48		4	2	8	4
72	7	–	1	T-47	T-47	T-48		T-48	T-48	T-47	T-48	2	8	4	4
73	8	–	–	T-47	T-47	T-48	T-48	T-48	T-48	–	–	–	4	2	8
74	–	–	8	–	–	T-48	T-48	T-47	T-48	T-48	T-48	4	4	2	2
75	–	8	–	T-47	T-47	T-48	T-48	T-48				4	8	2	4
76	–	8	–									4	8	2	4
77	–	2	–									4	8	2	4
78	–	8	–									4	8	2	4
79	–	8	–									4	8	8	4
80	–	8	–									4	8	2	4
81	–	8	–									4	8	2	4
82	–	8	–	T-47	T-47	T-48	T-48	T-48	T-47	T-48	T-48	4	8	2	4
											TOTALS	344	346	234	300

* SEE TYPICAL ARRANGEMENT

NOTES:

1. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-301.

REFERENCES:

SC-421-305 [illegible] - PLAN [illegible] - 90° TO 180°
SC-421-313 [illegible] - PLAN [illegible] - 180° TO 270°
SC-421-314 [illegible] - PLAN [illegible] - 30° TO 90°
SC-421-327 [illegible] - PLAN [illegible] - 30° TO 150°
SC-421-328 [illegible] - SECTIONS & DETAILS - [illegible]
SC-421-302 [illegible]
[illegible] REINFORCEMENT LIST (C-3)
[illegible] REINFORCEMENT LIST (C-3)

4-24-72	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

NO.	REVISIONS	BY	CK	APP	DATE
1	FIELD CHANGE NO 73-252 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

[illegible]
[illegible]
PLAN - [illegible] C - 90° - 180°

GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	SIZE	DRAWING	REV	FPC DRAWING NUMBER
	4203		E-421-315	1	SC-421-315

E-10-15

TYPICAL ARRANGEMENT
(NOT TO SCALE)

SCHEDULE C-1

Row	Type of arrangement*			A	B	C	D	E	F	G	H	Totals			
1	-	[illegible]	-	T-47	T-47	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	2	4
2	-	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	[illegible]	2	4
3	-	[illegible]	-									4	[illegible]	2	[illegible]
4	-	[illegible]	-									4	[illegible]	2	4
5	-	[illegible]	-									[illegible]	[illegible]	2	4
6	-	[illegible]	-									4	[illegible]	2	4
7	[illegible]	-	[illegible]			[illegible]						4	[illegible]	2	4
8	[illegible]	-	[illegible]	T-47	T-47	[illegible]	[illegible]					4	[illegible]	-	[illegible]
9	-	-	4	-	-	-	-	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	-	2
10	[illegible]	[illegible]	-	T-47	T-47	[illegible]	[illegible]	-	-	-	-	-	4	4	-
11	-	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	T-47	[illegible]	2	4	[illegible]	4
12	[illegible]	[illegible]	-		T-47		[illegible]	[illegible]	[illegible]	[illegible]	-	-	4	[illegible]	2
13	[illegible]	-	[illegible]	T-47	[illegible]	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	2	4
14	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	2	[illegible]	4
15	-	-	4	-	-	-	-	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	-	2
16	-	4	-	T-47	T-47	[illegible]	[illegible]	-	-	-	-	-	4	4	-
17	-	[illegible]	[illegible]	T-47	T-47	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	2	4
18	-	[illegible]	4	-	-	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	2	2	[illegible]
19	[illegible]	-	-	T-47	T-47	-	-	-	-	-	-	-	4	-	-
20	-	[illegible]	-	T-47	T-47	[illegible]	[illegible]	[illegible]	T-47	[illegible]	[illegible]	4	[illegible]	2	4
21	-	[illegible]	[illegible]	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	-	4	[illegible]
22	-	-	[illegible]	-	-	-	-	-	T-47	[illegible]	[illegible]	4	2	-	-
23	4	-	-	T-47	T-47	[illegible]	[illegible]	-	-	-	-	-	4	4	-
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
											TOTALS	[illegible]	[illegible]	[illegible]	[illegible]

*SEE "TYPICAL ARRANGEMENT"

	CONSTRUCTION	
	LIMITED CONSTRUCTION: AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

1 FIELD CHANGE NO. 73-292, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS

NO. | REVISIONS | BY | CK | APP | DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

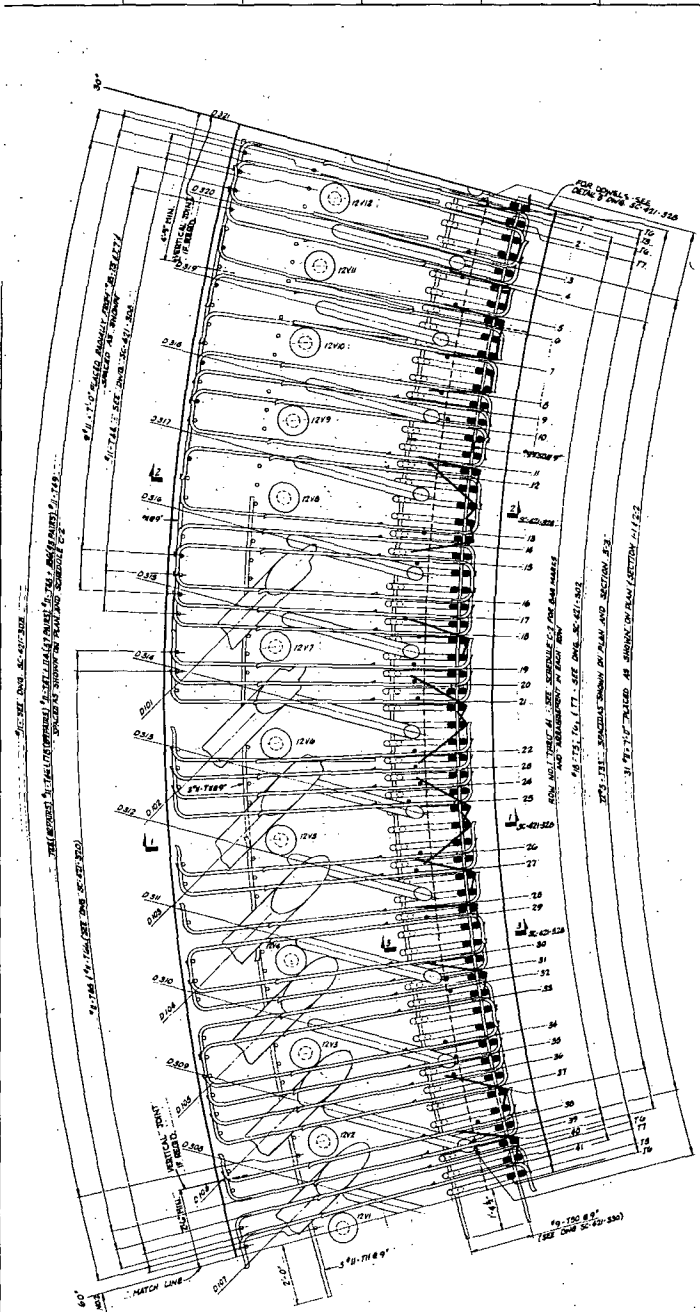
GILBERT ASSOCIATES, INC.

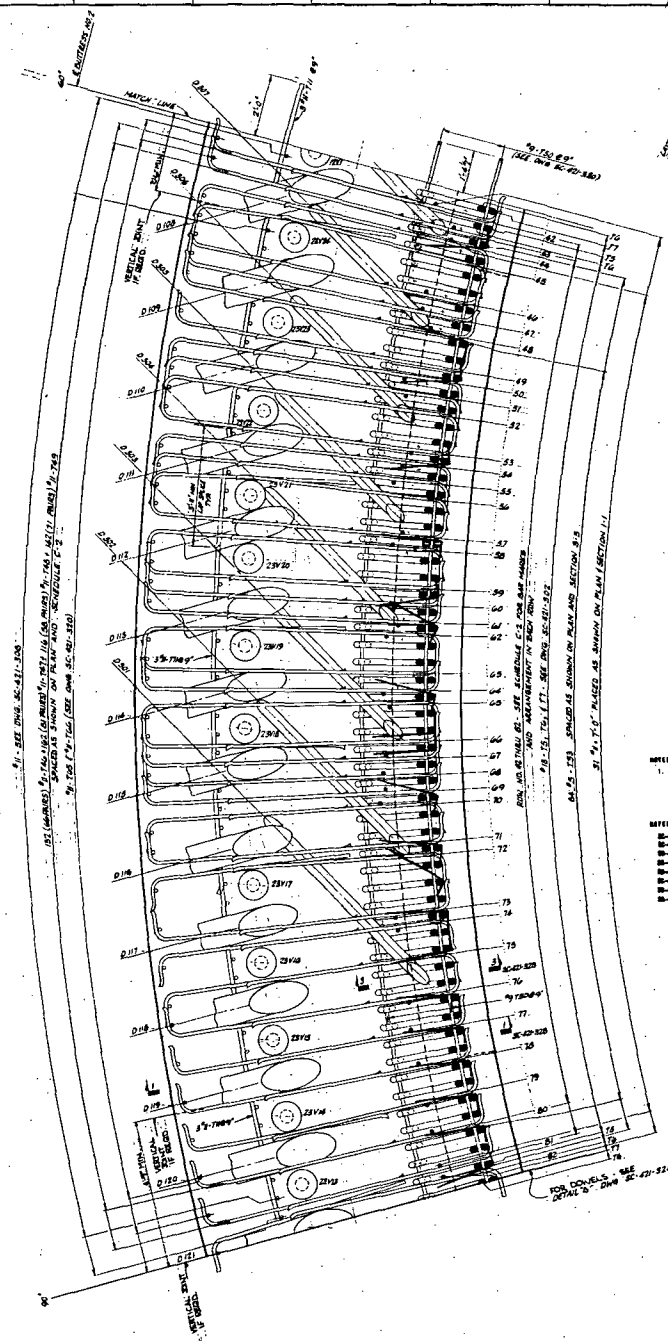
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

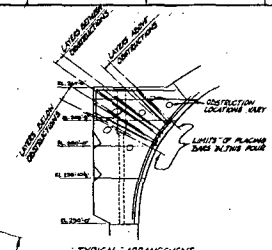
4-24-72

SCALE	WORK ORDER	SIZE / DRAWING	REV.	FPC DRAWING NUMBER
	4203	E-421-313	1	SC-421-313

E-10-15







TYPICAL ARRANGEMENT
(NOT TO SCALE)

NOTES:
1. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-301.

REFERENCES:
SC-421-302 LOCK DIAGRAM - PLAN PIER A 30'-0" TO 60'-0"
SC-421-315 LOCK DIAGRAM - PLAN PIER C 30'-0" TO 60'-0"
SC-421-303 LOCK DIAGRAM - PLAN PIER C 60'-0" TO 90'-0"
SC-421-325 LOCK DIAGRAM - PLAN PIER D-4-5 90'-0" TO 60'-0"
SC-421-305 LOCK DIAGRAM - SECTIONS & DETAILS - PIER "C"
SC-421-321 LOCK DIAGRAM - MISCELLANEOUS W.P.
SC-421-322-D DE-WATERING LIST (D-E)
SC-421-324-D DE-WATERING LIST (E-F)

ASSEMBLY C-1										
TYPE OF CONSTRUCTION JOINT		GENERAL USE PLACEMENT (SEE SECTIONS 1-1, 2-2, AND 3-3, SC-421-305)								MISC. DETAILS
		A	B	C	D	E	F	G	H	
1	0	-	T-41	T-41	T-48	T-48	T-48	T-48	-	+ T-48 T-47 T-48 T-48
2	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
3	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
4	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
5	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
6	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
7	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
8	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
9	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
10	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
11	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
12	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
13	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
14	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
15	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
16	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
17	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
18	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
19	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
20	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
21	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
22	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
23	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
24	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
25	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
26	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
27	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
28	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
29	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
30	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
31	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
32	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
33	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
34	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
35	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
36	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
37	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
38	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
39	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
40	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
41	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
42	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
43	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
44	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
45	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
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47	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
48	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
49	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
50	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
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52	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
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62	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
63	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
64	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
65	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
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72	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
73	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
74	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
75	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
76	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
77	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
78	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
79	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
80	0	-	-	-	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
81	0	-	T-41	T-41	T-48	-	T-48	-	-	+ T-48 T-47 T-48 T-48
82	0	-	-	-	T-48	-	T-48	T-48	T-48	+ T-48 T-47 T-48 T-48
										PIECE TOTAL 840 320 320 320

#SEE TYPICAL ARRANGEMENT

KEY PLAN

POUR KEY

CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
DATE RELEASED FOR ENGR

NO.	REVISION	BY	CK	APP	DATE
1	FIELD CHANGE NO. 73-252 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS	RH	CK	APP	2-21-73

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

PLAN - PIER C - 30'-0" - 60'-0"

GILBERT ASSOCIATES, INC.

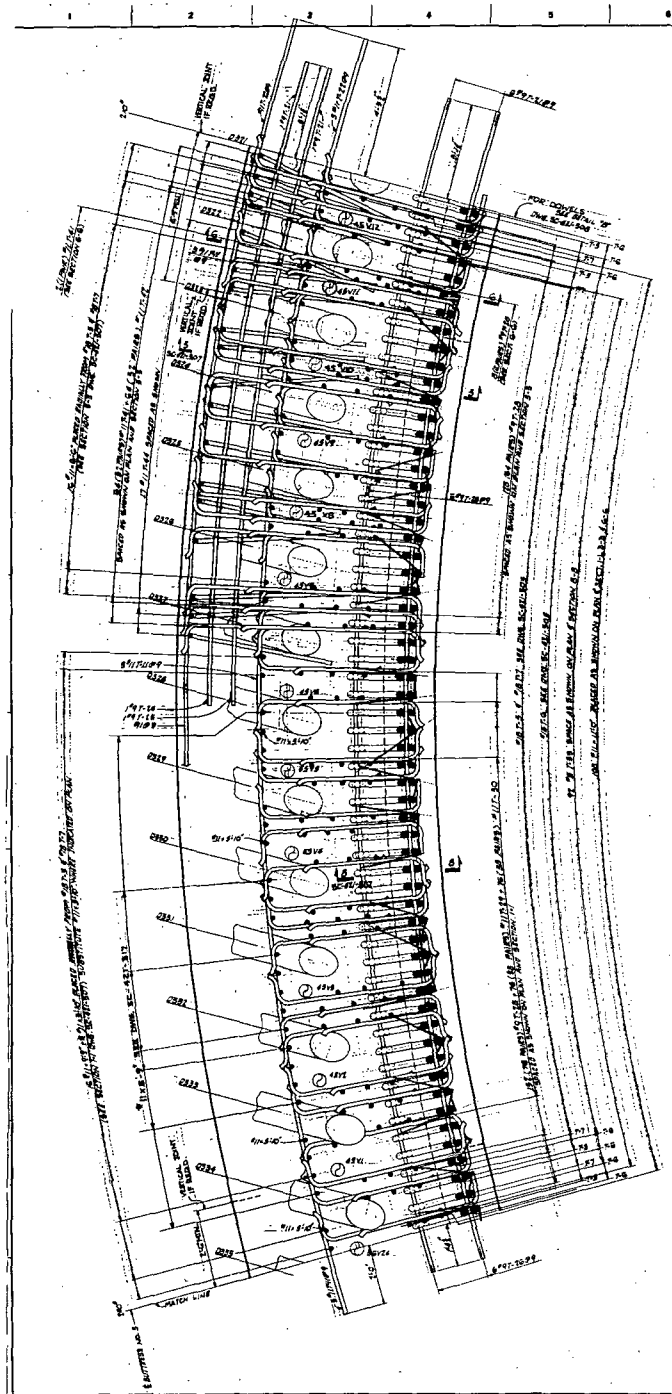
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

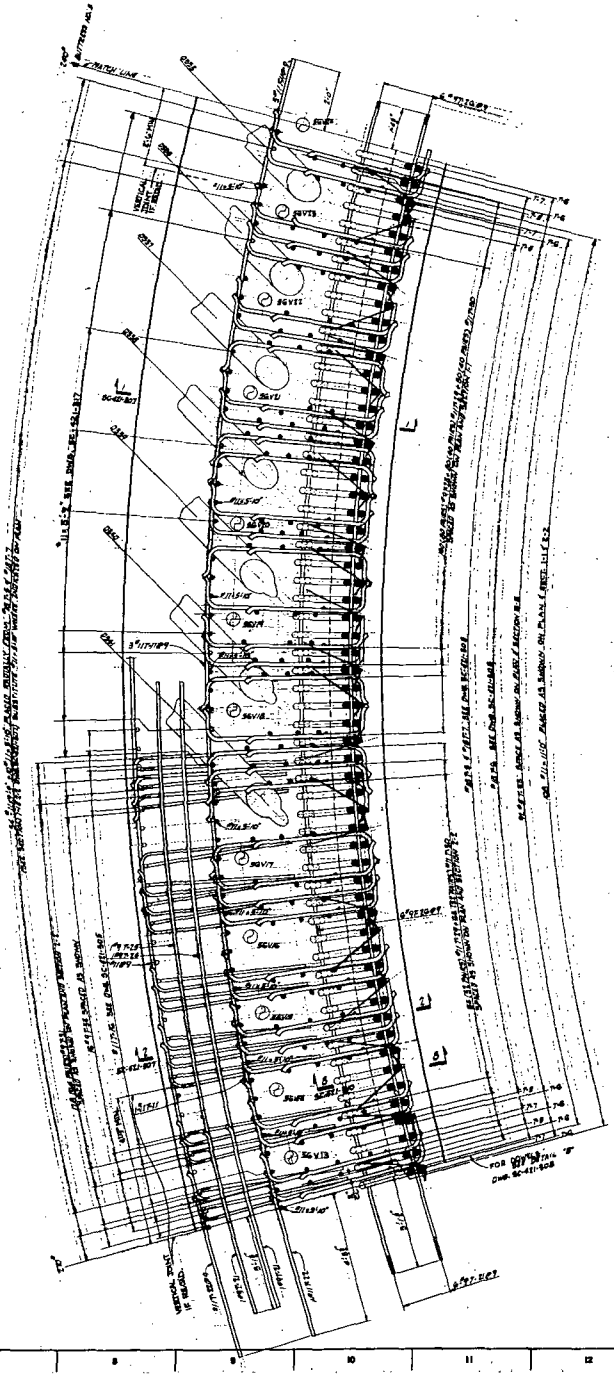
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED
RH	LEC	1-24-73	1-24-73	

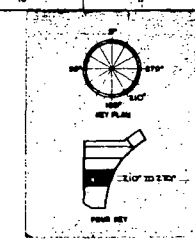
SPEC. NO.	JOB NO.	DRAWING NO.	REV.
SPEC-147	4203	E-421-314	1

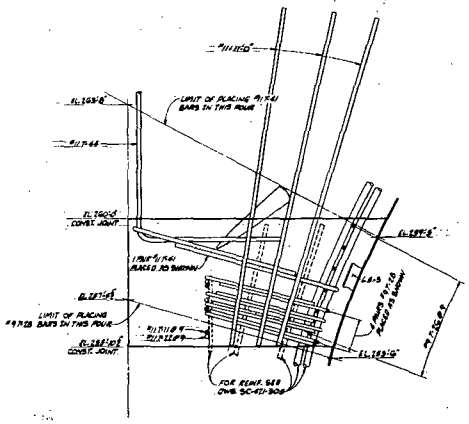
SC-421-314

E-10-50









SECTION G-G

NO.	REVISIONS	BY	CK	APP	DATE
2	FIELD CHANGE NO. 73-292, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
1	ADJUSTED LOCATIONS OF #11 x 11'-0" SPLAYED BARS ON PLAN & ADDED REF. TO #11 x 8'-9"				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
RING GIRDER
PLAN & SECTION - POUR 8 — 210° TO 270°

GILBERT ASSOCIATES, INC.

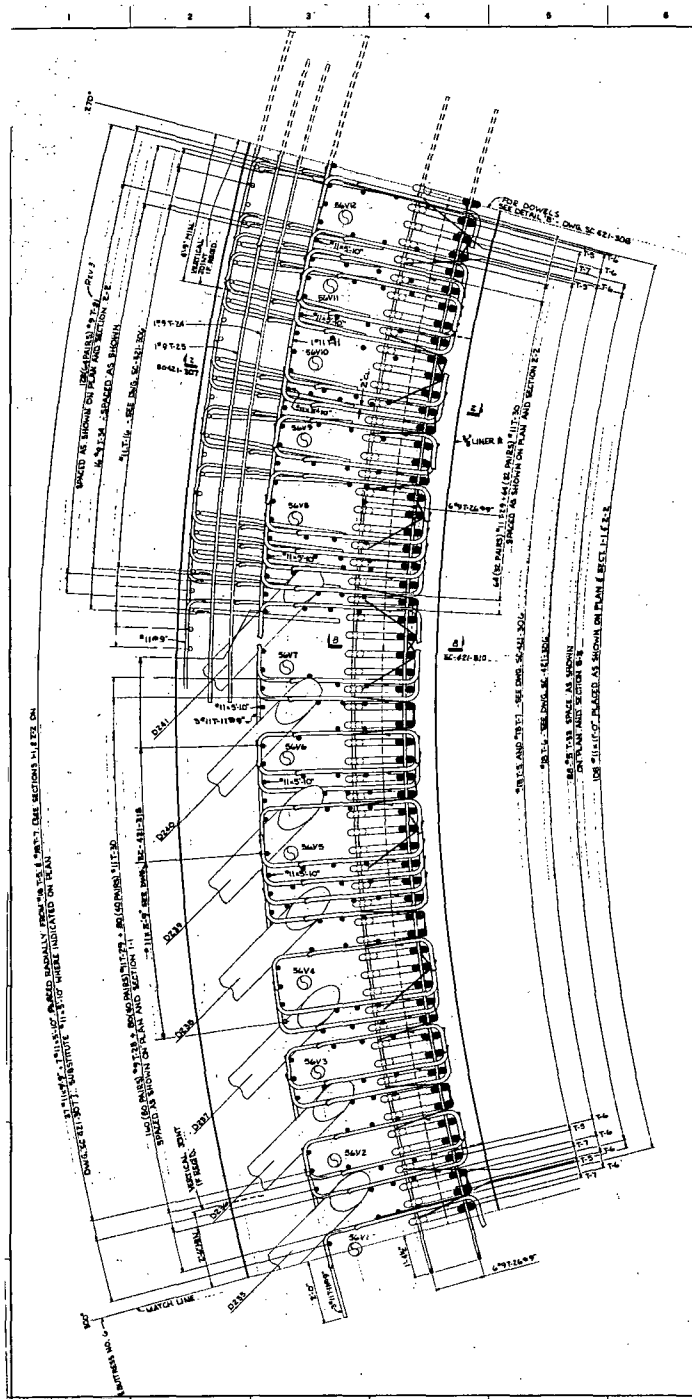
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

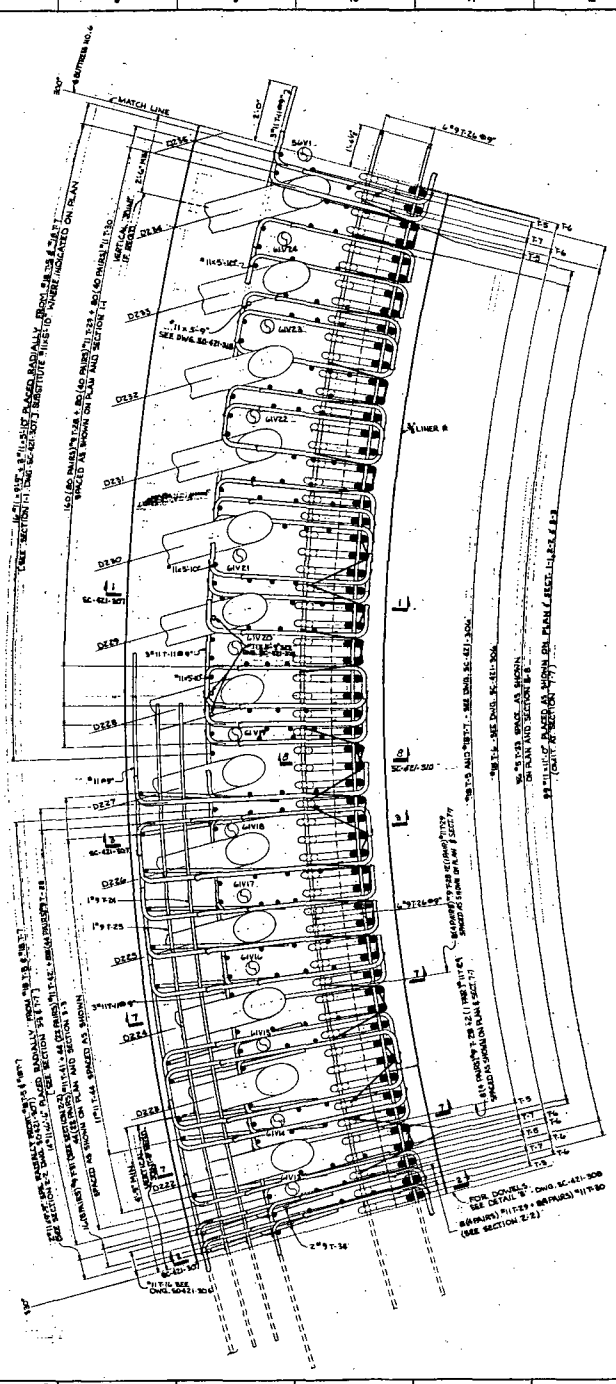
DATE	RELEASED FOR	ENGR.
3/11/72	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

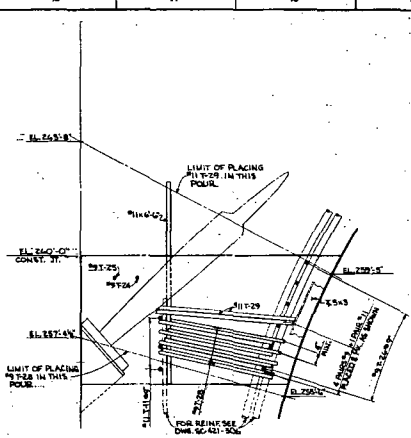
SCALE	DRAWN	DATE	DRAWING NO.	REV.
1/4" = 1'-0"	4203	E-421-311		2

SC-421-311

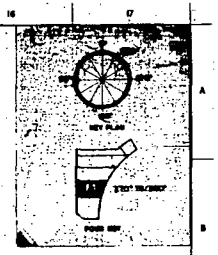
E-10-15







SECTION 7-7



NOTES:

DEVELOPMENTS:

4	CHANGED REINF BAR MARKS & NOTES AS INDICATED (6-10-10)	K	6/10/10	CL	6-10-10
3	CHANGED REINF BAR MARKS AS IND. (3) PLACES.	K	7/8/80	CL	7-8-80
2	FIELD CHANGE NO. 79-797, ADDED CT. REQUIREMENTS	K	7/8/80	CL	7-8-80
1	FOR LOCATION OF VERTICAL CONSTRUCTION JOINTS	K	6/10/80	CL	6-10-80
1	ADJUSTED LOCATIONS OF "11'-11'-0" SPLAYED BARS ON PLAN & ADDED BAR NO "11 & 6'-9"	K	4/16/80	CL	4-16-80
NO.	REVISIONS	BY	DATE	APP	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 833,000 KW

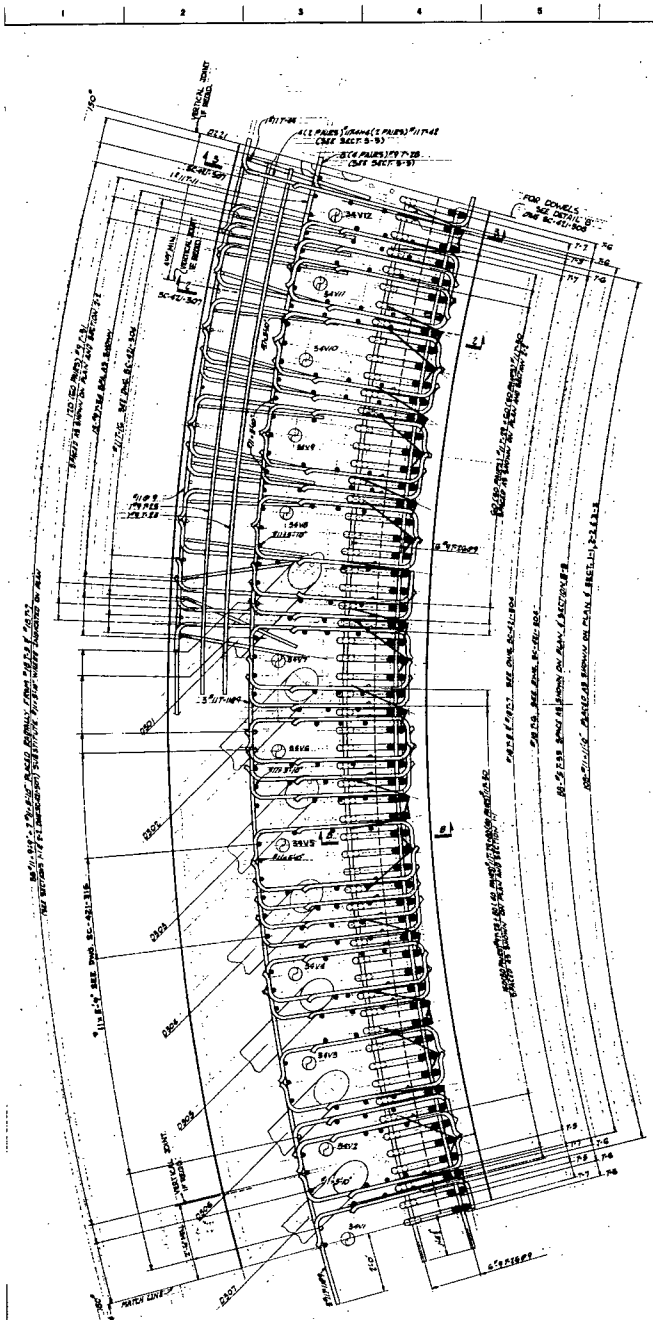
REACTOR BUILDING
RING GIRDER
PLAN & SECTIONS ELEV. 9'-0" - 238'-0"

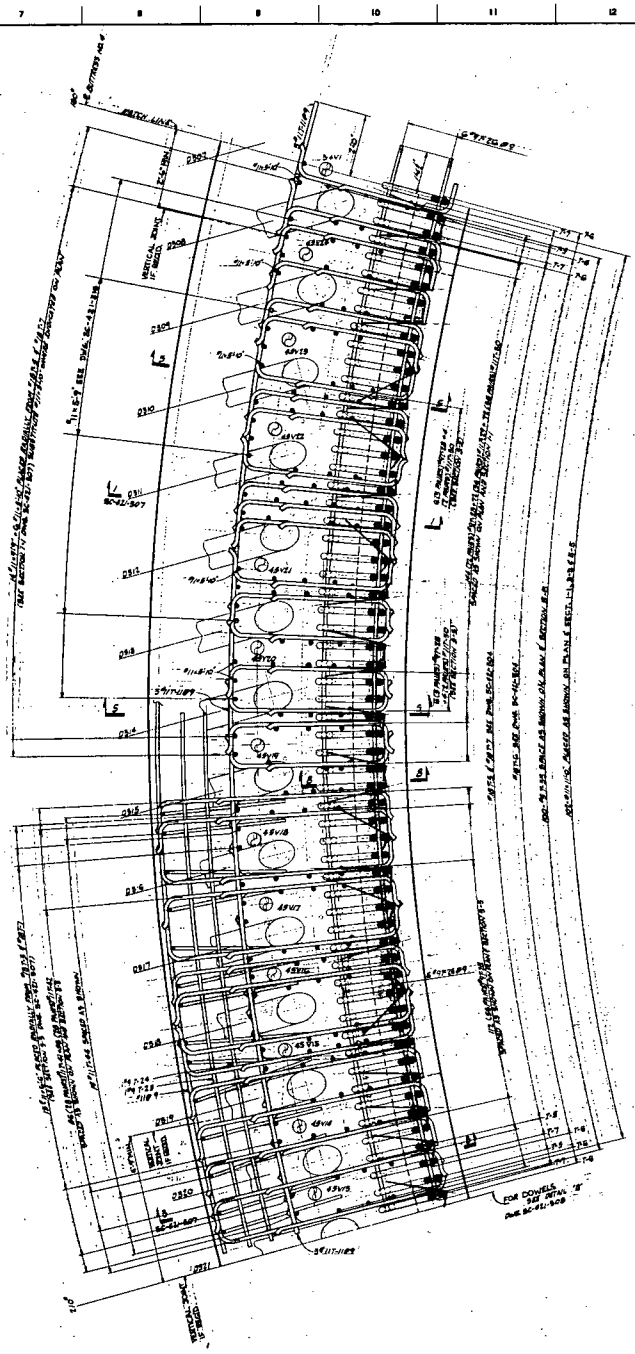
DESIGNED	GILBERT ASSOCIATES, INC.	APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION	
DRAWN			
TRACED			
CHECKED			
QUALITY ASSURANCE			
APPROVED			
DATE			
JOB NO.	4203	E-421-312	4
SCALE	WORK ORDER	FILE	DRAWING NO.

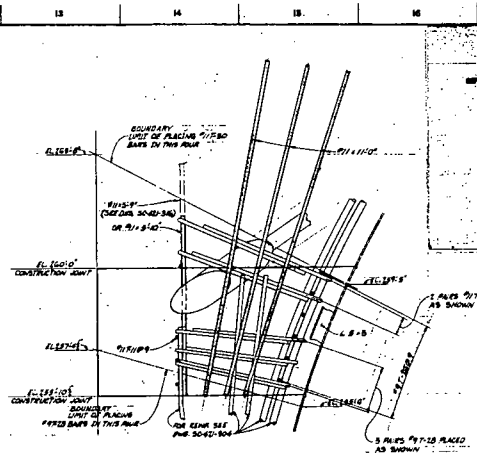
SC-421-312

1/1/11	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

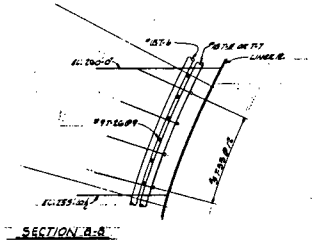
E-10-80







SECTION 5-5



SECTION 8-8

NOTES:-

1. [illegible]

REFERENCES:-

SC-421-301	[illegible]
SC-421-302	[illegible]
SC-421-303	[illegible]
SC-421-304	[illegible]
SC-421-305	[illegible]
SC-421-306	[illegible]
SC-421-307	[illegible]
SC-421-308	[illegible]
SC-421-309	[illegible]

NO.	REVISIONS	BY	CK	APP	DATE
2	FIELD CHANGE NO. 73-292 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS	[illegible]	[illegible]	[illegible]	[illegible]
1	ADJUSTED LOCATIONS OF "H1-O" SPLAYED BARS ON PLAN & SECT. E-E & REVISED "E" TO "11'x 8'9"	K S	[illegible]	[illegible]	4-25-74

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 825,000 KW

PLAN & SECTION - PIER 'B' - 156° TO 210°

DESIGNED	GILBERT ASSOCIATES, INC.		APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
DRAWN			
TRACED			
CHECKED			
DATE	1/24/74	APP.	
SCALE	1/4" = 1'-0"	DATE	3/4/74
DRAWING NO.	4203	E-421-310	2
SCALE	WORK ORDER	DATE	DRAWING NO.

SC-421-310

4/74	CONSTRUCTION	RT
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

E-10-150

NOTES:-

1. [illegible]

REFERENCES:-

[illegible]

2	FIELD CHANGE NO. 73-292, ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
1	ADJUSTED LOCATIONS OF #11x11'-0" SPLAYED BARS ON PLAN.	K.S.			
NO.	REVISIONS	BY	CK	APP	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 855,000 KW

REACTOR BUILDING
RING GIRDER
PLAN & DETAILS - POUR 4 30° - 90°

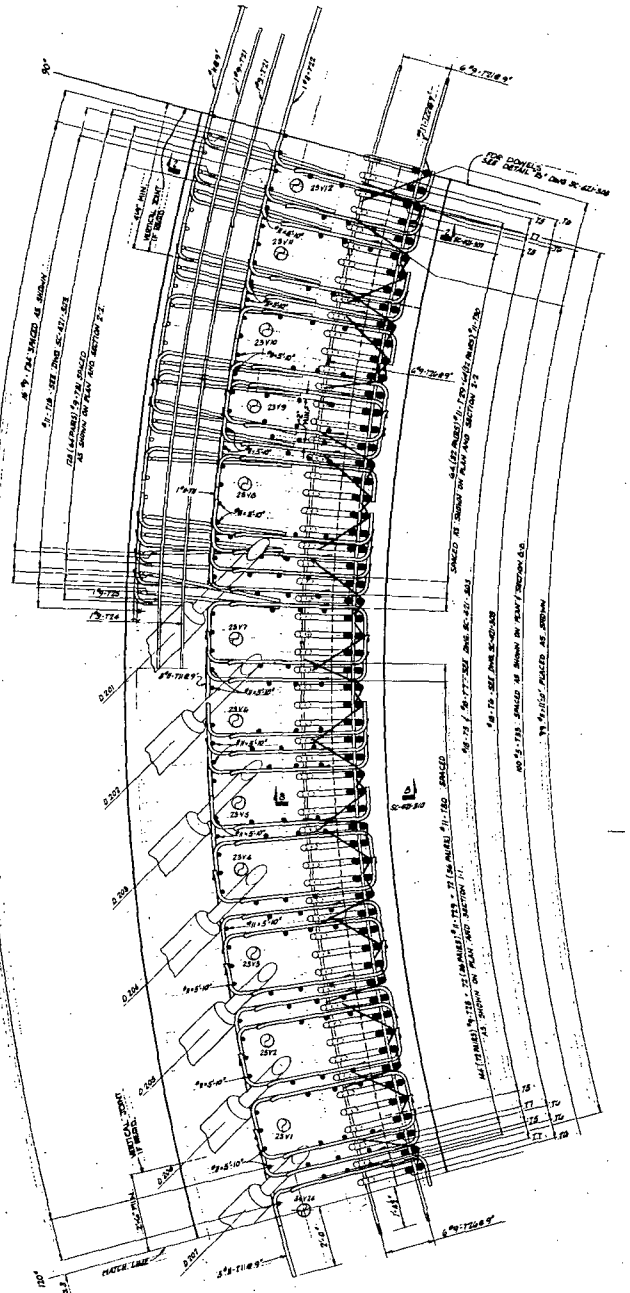
5/5/72	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

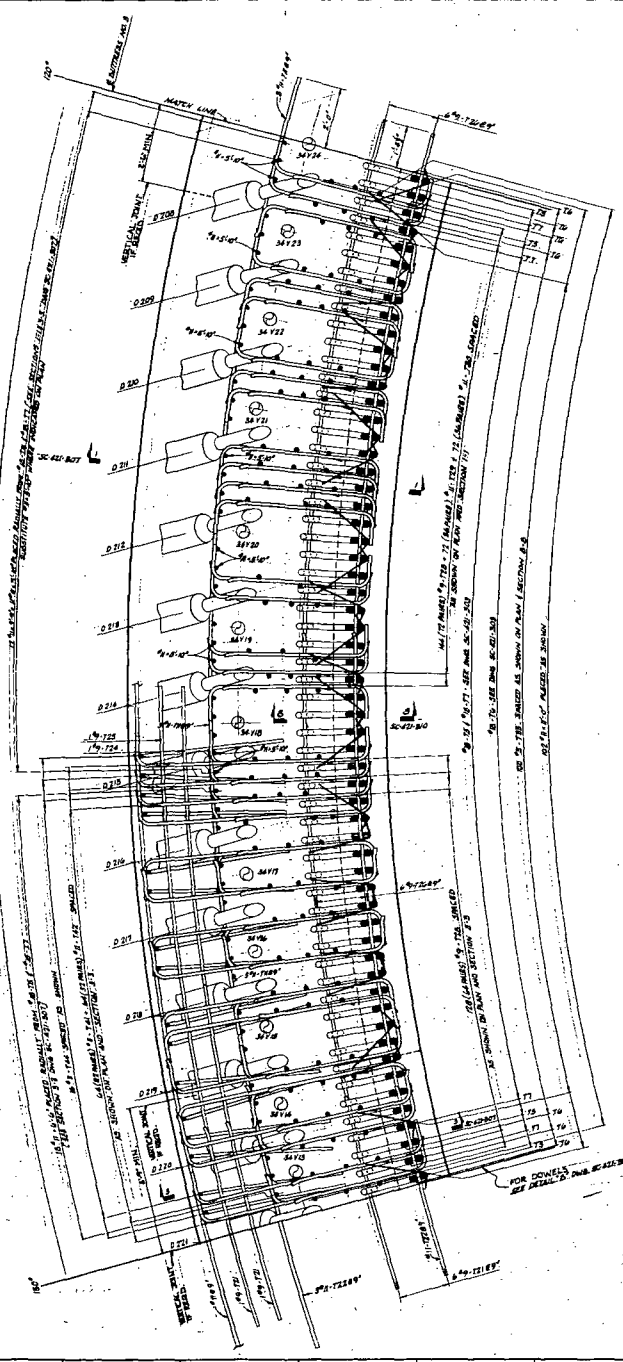
GILBERT ASSOCIATES, INC.

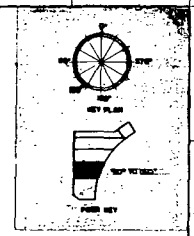
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	DRAWING	REV.	FPC DRAWING NUMBER
	4203	E-421-308	2	SC-421-308

E-10-15







NOTES:
1. FOR GENERAL NOTES AND REFERENCES SEE SHEETS SC-421-305.

REFERENCES:
SC-421-305 REINF. & EMBED. PLAN - PENS. 2 34° TO 90°
SC-421-319 REINF. & EMBED. PLAN - PENS. 3 134° TO 154°
SC-421-320 REINF. & EMBED. PLAN - PENS. 4 90° TO 134°
SC-421-321 REINF. & EMBED. PLAN - PENS. 5 90° TO 134°
SC-421-322 REINF. & EMBED. - EQUIPMENT @ EL. 69' PEN 90 TO 94°
SC-424-300-1 LIST (2 of 2)
SC-424-400-0 LIST (2 of 2)

No.	REVISIONS	BY	CK	APP	DATE
2	FIELD CHANGE NO. 73-252, ADDED, REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS	KS			12-19-73
1	ADJUSTED LOCATIONS OF "SHORT LEG" SPLAYED BARS ON PLAN AND CORRECTED QUANTITY.	KS			10-31-73

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
RING GIRDER
PLAN - ZONE 2 90° - 134°

	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY, NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY
DATE	RELEASED FOR

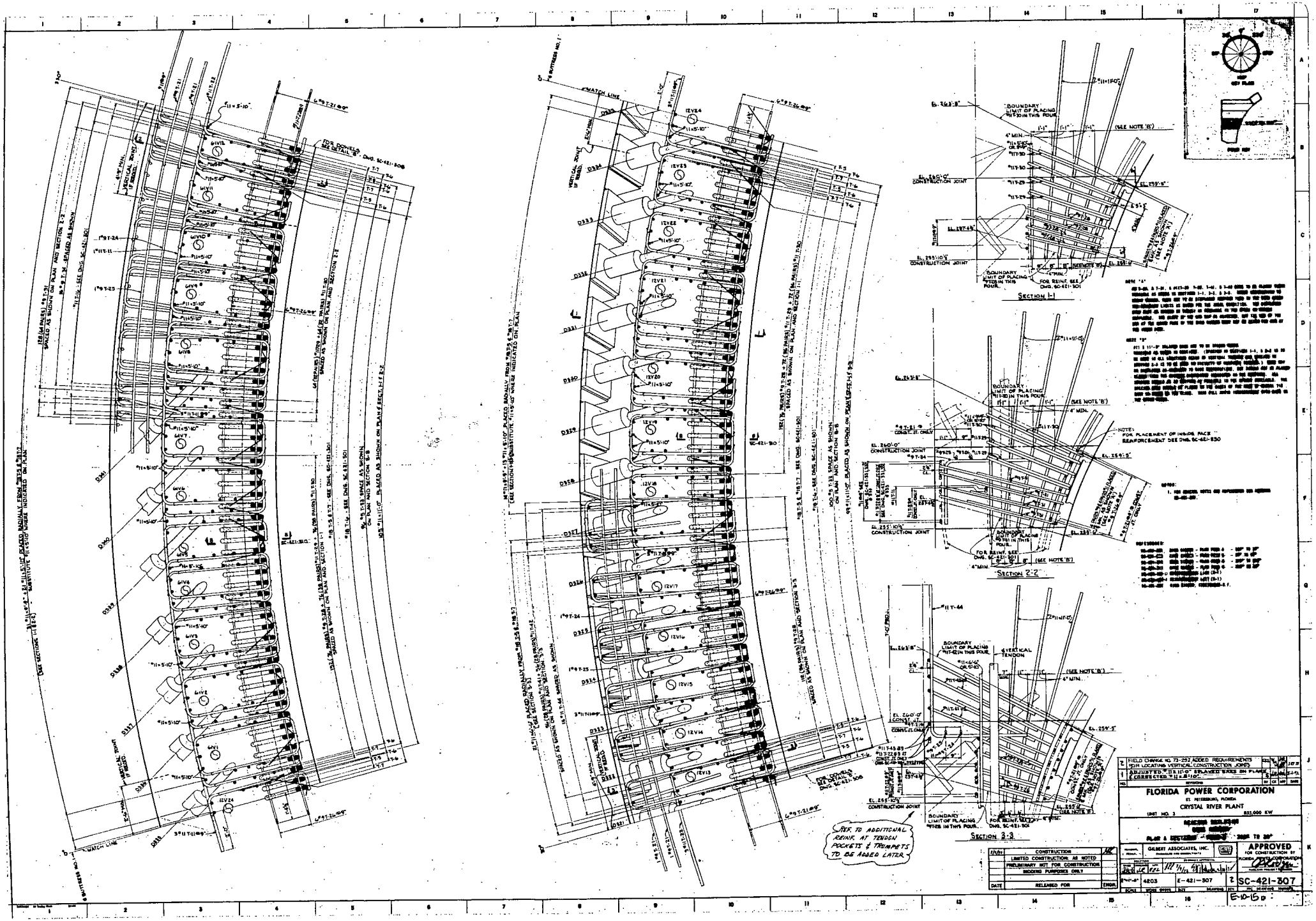
GILBERT ASSOCIATES, INC.
READING, PENNSYLVANIA

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

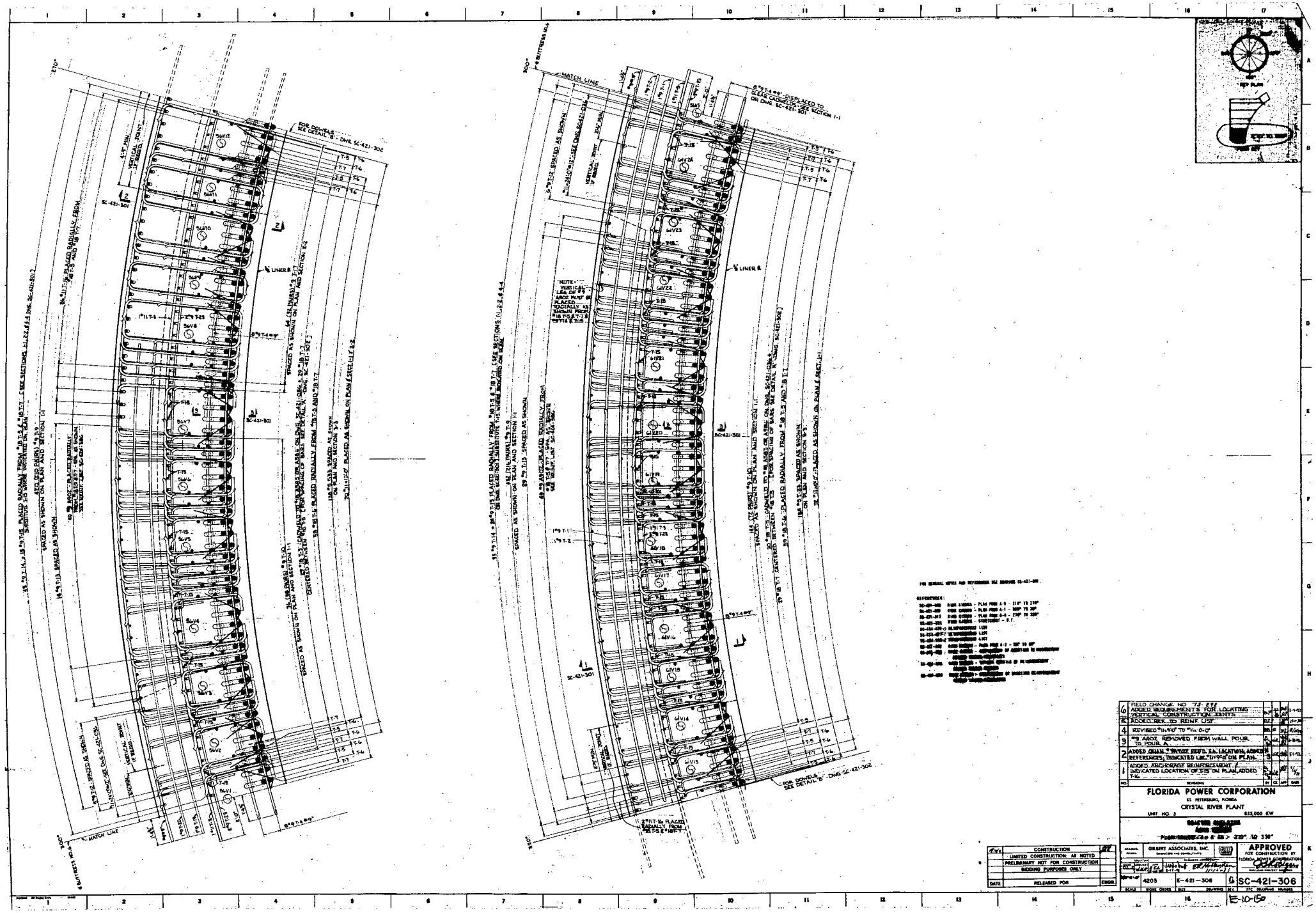
DESIGNED	DRAWN	CHECKED	APPROVED
EEL	EEL		

JOB NO.	CONTRACT NO.	DRAWING NO.	REV.
4203	E-421-309	2	SC-421-309

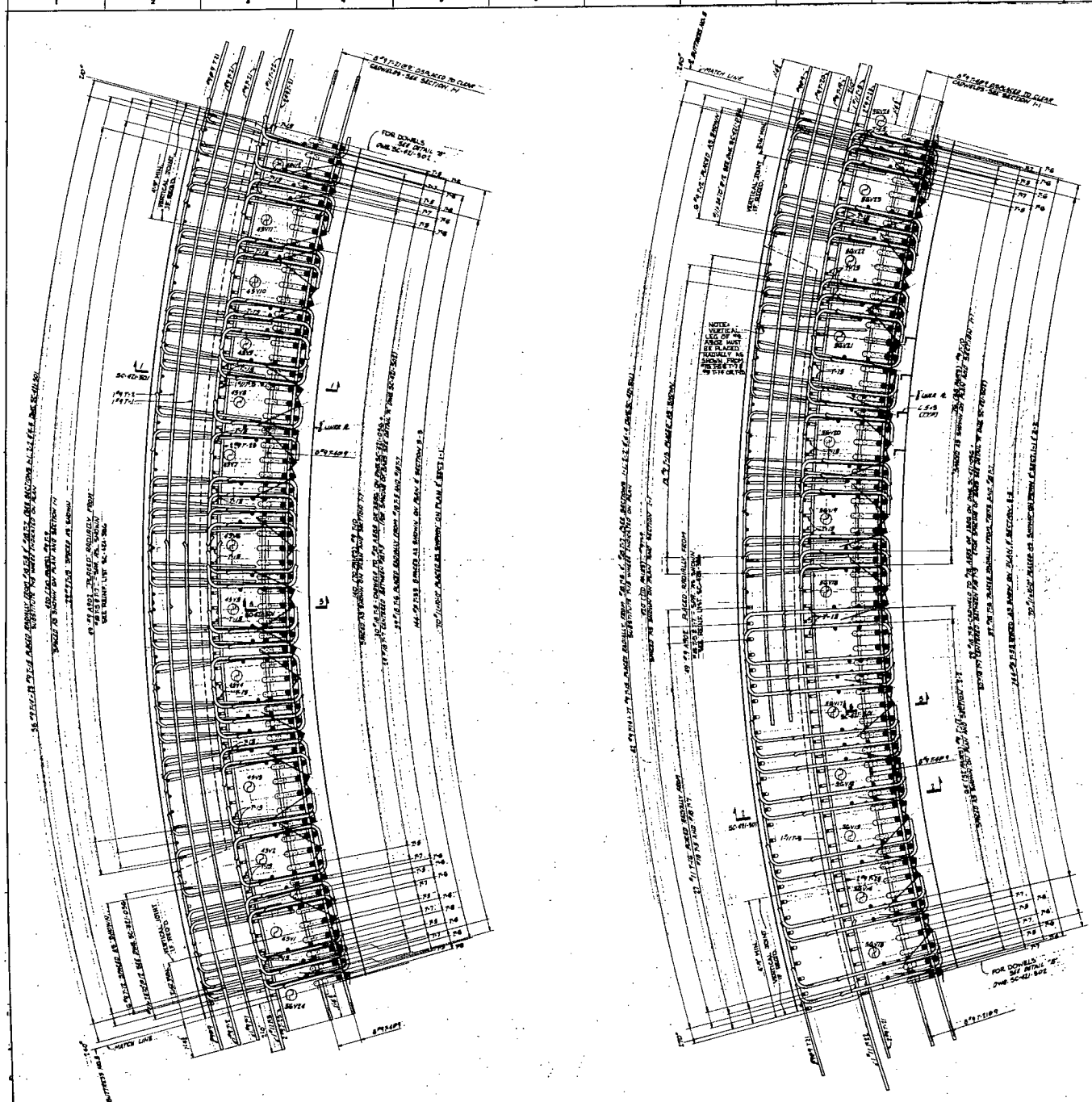
SCALE 1/8" WORK POINTS SIZE E DRAWING STD. PFC DRAWING NUMBER E-10-15 D

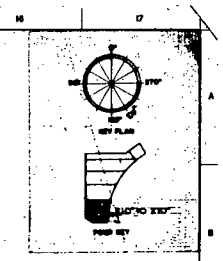


SECTION 1-1
SECTION 2-2
SECTION 3-3
REF. TO ADDITIONAL REINF. AT TENDON POCKETS & TROMPETS TO BE ADDED LATER
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-307
SC-421-307
E-10-15



MATCH LINE
FOR DOWELS SEE DETAIL 'B' - DWG. SC-421-302
SC-421-301
FOR GENERAL NOTES AND REFERENCES SEE DRAWING SC-421-301.
REFERENCES:
6 FIELD CHANGE NO. 73-292 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS
5 ADDED REF. TO REINF. LIST
4 REVISED #11x9'-0" TO #11x10'-0"
3 #9 AROZ REMOVED FROM WALL POUR TO POUR A
2 ADDED QUAN. #9 AROZ REQ'D. EA. LOCATION, ADDED REFERENCES, INDICATED LOC. #11x9'-0" ON PLAN.
1 ADDED ANCHORAGE REINFORCEMENT INDICATED LOCATION OF T-15 ON PLAN, ADDED T-16
NO. REVISIONS BY CK APP DATE
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 855,000 KW
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
4203
E-421-306
SC-421-306
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
DATE
RELEASED FOR
ENGR.
E-10-150





NO.	REVISIONS	BY	CK	APP	DATE
6	FIELD CHANGE NO. 73-878 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS	[illegible]	[illegible]	[illegible]	[illegible]
5	ADDED REF. TO REINF. LIST	[illegible]	[illegible]	[illegible]	[illegible]
4	REVISED #11 x 9'-0" TO #11 x 10'-0"	[illegible]	[illegible]	[illegible]	[illegible]
3	#9 A902 REMOVED FROM WALL POUR TO POUR A	[illegible]	[illegible]	[illegible]	[illegible]
2	ADDED QUAN. #9 A902 REQ'D. FOR EA. LOCATION & INDICATED LOC. #11 x 9'-0" ON PLAN	[illegible]	[illegible]	[illegible]	[illegible]
1	ADDED ANCHORAGE REINFORCEMENT AND INDICATED LOCATIONS FOR T-18 ON PLAN	[illegible]	[illegible]	[illegible]	[illegible]

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 855,000 KW

[illegible]

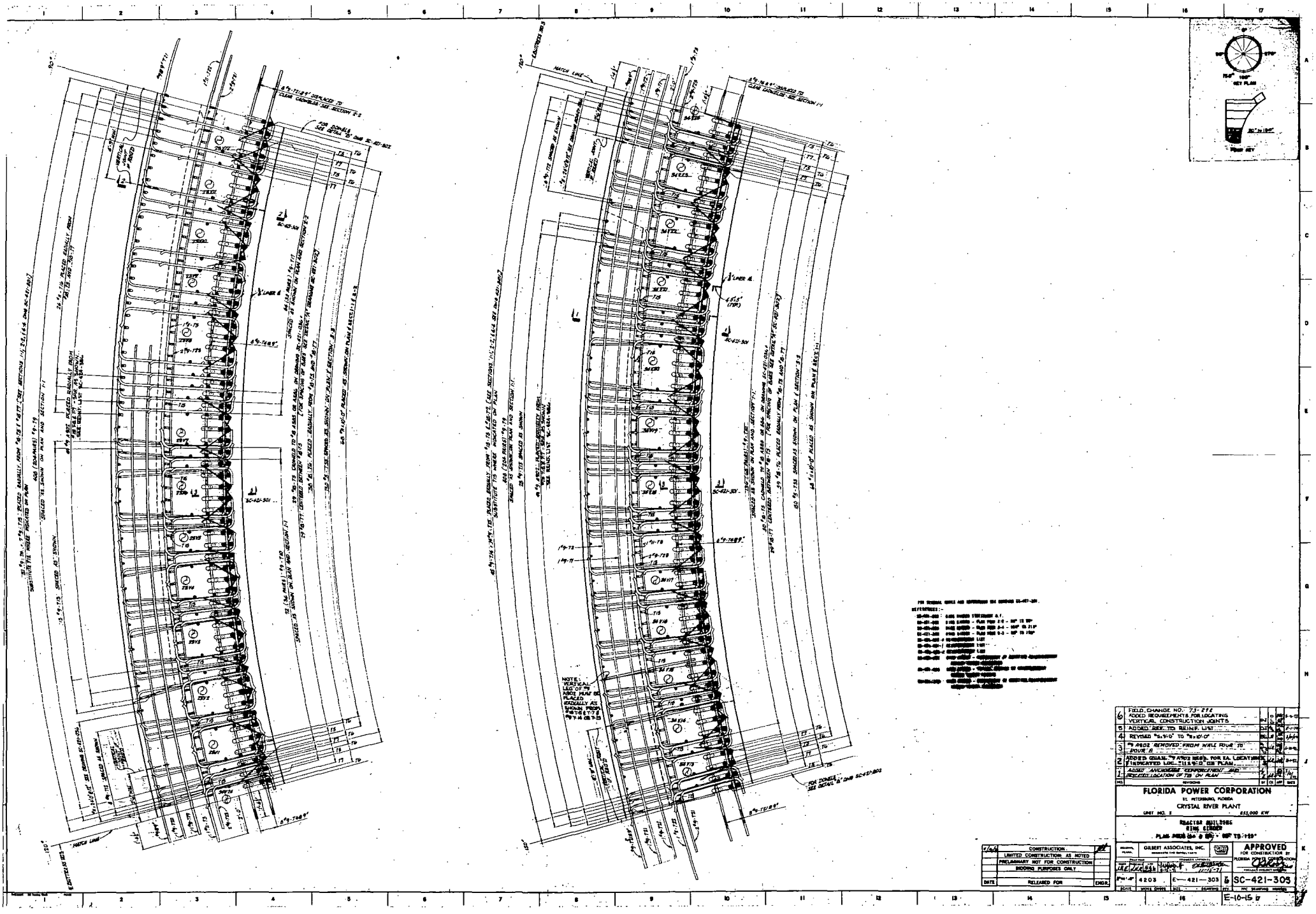
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

4203	E—421—305	6	SC-421-305		

DATE	RELEASED FOR	ENGR.
	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

E-10-15



NO.	REVISIONS	BY	CK	APP	DATE
6	FIELD CHANGE NO. 73-292 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
5	ADDED REF. TO REINF. LIST				
4	REVISED "B"=9'-0" TO "B"=10'-0"				
3	#9 A902 REMOVED FROM WALL POUR TO POUR B				
2	ADDED QUAN. #9 A902 REQD. FOR EA. LOCATION INDICATED LOC. "11 & 9-D" ON PLAN				
1	ADDED ANCHORAGE REINFORCEMENT AND RELOCATED LOCATION OF T15 ON PLAN				

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
RING GIRDER
PLAN [illegible] TO 139'

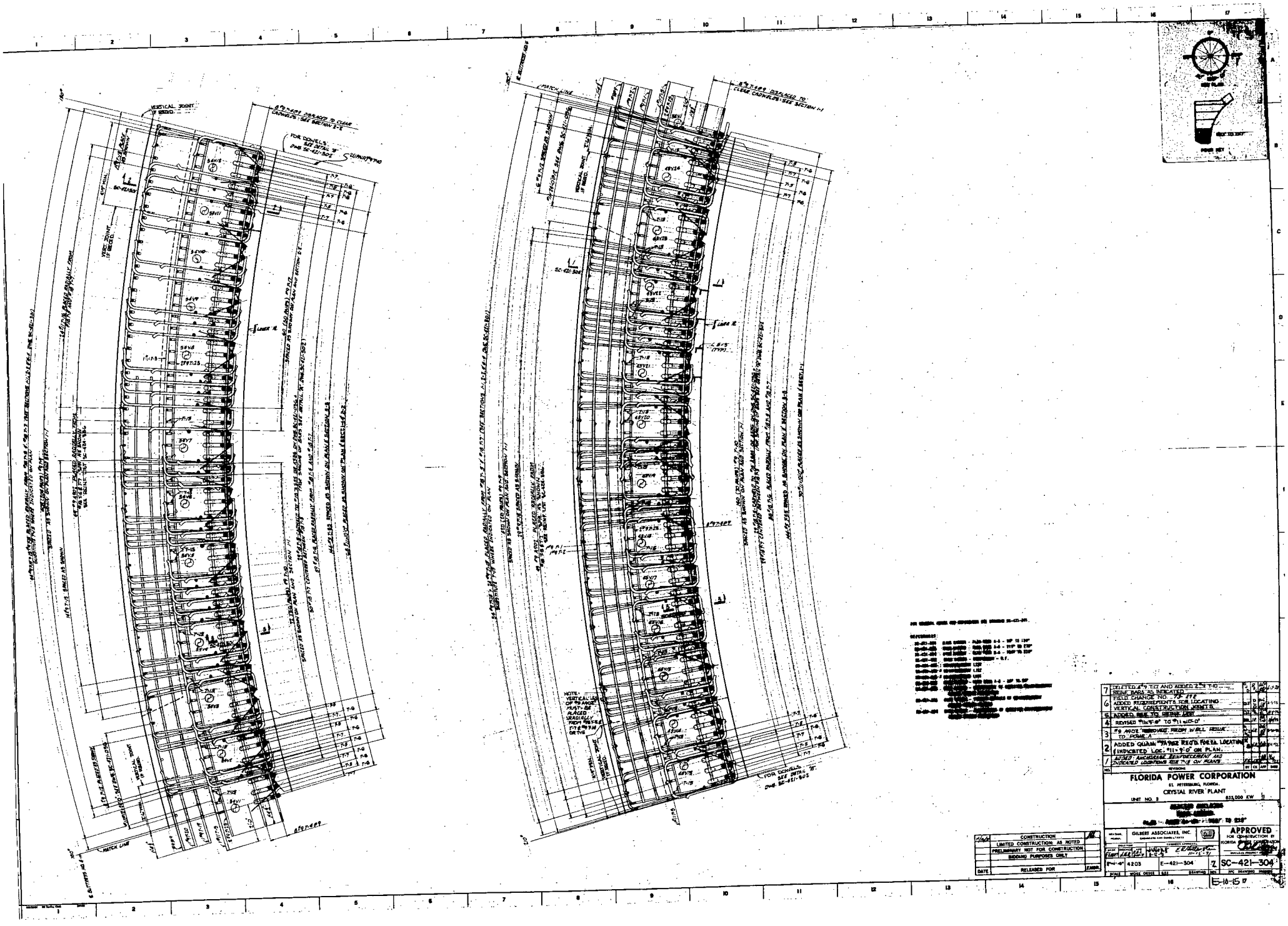
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.	FPC DRAWING NUMBER
	4203	E—421—303		6	SC-421-303

E-10-15

DATE	RELEASED FOR	ENGR.
	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	



NO.	REVISIONS	BY	CK	APP	DATE
7	DELETED 4 #9 T-12 AND ADDED 2 #9 T-10 REINF. BARS AS INDICATED				
6	FIELD CHANGE NO. 73-272 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
5	ADDED REF. TO REINF. LIST				
4	REVISED #11x9'-0" TO #11 x10'-0"				
3	#9 A902 REMOVED FROM WALL REINF. TO POWR. A				
2	ADDED QUAN. "7A902 REQ'D FOR EA. LOCATION & INDICATED LOC. #11 x 9'-0" ON PLAN.				
1	ADDED ANCHORAGE REINFORCEMENT AND INDICATED LOCATIONS FOR T-15 ON PLANS				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA.
CRYSTAL RIVER PLANT
UNIT NO. 3 — 833,000 KW

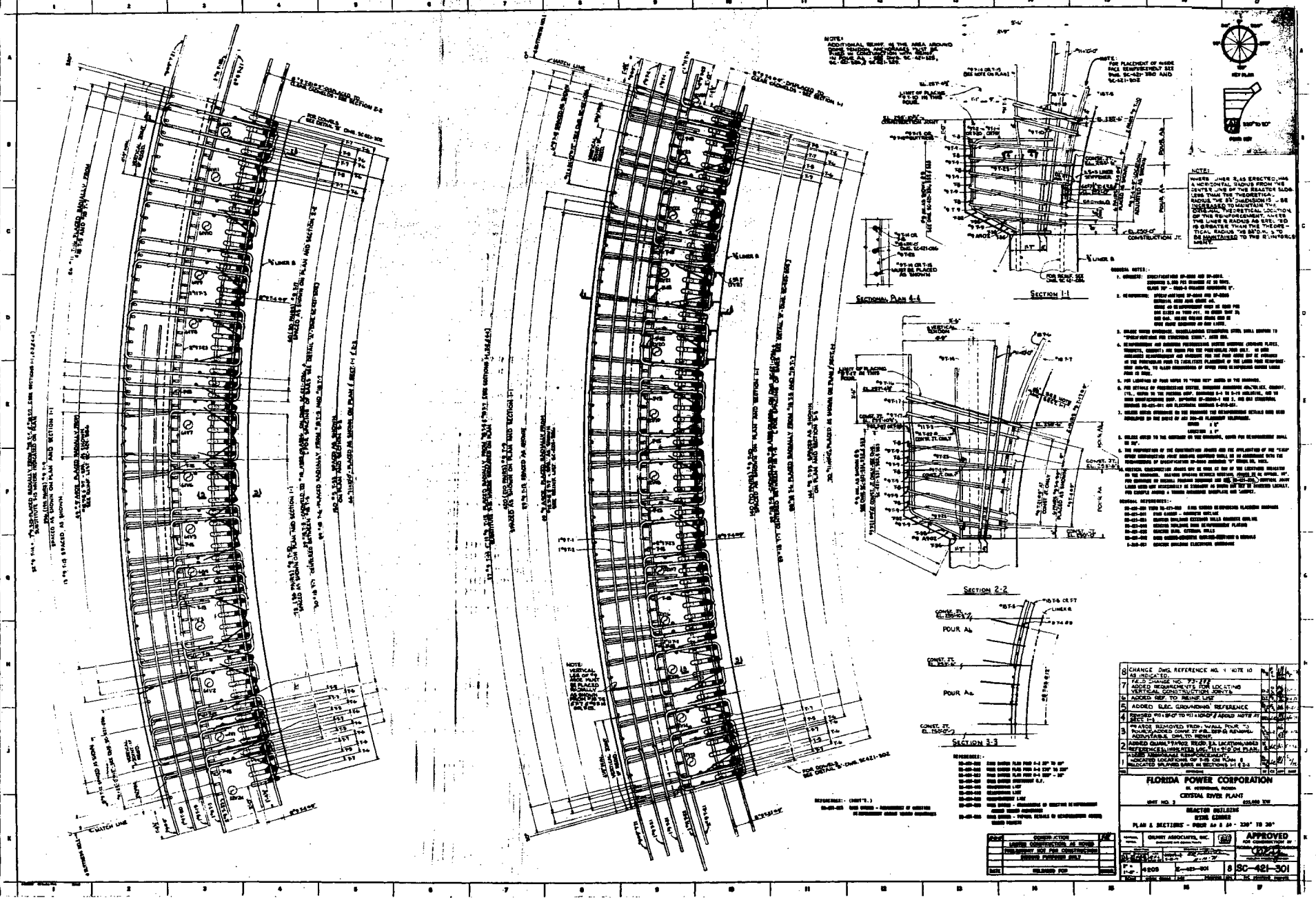
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

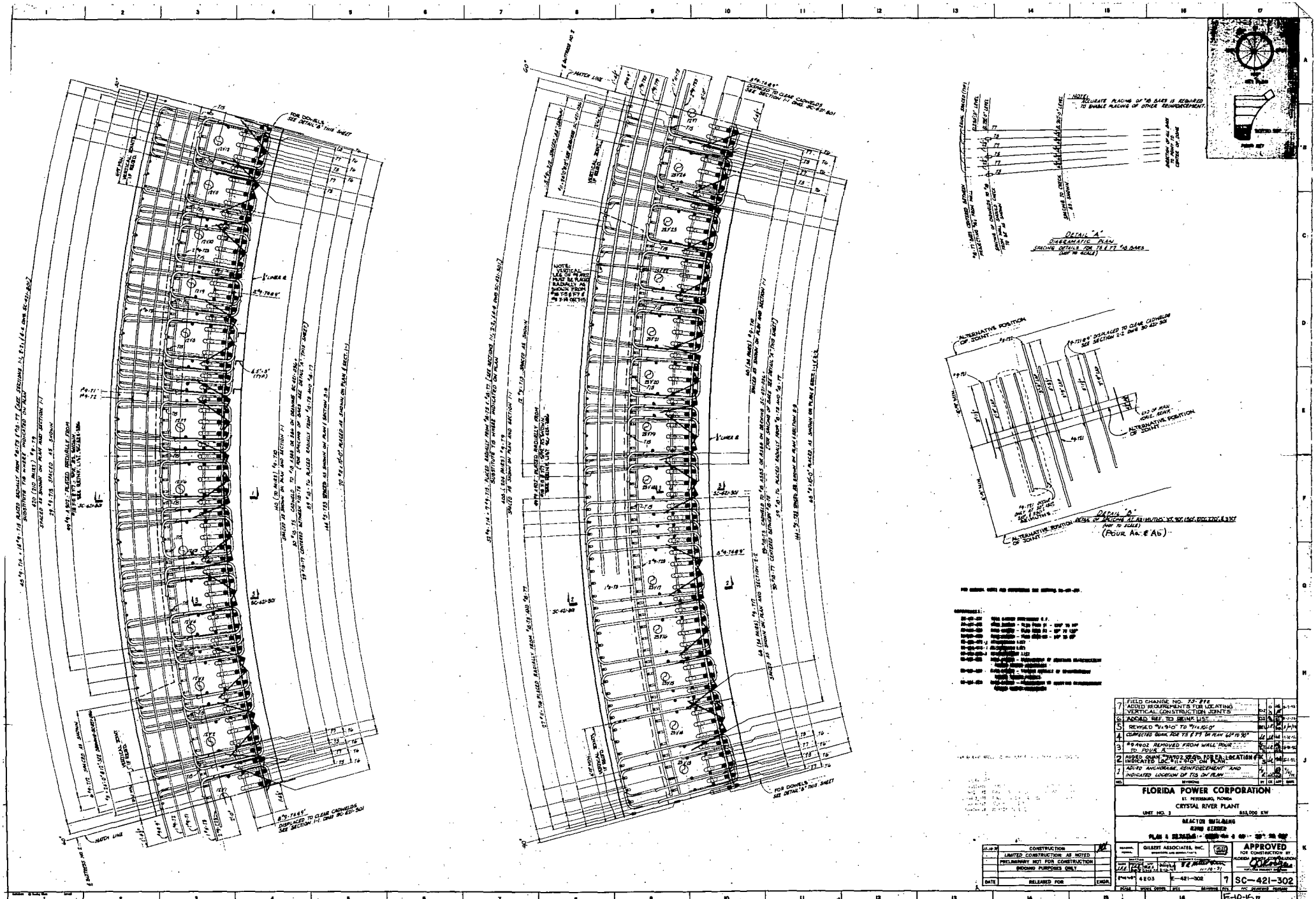
SCALE	WORK ORDER	SIZE	DRAWING	REV.	PC DRAWING NUMBER
1"=1'-0"	4203	E-421-304		7	SC-421-304

E-10-15 17

DATE	RELEASED FOR	ENGR.
11/16/70	CONSTRUCTION	
	LIMITED CONSTRUCTION: AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	



SECTIONAL PLAN 4-4
SECTION 1-1
SECTION 2-2
SECTION 3-3
POUR A6
POUR A5
CONSTRUCTION JT.
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
UNIT NO. 3
REACTOR BUILDING
PLAN & SECTIONS - POUR A6 & A5 - 330° TO 30°
APPROVED
SC-421-301



NO.	REVISIONS	BY	CK	APP	DATE
7	FIELD CHANGE NO. 73-872 ADDED REQUIREMENTS FOR LOCATING VERTICAL CONSTRUCTION JOINTS				
6	ADDED REF. TO REINF. LIST				
5	REVISED #11x9'-0" TO #11x10'-0"				
4	CORRECTED QUAN. FOR T5 & T7 ON PLAN 60° TO 90°				
3	#9A902 REMOVED FROM WALL POUR TO POUR A				
2	ADDED QUAN. #9A902 REQD. FOR EA. LOCATION & INDICATED LOC. #11x9'-0" ON PLAN				
1	ADDED ANCHORAGE REINFORCEMENT AND INDICATED LOCATION OF T15 ON PLAN				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
RING GIRDER
PLAN & SECTIONS

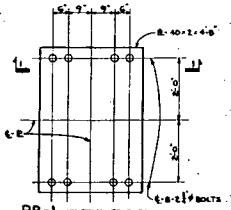
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

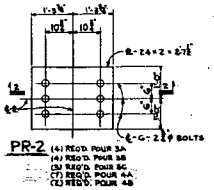
DATE	RELEASED FOR	ENGR.
11-10-71	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

4203 — E-421-302 — 7 — SC-421-302

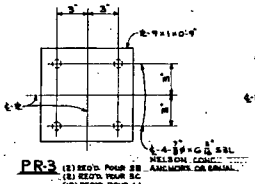
E-10-15



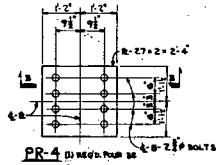
PR-1 (1) REQ'D. POUR 3A (11) REQ'D. POUR 3B (3) REQ'D. POUR 3C (6) REQ'D. POUR 4A (5) REQ'D. POUR 4B



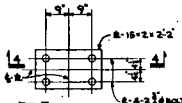
PR-2 (4) REQ'D. POUR 3A (4) REQ'D. POUR 3B (3) REQ'D. POUR 3C (7) REQ'D. POUR 4A (2) REQ'D. POUR 4B



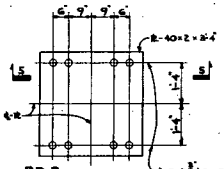
PR-3 (2) REQ'D. POUR 3B (2) REQ'D. POUR 3C (10) REQ'D. POUR 4A



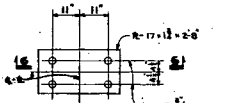
PR-4 (1) REQ'D. POUR 3B



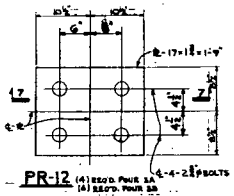
PR-5 (2) REQ'D. POUR 3A



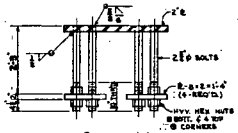
PR-9 (1) REQ'D. POUR 3A (1) REQ'D. POUR 4A (1) REQ'D. POUR 4B (1) REQ'D. POUR 4C



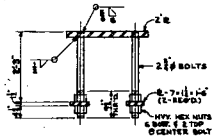
PR-10 (1) REQ'D. POUR 3A (7) REQ'D. POUR 3B (3) REQ'D. POUR 4A (4) REQ'D. POUR 4B



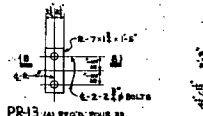
PR-12 (4) REQ'D. POUR 3A (4) REQ'D. POUR 3B



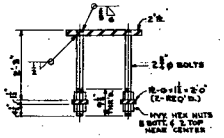
SECTION 1-1



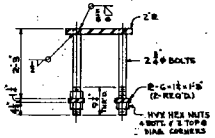
SECTION 2-2



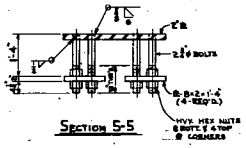
PR-13 (4) REQ'D. POUR 3B (4) REQ'D. POUR 3C



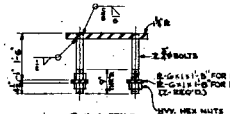
SECTION 3-3



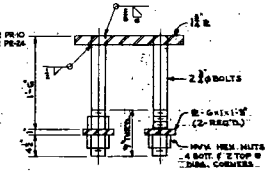
SECTION 4-4



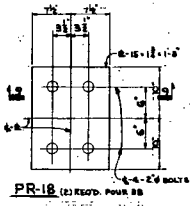
SECTION 5-5



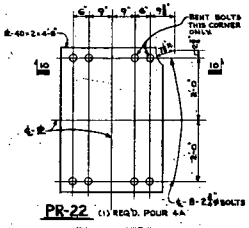
SECTION 6-6



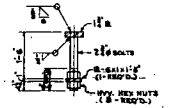
SECTION 7-7



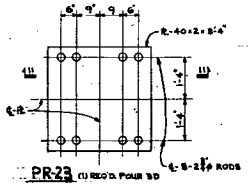
PR-18 (2) REQ'D. POUR 3B



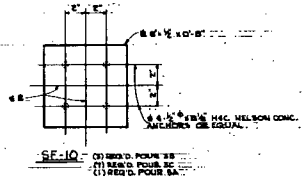
PR-22 (1) REQ'D. POUR 4A



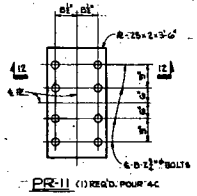
SECTION 8-8



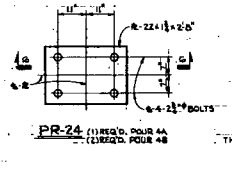
PR-23 (1) REQ'D. POUR 3D



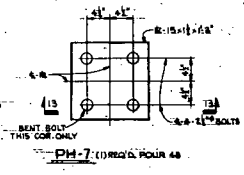
SF-10 (3) REQ'D. POUR 3B (1) REQ'D. POUR 3C (1) REQ'D. POUR 5A



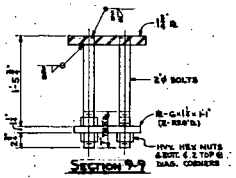
PR-11 (1) REQ'D. POUR 4C



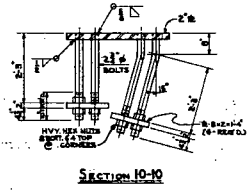
PR-24 (1) REQ'D. POUR 4A (2) REQ'D. POUR 4B



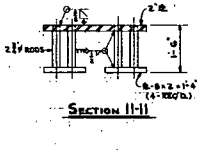
PH-7 (1) REQ'D. POUR 4B



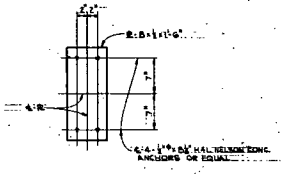
SECTION 9-9



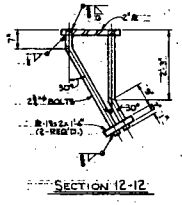
SECTION 10-10



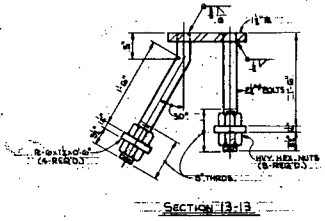
SECTION 11-11



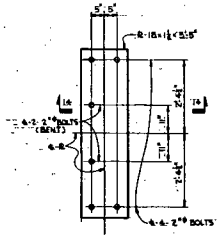
PH-8 (1) REQ'D. POUR 4B



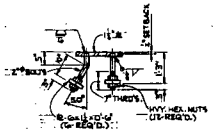
SECTION 12-12



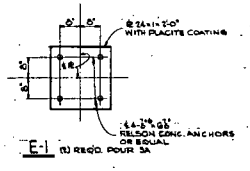
SECTION 13-13



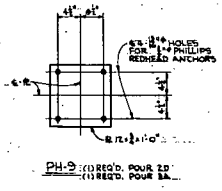
SF-11 (1) REQ'D. POUR 4B



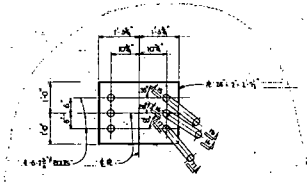
SECTION 14-14



E-1 (1) REQ'D. POUR 3A



PH-9 (1) REQ'D. POUR 2D (1) REQ'D. POUR 3A



PR-2 (1) REQ'D. POUR 4A

SECTION 15-15

SECTION 16-16

SECTION 17-17

NO.	REVISIONS	BY	CK	DATE
5	CHANGED QUANTITY OF PR-2, POUR 4A FROM 8 REQ'D. TO 7 REQ'D. ADDED PR-3, POUR 4A (7 REQ'D.) SEE D-5, SECT. 15-15, SECT. 16-16 AND SECT. 17-17 AND REVISED BT & 'A' "AS BUILT"	JM		5-31-84
4	REVISED IN ACCORDANCE WITH ECN #439	JM		4-5-84
3	ADDED EMB. @ PH-5 POUR 4B	JM		3-15-84
2	ADDED EMB. @ E-1 POUR 3A RELEASED EMB. @'s FOR POURS 3A & 3B	JM		3-15-84
1	ADDED EMB. @'s PR-11, PR-24, PH-7 & SF-11 AND RELEASED EMB. @'s FOR POURS 4A & 4B	JM		3-15-84

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR ENCLOSURE EXTERIOR WALLS
EMBEDDED PLATES

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

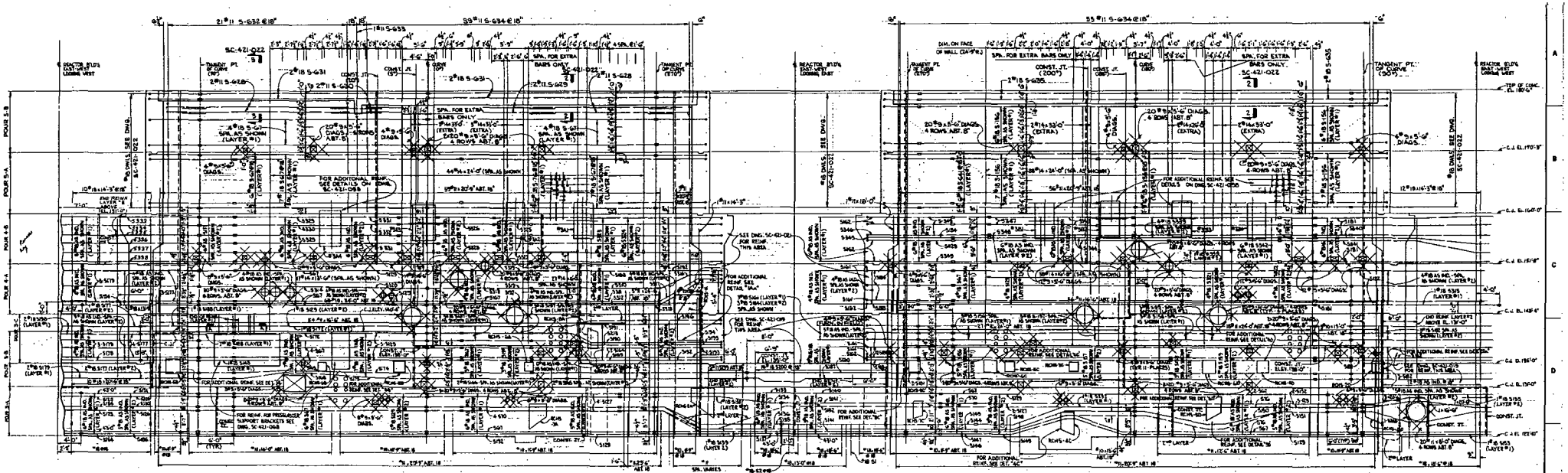
CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY, NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

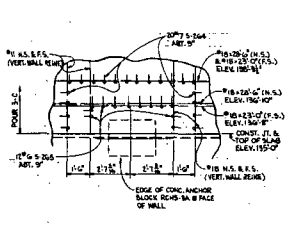
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED
K.S.	W.C.	WZ.	15-13-1	13-23-1

JOB NO. 4803 — DWG. NO. E-421-065 — SHT. NO. 5 — REV. NO. SC-421-065

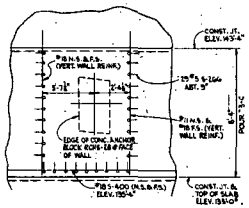
SCALE: WORK POINTS — DATE — APPROVED — DATE — DR. REVIEW — PROJECT ENG.

NE-10-13

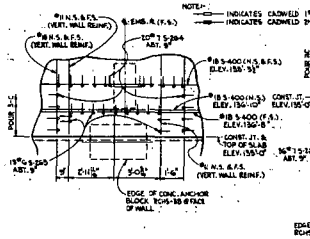




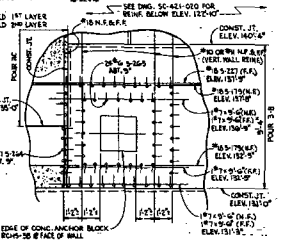
DETAIL "3A"
SC-421-019



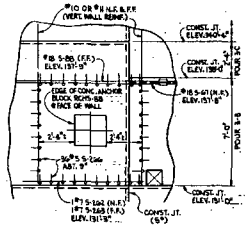
DETAIL "2B"
SC-421-019



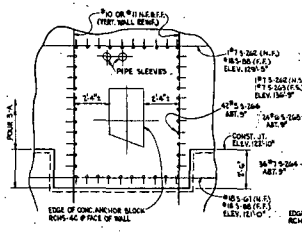
DETAIL "3B"
SC-421-019



DETAIL "5B"



DETAIL "8B"



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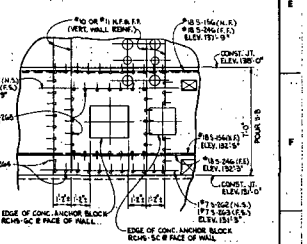

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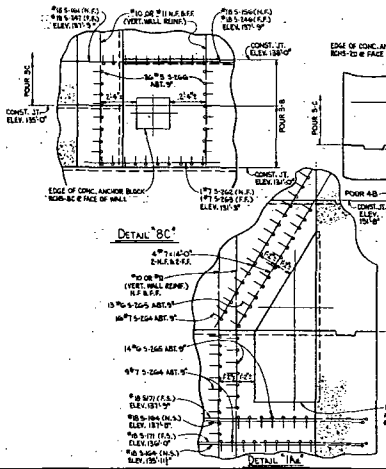
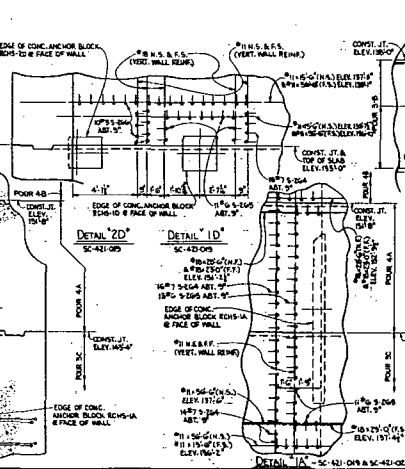


DETAIL "8C"

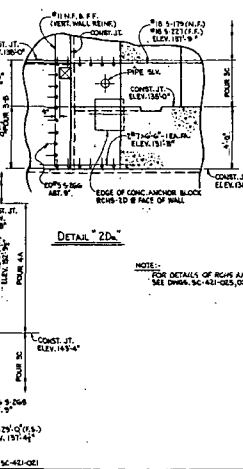
DETAIL "1A"



DETAIL "2D"
SC-421-015

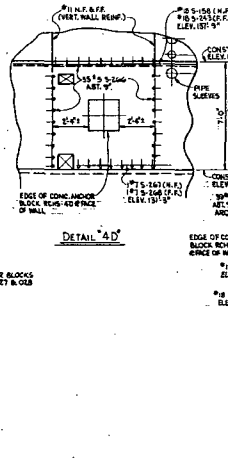
DETAIL "1D"
SC-421-015

DETAIL "1A" - SC-421-019 & SC-421-021



DETAIL "2A"

NOTE:
FOR DETAILS OF RCHS ANCHOR BLOCKS SEE DWGS. SC-421-025, 020, 027 & 028



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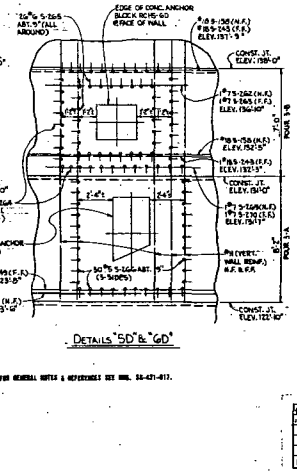
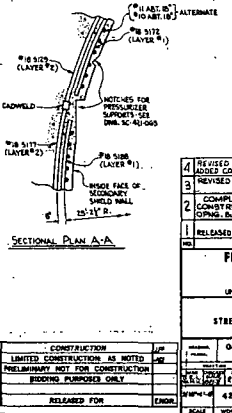


DETAILS "5D" & "6D"

FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-017.



SECTIONAL PLAN A-A

NO.	REVISIONS	BY	CK	APP	DATE
4	REVISED ACCORDING TO KCH DTD2 ADDED CONST. JT. TO POUR 4B - AS BUILT	KCH			1-9-13
3	REVISED CONSTRUCTION JOINTS IN POUR 5-A	KCH			2-8-79
2	COMPLETED DRAWING, RELEASED FOR CONSTRUCTION. POURS 5A, & 8B AND ADDED DIMS. & DIAGS. IN POUR 5C AS INDICATED	KCH			6-28-78
1	RELEASED FOR CONSTRUCTION TO ELEV. 150'-0"	KCH			11-18-77

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
UNIT NO. 3 — 825,000 KW
CRYSTAL RIVER PLANT

REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
STRETCHOUT OF INSIDE FACE REINFORCEMENT
EL. 122'-10" TO EL. 188'-8"

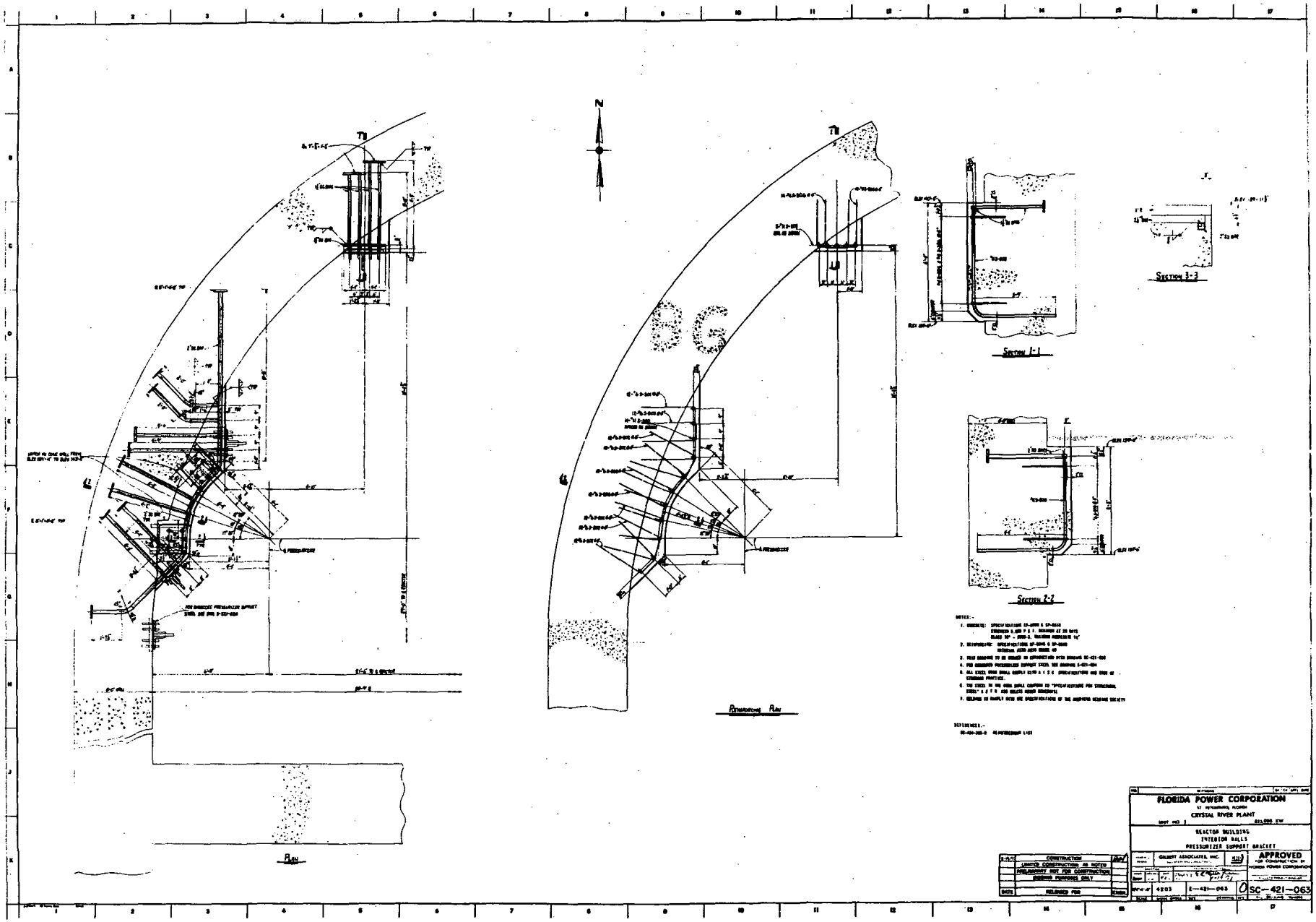
	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSTRUCTORS
READING, PENNSYLVANIA

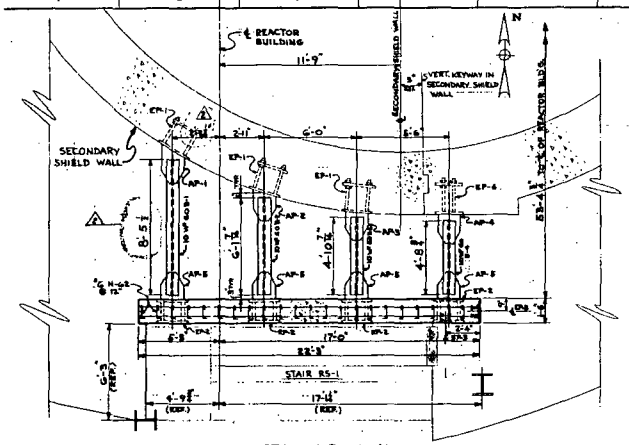
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

DESIGNED	DRAWN	TRACED	CHECKED	APPROVED
	E.D.P.K.			

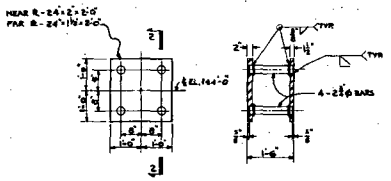
SCALE	WORK ORDER	DATE	DRAWING NO.	REV.
1/4"=1'-0"	4203	10-E-10-13	SC-421-064	4



Plan
Reinforcing Plan
Section 1-1
Section 2-2
Section 3-3
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING
INTERIOR WALLS
PRESSURIZER SUPPORT BRACKET
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-063
SC-421-063
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
DESIGNED PURPOSES ONLY
RELEASED FOR

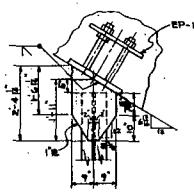


SECTION PLAN 4-4

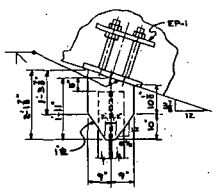


EMBEDDED PLATE
EP-2
(4 REQ'D.)

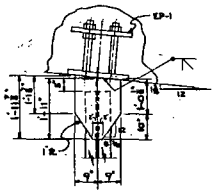
SECTION 2-2



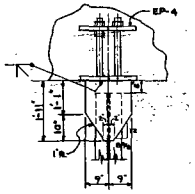
ANCHOR PLATE
AP-1
(1 REQ'D.)



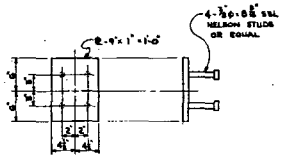
ANCHOR PLATE
AP-2
(1 REQ'D.)



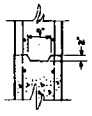
ANCHOR PLATE
AP-3
(1 REQ'D.)



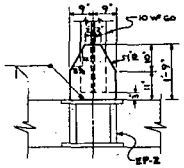
ANCHOR PLATE
AP-4
(1 REQ'D.)



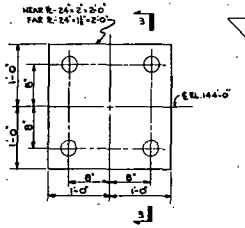
EMBEDDED PLATE
EP-3
(2 REQ'D.)



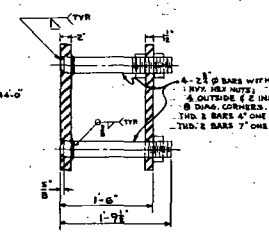
DETAIL 'B'
(TYR 4 PLACES)



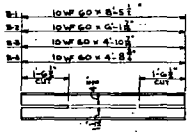
ANCHOR PLATE
AP-5
(4 REQ'D.)



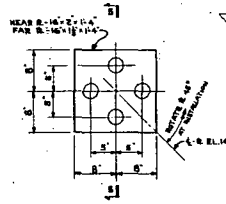
EMBEDDED PLATE
EP-1
(3 REQ'D.)



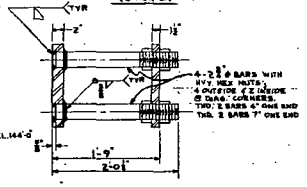
SECTION 3-3



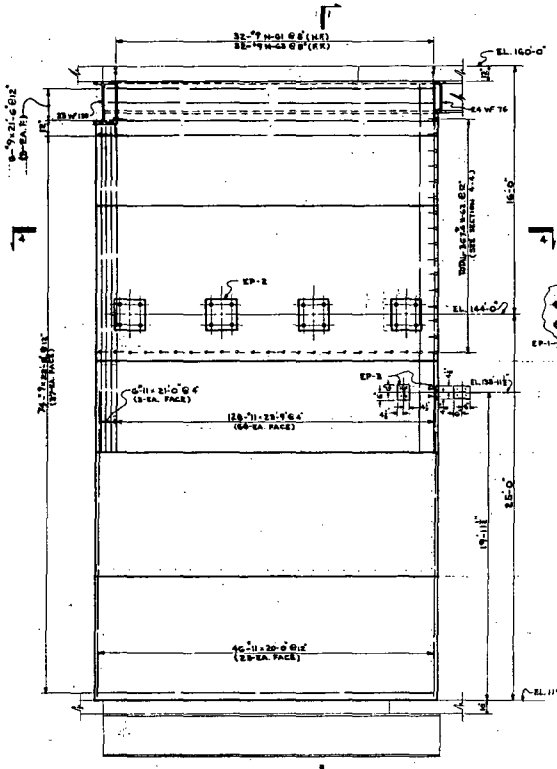
BEAM B-1 (1-REQ'D.)
BEAM B-2 (1-REQ'D.)
BEAM B-3 (1-REQ'D.)
BEAM B-4 (1-REQ'D.)



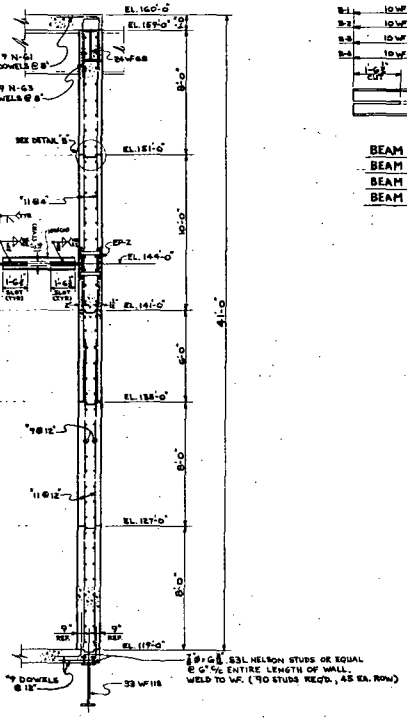
EMBEDDED PLATE
EP-4
(1 REQ'D.)



SECTION 5-5



ELEVATION



SECTION 1-1

REFERENCES:

2. FIELD CHANGE NO.3466 MOVED RESTRAINT 2ND 2 PLACES
CHG. LOC. OF BEAMS B-1 & B-4
ADDED EMB. @ EP-4 & SECTION B-B
DELETED ITEMS @ EP-1 AS INDICATED

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
SHIELD WALL AT LOWER STAGE RS-1 EL. 119'-0" TO EL. 160'-0"
SECTIONAL PLAN, SECTIONS AND DETAILS

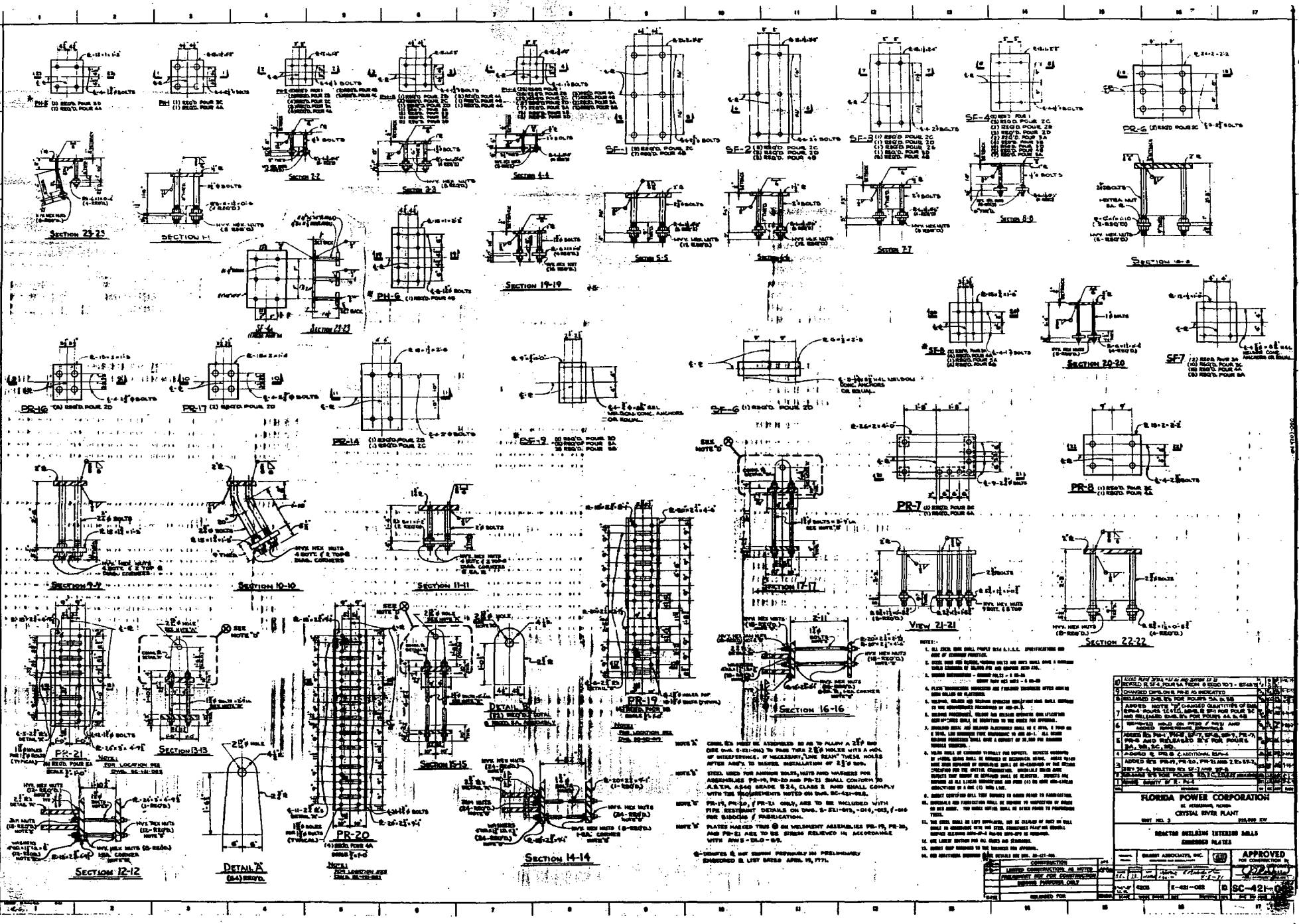
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
DRAWING PURPOSES ONLY
RELEASED FOR

4203 | E-421-061 | SC-421-061

16 E-10-B



NOTES:

1. ALL STEEL SHALL CONFORM WITH A.I.S.C. SPECIFICATIONS AND CODE OF STANDARD PRACTICE.
2. STEEL SHALL BE ASTM A36, EXCEPT AS NOTED.
3. WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED AND SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1.
4. WELDING PROCEDURES, WELDING AND WELDING OPERATORS SHALL BE QUALIFIED ACCORDING TO AWS D1.1. ALL WELDING SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY APPROVED BY THE OWNER.
5. ANCHORED STEEL AND EMBEDDED ALUMINUM SHALL BE 6 MILS. A THICK OR 2 COATS. LESS ORGANIC TYPE INORGANIC ZINC RICH PRIMER. ALL OTHER WELDING PRIMERS SHALL HAVE A MINIMUM OF 35,000 PSI ORGANIC VEHICLE CONTENT.
6. WELDS SHALL BE CLEANED VISUALLY AND INSPECTED. SURFACE DISCONTINUITIES, WELDS SHALL BE FREE FROM CRACKS, SLAG INCLUSIONS, AREAS WHERE BASE METAL THICKNESS HAS BEEN REDUCED BELOW SPECIFIED MINIMUM, AND AREAS WHERE BASE METAL HAS BEEN DAMAGED BY ARC STRIKES. ARC STRIKES SHALL BE REPAIRED BY GRINDING SMOOTH AND MAGNETIC PARTICLE INSPECTED AS ALL LOCAL DISCONTINUITIES AND FREE FROM CRACKS. REPAIRED AREAS SHALL BE RE-INSPECTED IN THE SAME MANNER AS ORIGINAL WELDS.
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NOTE 'A' CONNECTIONS MUST BE ASSEMBLED AS AID TO PLACING A 2⅛" DIA. BOLT IN A 2-13/16" DIA. HOLE IN THE OTHER PART. IF NECESSARY, "LINE REAM" THESE HOLES AFTER ASSY. TO INSURE INSTALLATION OF 2⅛" DIA. BOLTS.

NOTE 'B' STEEL USED FOR ANCHOR BOLTS, NUTS AND WASHERS FOR ASSEMBLIES PR-19, PR-20 AND PR-21 SHALL CONFORM TO A.S.T.M. A354 GRADE BD, CLASS 3 AND SHALL COMPLY WITH THE REQUIREMENTS NOTED ON DWG. SC-421-005.

NOTE 'C' PR-19, PR-20, & PR-21 ONLY, ARE TO BE INCLUDED WITH FIRE RESISTANT DETAILS ON DWG. S-521-013, -014, -015, & -016 FOR BIDDING & FABRICATION.

NOTE 'D' PLATES MARKED THUS ⊕ ON WELDMENT ASSEMBLIES PR-19, PR-20, AND PR-21 ARE TO BE STRESS RELIEVED IN ACCORDANCE WITH ANSI B 31.0 - 69.

NOTE 'E' CONCRETE IS NOT SHOWN FOR CLARITY ON PRELIMINARY DRAWINGS IS LAST DATED APRIL 19, 1971.

10	ADDED NOTE 20		
9	CHANGED DIMS. ON E & PR-21 AS INDICATED		
8	RELEASED DWG. FOR POURS 5A & 5B		
7	ADDED NOTE 19, CHANGED QUANTITIES OF DWG. 5B4-4 POURS 1, 1A, 1C, 5B4-5 & SF-1 POUR 1C & HAS RELEASED DWG. FOR POURS 4A & 4B		
6	REVISED HOLD ON PR20 / PR19 AND ADDED SHIPPING MARKS		
5	ADDED NO. PR-21 PR19, SF-1, SF-2, SF-3, PR-7, PR-8, PR-14 AND RELEASED DWG. FOR POURS 3A, 3B, 3C, 3D.		
4	ADDED E, PR-6 & ADDITIONAL DWG-4		
3	ADDED NOS. PR-19, PR-20, PR-21 AND S.F. 1, 2, 3, 4, 5, 6, 7, 8, 9		
2	DWG. 5A-4 DELETED NO. SF-1 AND ADDED NOS. SF-1, SF-2, SF-3, SF-4, SF-5, SF-6, SF-7, SF-8, SF-9 FOR POURS 1, 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D, 3A, 3B, 3C, 3D, 4A, 4B, 5A, 5B		
1	REVISED QUANTITY OF SF-1, PR-7		
0	ISSUED FOR CONSTRUCTION		

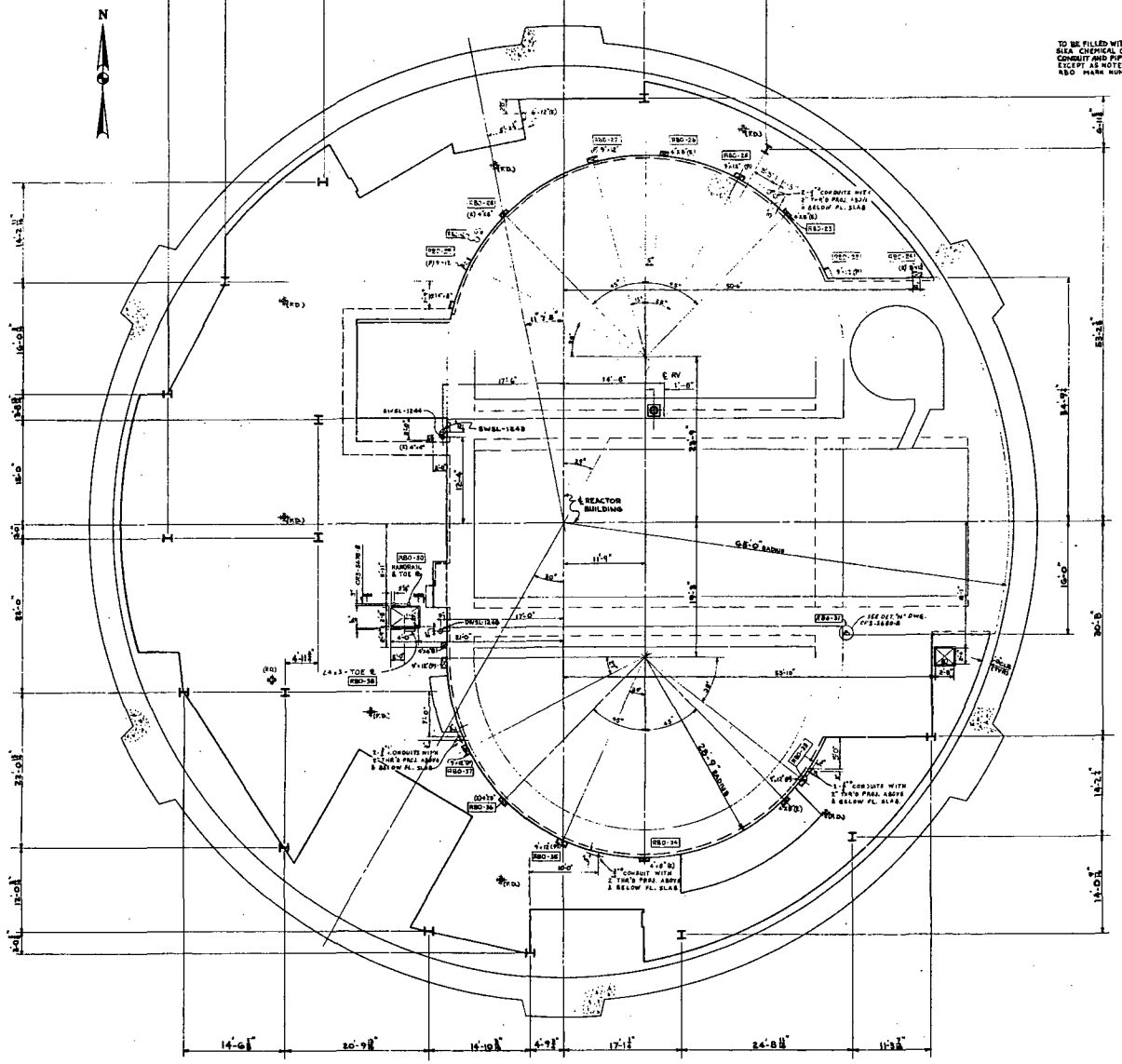
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3

REACTOR BUILDING INTERIOR WALLS
EMBEDDED PLATES

GILBERT ASSOCIATES, INC. — APPROVED FOR CONSTRUCTION

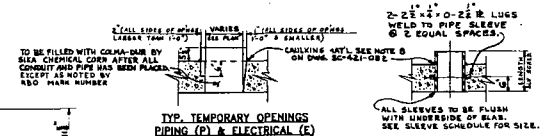
CONSTRUCTION	APPROVED
LIMITED CONSTRUCTION, AS NOTED	APPROVED
PRELIMINARY NOT FOR CONSTRUCTION	
RELEASED FOR	

DRAWING NO. SC-421-003



PLAN

OPERATING FLOOR EL. 160'-0"



TYP. TEMPORARY OPENINGS PIPING (P) & ELECTRICAL (E)

TYP. PIPE SLEEVE DETAIL

SLEEVE SCHEDULE			
QTY.	MARK	SIZE	LENGTH
1	SWSL-1243	8" STD. PIPE	1'-1"
1	SWSL-1244	6" STD. PIPE	1'-5½"
1	DWSL-1246	6" STD. PIPE	1'-8½"

THIS DRAWING TO BE USED FOR SIZE AND LOCATION OF OPENINGS ONLY.

RBO- DENOTES OPENING MARK NUMBER, SEE DRAWING CR3-5670-D

NO.	DESCRIPTION	DRAWN	CHKD	APPR.	DATE
03	AS BUILT PER EC 55238	TDF	[illegible]	[illegible]	[illegible]

REVISIONS

Progress Energy

NUCLEAR ENGINEERING

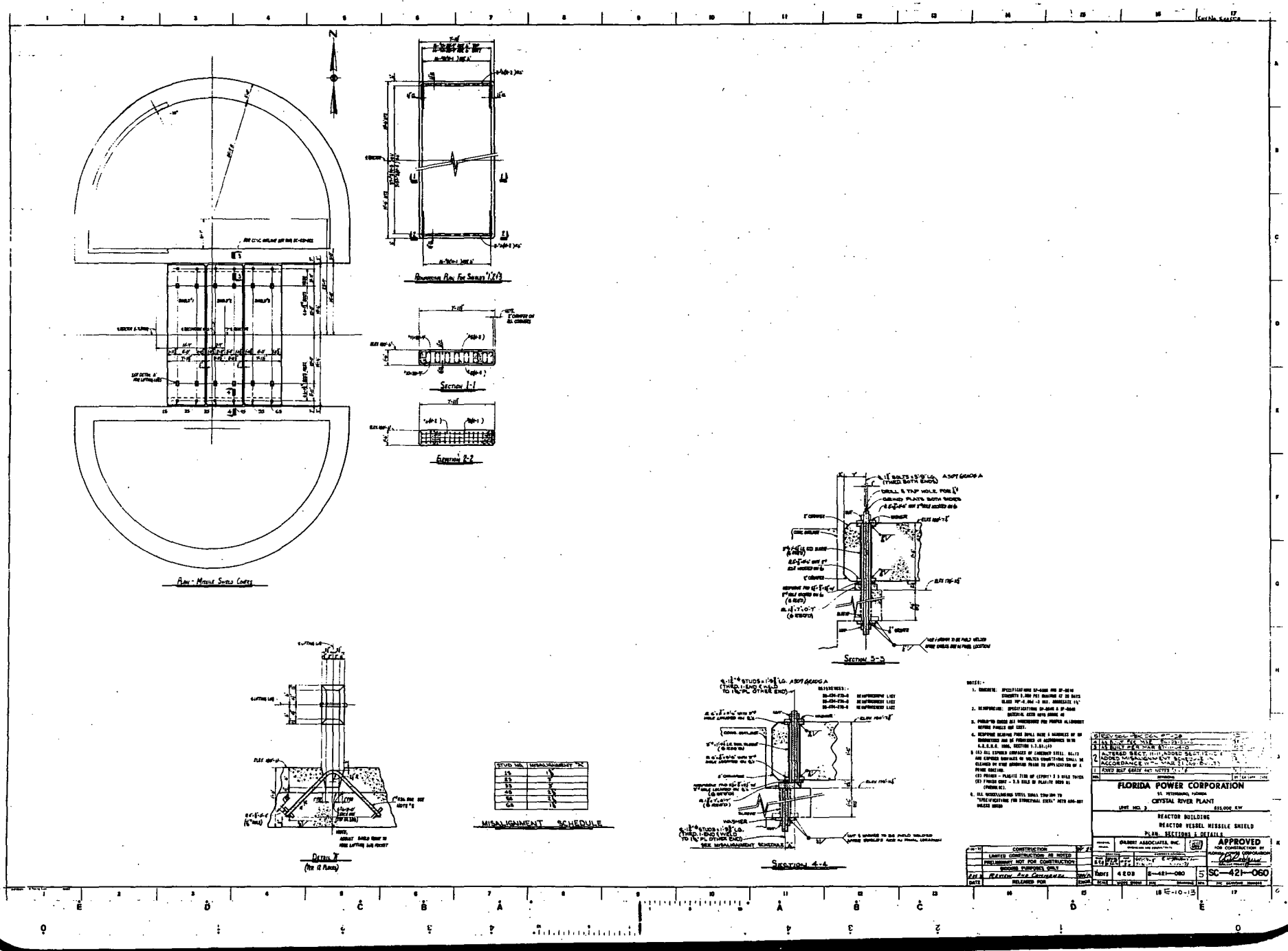
CRYSTAL RIVER UNIT 3

REACTOR BUILDING FLOOR SLAB OPENINGS OPERATING FLOOR ELEV. 169'-9"

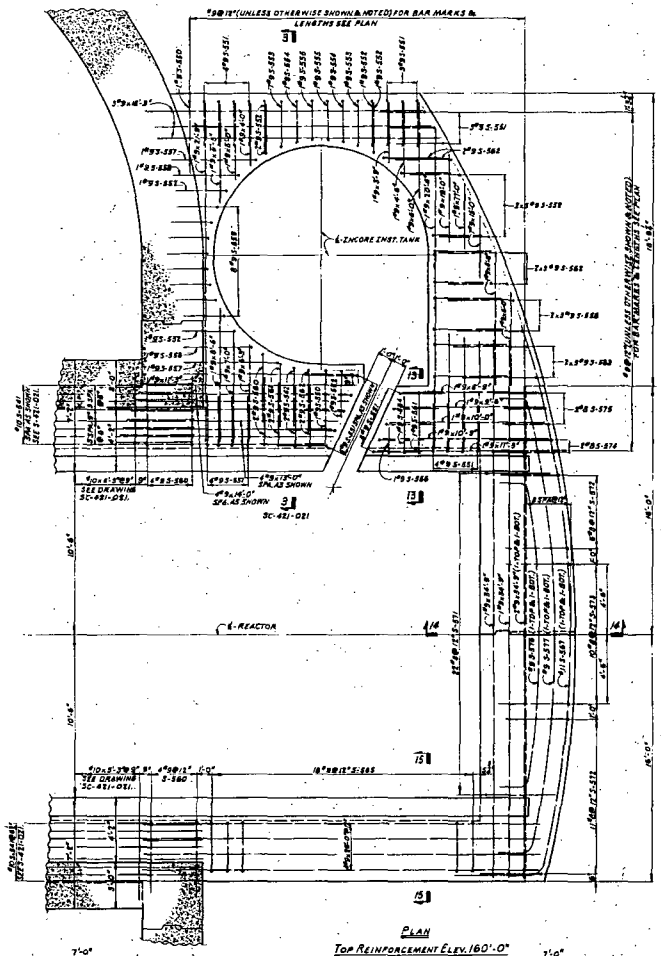
DRAWN	CHKD	APPR'D	DATE	SCALE
TDF			01/07/04	NTS

S DISCP. | SHEET | DWG SC-421-057 | REV 3

E-10-13 17

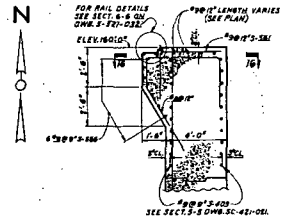


Plan - Missile Shield Covers
Ponderosa Plan For Shield 1 & 2
Section 1-1
Elevation 2-2
Section 3-3
Section 4-4
Detail X
(For 12 Places)
MISALIGNMENT SCHEDULE
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
REACTOR BUILDING
REACTOR VESSEL MISSILE SHIELD
PLAN, SECTIONS & DETAILS
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
SC-421-060
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
REVIEW AND COMMENTS
RELEASED FOR

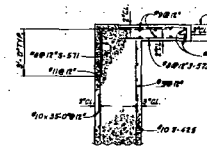


PLAN

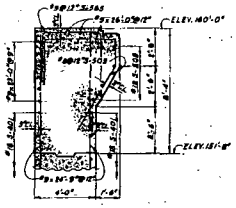
TOP REINFORCEMENT ELEV. 160'-0"



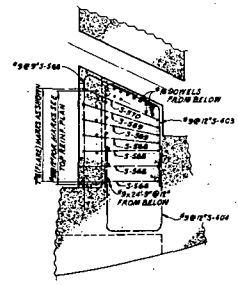
SECTION 13-13



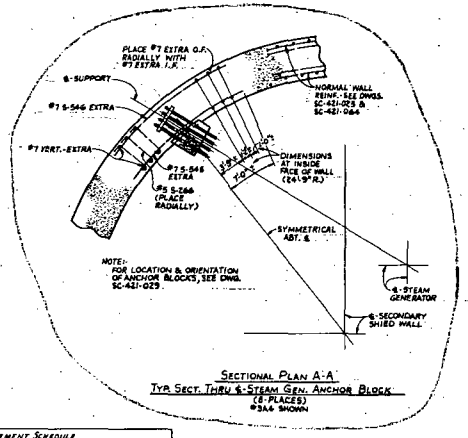
SECTION 14-14



SECTION 15-15



SECTIONAL PLAN 16-16

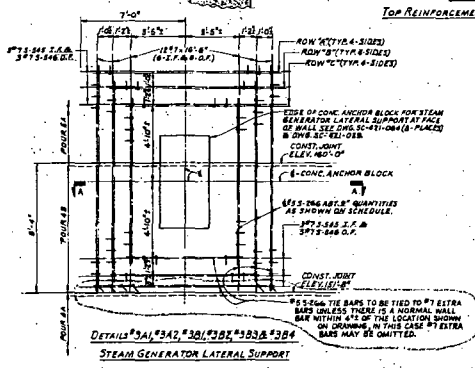


SECTIONAL PLAN A-A

TYP. SECT. THRU ℄-STEAM GEN. ANCHOR BLOCK (8-PLACES) #3A4 SHOWN

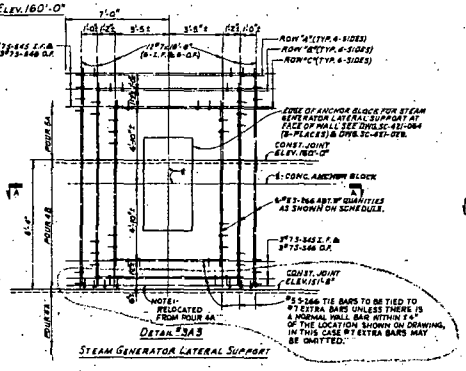
SHEAR REINFORCEMENT SCHEDULE										
SUPPORT DETAIL MARK	QUANTITIES OF #5 S-266									℄-ELEV. CONC. ANCHOR BLOCK
	POUR 4A			POUR 4B			POUR 5A			
	ROW "A"	ROW "B"	ROW "C"	ROW "A"	ROW "B"	ROW "C"	ROW "A"	ROW "B"	ROW "C"	
#3A1	0	0	0	38	31	26	30	25	18	158'-9 1/2"
#3A2	0	0	0	38	31	26	30	25	18	158'-10 1/2"
#3A3	0	0	0	27	30	26	35	28	18	158'-5 1/2"
#3A4	0	0	0	32	30	31	34	29	20	157'-8 1/2"
#3B1	0	0	0	38	31	26	30	25	18	158'-8 1/2"
#3B2	0	0	0	36	31	24	32	25	20	159'-1 1/2"
#3B3	0	0	0	38	31	24	32	25	20	159'-1 1/2"
#3B4	0	0	0	38	28	26	30	23	18	158'-7 1/2"

FOR REF. OF STEAM GENERATOR SUPPORT ANCHOR BLOCK DETAILS SEE DWG. SC-421-029.



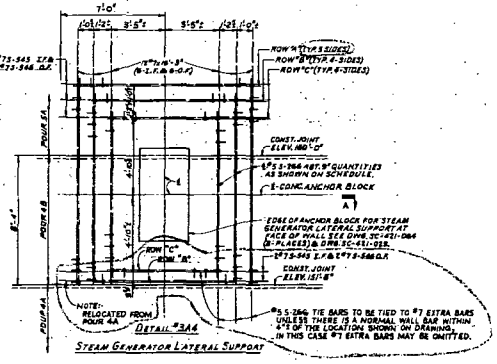
DETAILS #3A1, #3A2, #3B1, #3B2, #3B3 & #3B4

STEAM GENERATOR LATERAL SUPPORT



DETAIL #3A3

STEAM GENERATOR LATERAL SUPPORT



DETAIL #3A4

STEAM GENERATOR LATERAL SUPPORT

NOTES:

1. FOR GENERAL NOTES AND REFERENCES SEE DWG. SC-421-017.
2. THIS DRAWING TO BE VERIFIED IN CONJUNCTION WITH DWG. SC-421-021.

NO.	REVISIONS	BY	CK	APP	DATE
1	RELOCATED SHEAR BARS ON DETAILS #3A3 & #3A4 AND SHEAR REINF. SCHEDULE, ADDED SECT. PLAN A-A AND REVISED DETAILS TO CLARIFY PLACING OF EXTRA #7 BARS	KEK			3-29-72

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 855,000 KW

REACTOR BUILDING INTERIOR WALLS

SECONDARY SHIELD WALLS

SECTIONS AND DETAILS

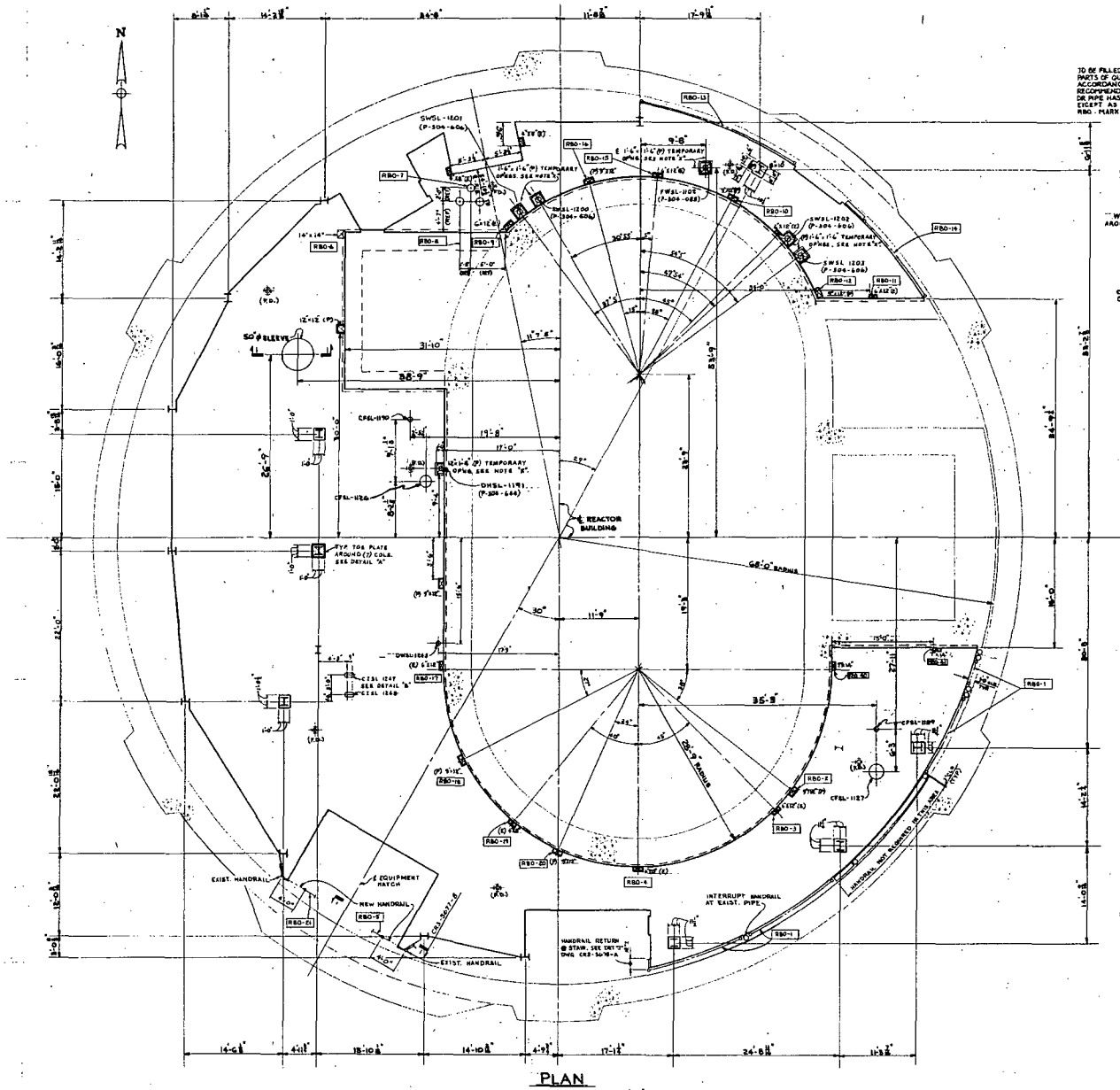
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
	RELEASED FOR	

SCALE	WORK ORDER	DWG	DRAWING	REV.	FPC DRAWING NUMBER
JAN 1973	4203	E-421-058		1	SC-421-058

E-10-13



PLAN
MEZZANINE FLOOR EL. 119'-0"

THIS DRAWING TO BE USED FOR SIZE AND LOCATION OF OPENINGS ONLY.
RBO- DENOTES OPENING MARK NUMBER SEE DRAWING CR3

TYP TEMPORARY OPENINGS PIPING (P) & ELECTRICAL (E)

TO BE FILLED WITH GOLMA-DUR WITH 3 PARTS OF QUARTZITE AGGREGATES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION AFTER ALL CONDUIT OR PIPE HAS BEEN PLACED EXCEPT AS NOTED BY RBO - MARK NUMBER

NOTE "A": SLEEVES SHOWN PLACED IN TEMPORARY OPENINGS MUST BE SET IN FIELD BEFORE OR AT SAME TIME AS INSTALLATION OF PIPING IN ORDER TO INSURE A PROPER AND LOOSE FIT AROUND PIPE.

SECTION 1-1

SECTION 2-2

TYP PIPE SLEEVE DETAIL

4-2½"x2" BAR LUGS ON SLEEVES LARGER THAN 12"ø & 2-LUGS ON SLEEVES 12"ø AND SMALLER WELD TO SLEEVES AT EQUAL SPACES.

ALL SLEEVES TO BE FLUSH WITH UNDERSIDE OF SLAB. SEE SLEEVE SCHEDULE FOR SIZE.

DETAIL 'A'

DETAIL 'B'

4-2½"x2"x¼" BAR LUGS SPACED AS SHOWN AND WELDED TO PIPE SLEEVE PER TYP DETAILS ABOVE.

SLEEVE SCHEDULE

QTY	MARK	SIZE	LENGTH
1	FWSL-1102	12"ø STD. PIPE	1'-8½"
1	CFSL-1126	20"ø STD. PIPE	1'-8½"
1	CFSL-1127	24"ø STD. PIPE	1'-8½"
1	CFSL-1189	8"ø STD. PIPE	1'-8½"
1	CFSL-1190	8"ø STD. PIPE	1'-8½"
1	DWSL-1191	8"ø STD. PIPE	1'-8½"
1	SWSL-1200	10"ø STD. PIPE	1'-8½"
1	SWSL-1201	10"ø STD. PIPE	1'-8½"
1	SWSL-1202	10"ø STD. PIPE	1'-8½"
1	SWSL-1203	10"ø STD. PIPE	1'-8½"
1	DWSL-1248	6" STD. PIPE	1'-8½"
1	CFSL-1247	SEE DET 'B'	1'-8½"
1	CFSL-1248	SEE DET 'B'	1'-8½"

NO.	REVISIONS	BY	CO	APP	DATE
3	AS BUILT PER CCWR 97-07-13-01	MB	TS		7-8-98
2	REVISED NOTE FOR CLARIFICATION AT TYP. TEMPORARY OPENING DETAIL AS INDICATED.	DL	KS		5-13-91
1	ADDED CAULKING MAT'L. (3) PLACES & INDICATED FILL FOR TEMPORARY OPN'GS. ADDED (12)-12" Pipe Opns. AREA C-6.	K. S.	SMC		5-6-91

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING FLOOR SLAB OPENINGS
MEZZANINE FLOOR ELEV. 119'-0"

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

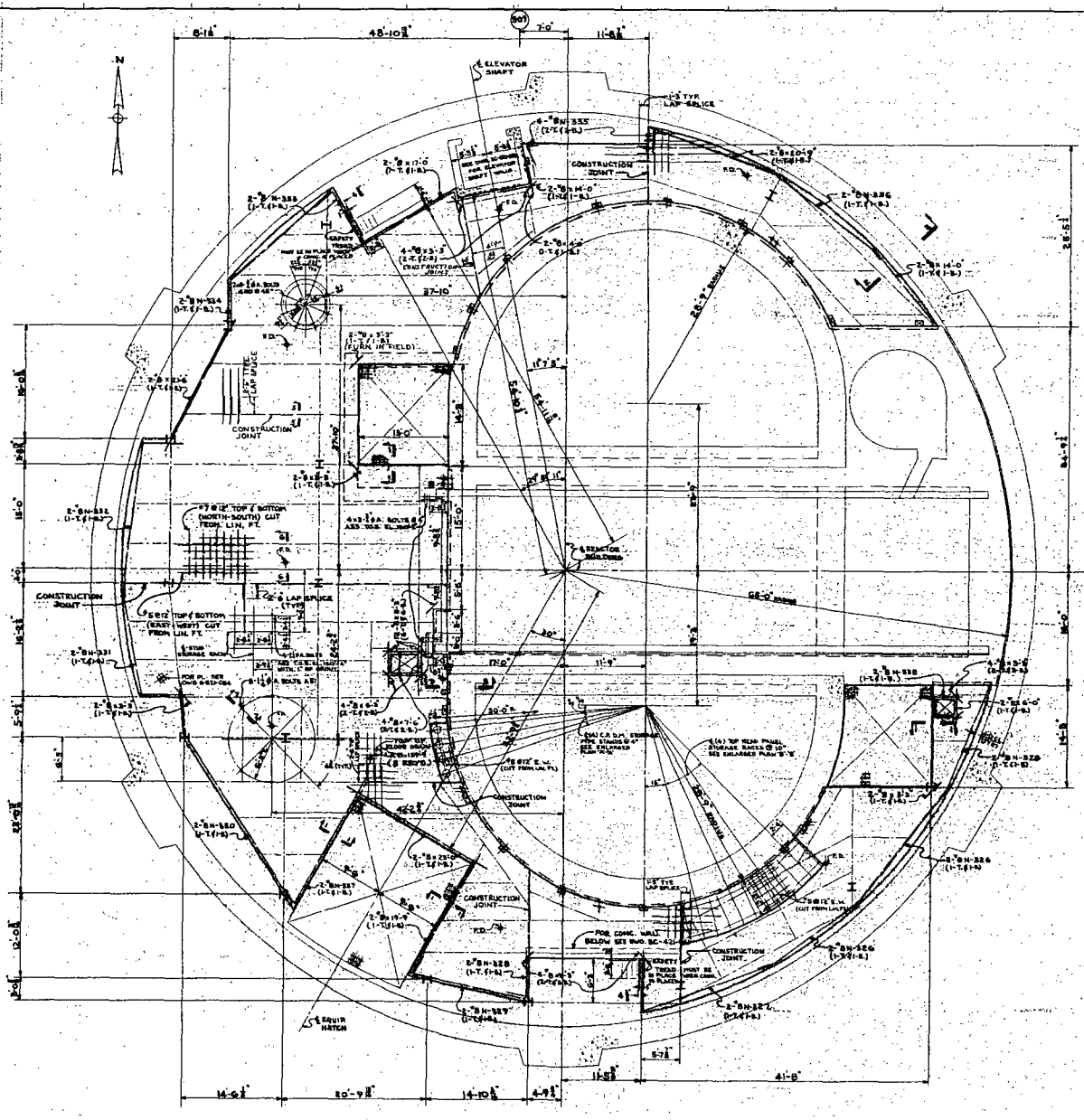
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE
KS	FG	FEC			1-9-91

JOB NUMBER	DRAWING NUMBER	REVISION
4203	E-421-056	3

SC-421-056

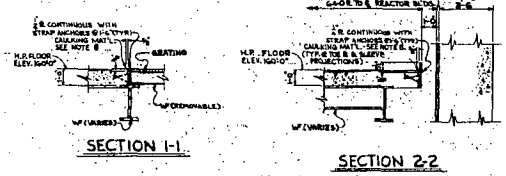
DATE	RELEASED FOR
5-6-91	CONSTRUCTION
5-7-91	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY

E-10-B

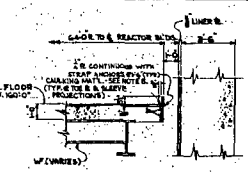


PLAN

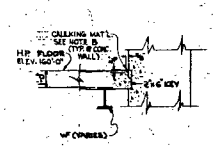
OPERATING FLOOR EL. 100'-0"



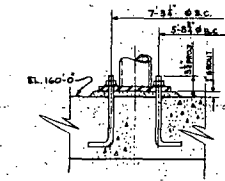
SECTION 1-1



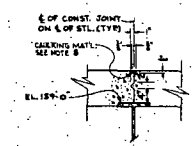
SECTION 2-2



SECTION 3-3

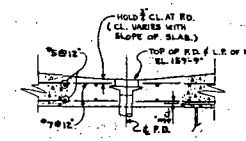


SECTION 4-4

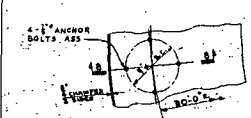


SECTION 5-5

TYPICAL CONST. JOINT

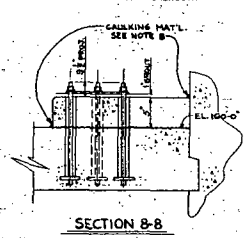


SECTION 6-6

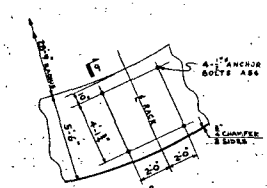


ENLARGED PLAN 'A'-'A'

(4 - R80'0")

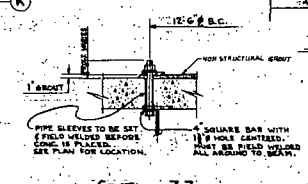


SECTION 8-8

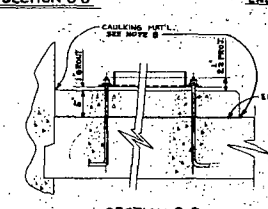


ENLARGED PLAN 'B'-'B'

(4 - R80'0")



SECTION 7-7



SECTION 9-9

NOTES:

1. FOR GENERAL NOTES SEE DWG. 10-401-020.
2. FLOOR JOINTS MUST BE LOCATED AND CUT AS SHOWN ON DWG. 22-311-014 BEFORE CONCRETE SLAB IS PLACED.
3. THIS DWG. MUST BE VIEWED IN CONJUNCTION WITH SLAB OPENING DWG. 22-421-027.
4. ALL EXPOSY TERRAZO SHALL BE TYPE 200 OR 204 STAINLESS STEEL IN ACCORDANCE WITH SP-3020.
5. ALL CONSTRUCTION JOINTS REQUIRE A RESURFACING OF CONCRETE FLOORS SHALL HAVE CHAMFERED EDGES AS SHOWN ON SECTIONAL DWG DRAWINGS.
6. FLOOR AREAS TO RECEIVE A 4000 PSIG FINISH SEE SPECIFICATION SP-3010.
7. FOR PAINTING & PROTECTING COATINGS ON CONCRETE FLOOR SEE 10-3417.
8. FOR BUILDING MATERIAL SEE B.O. 3100.

REFERENCES:

22-421-021 SECONDARY SHIELD WALL PLAN - ELEV. 100'-0"
22-403-203-1 ANCHOR BOLT LIST
22-404-202-1 REINFORCEMENT LIST
22-404-203-1 REINFORCEMENT LIST

5	AS BUILT PER MAR. 27-11-01-N						
4	ADDED PL. AS INDICATED.						
3	RELOCATED CONSTRUCTION JOINT AS SHOWN PER KEN-108 (FCN 14)						
2	FIELD CHANGE NO. 77-326.						
1	ADDED CONST. JT. ON PLAN AS IND. (1) PLACE						
	ADDED DIMENSION FOR TOE & CPN SECT. 2-2 & INDICATED CAULKING ON SECTS. (6) PLACES, ADDED NOTES 4 THRU 8.						
NO.	REVISIONS	BY	CK	APP	DATE		

FLORIDA POWER CORPORATION

ST. PETERSBURG, FLORIDA

CRYSTAL RIVER PLANT

UNIT NO. 3 — 825,000 KW

REACTOR BUILDING FLOOR SLAB

OPERATING FLOOR ELEV. 100'-0"

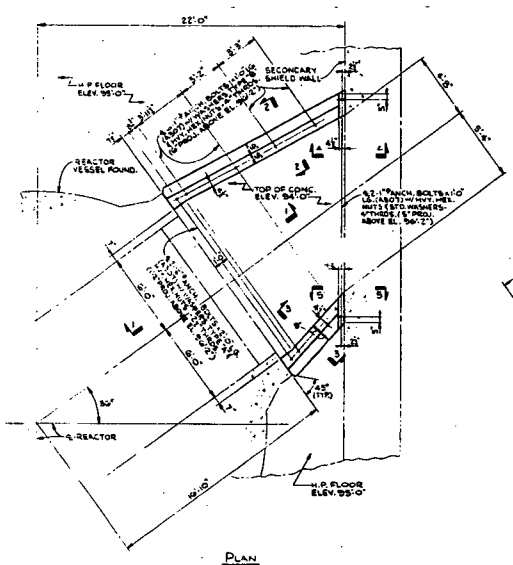
GILBERT ASSOCIATES, INC. — Engineers and Constructors

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

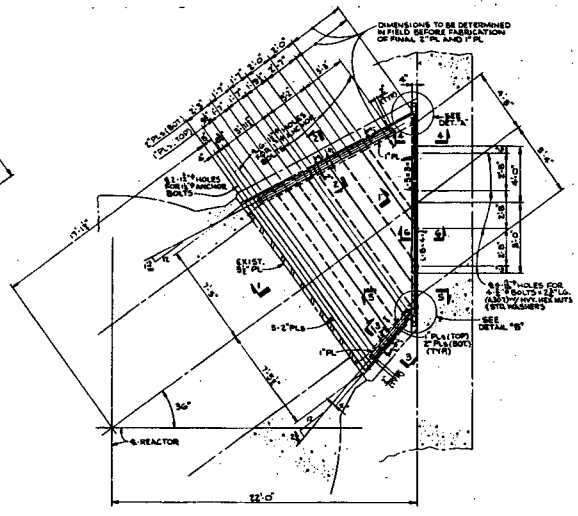
DESIGN	KS	DRAWN	F.G.	TRACED	ETL	DATE	1-9-74
SUPERVISION		CHECKED		APPROVED		DATE	
DESIGN SUPERVISOR							
SCALE	AS NOTED	WORK ORDER	4203	SIZE	E	DRAWING NO.	SC-421-052
						REV.	6

	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
3-4-74	BIDDING PURPOSES ONLY
	REVISED AND CANCELLED
DATE	RELEASED FOR

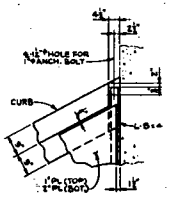
16 E-10-13



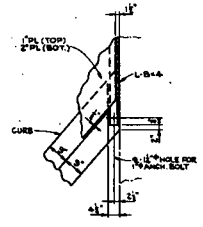
PLAN
CONCRETE CURB FOR INCORE INSTRUMENT
CABLE TRENCH SHIELDING



PLAN
INCORE INSTRUMENT
CABLE TRENCH SHIELDING



DETAIL "A"



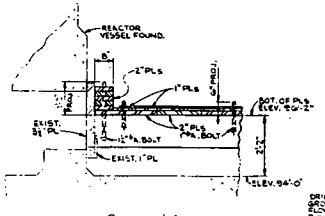
DETAIL "B"

NOTES:-

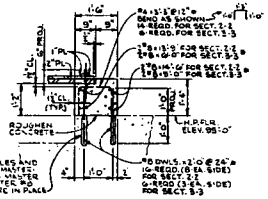
1. CONCRETE: SPECIFICATIONS SP-0300 AND SP-0410
   STRENGTH - 3000 PSI MINIMUM AT 28 DAYS
   CLASS 3SP - 3000-4 MAXIMUM AGGREGATE 1-1 2".
2. REINFORCING: SPECIFICATIONS SP-0300 AND SP-0040
   MATERIAL ASTM A615 GRADE 40.
3. ALL STEEL USED SHALL COMPLY WITH AISC SPECIFICATIONS AND CODE OF STANDARD PRACTICE.
4. ALL STEEL USED IN THE WORK AND NOT OTHERWISE DESIGNATED SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL" ASTM A36.
5. ALL PAINT, SEE S.S. 3547.
6. VERTICAL LEG OF L-4 FRAMING MAY BE 4" TO 6" AS REQ'D. TO AVOID SC-421-13-D. FOR DETAILS OF SHIELD-EMBEDMENT AT WALL OPENING, SEE DRAWING SC2-0403-C.

REFERENCES:-

SC-421-006	REACTOR BUILDING - CONCRETE OUTLINE - BASEMENT PLANS EL. 82'-0"
SC-421-013	REACTOR BUILDING - REACTOR VESSEL FOUNDATION - PLAN AND SECTIONS
SC-421-017	REACTOR BUILDING - INTERIOR WALLS - SECONDARY
	SHIELD WALL - PLAN ABOVE EL. 82'-0" AND 103'-0"
S-421-020	REACTOR BUILDING - REACTOR VESSEL FOUNDATION - DOOR PLATES AND EMBEDMENT FRAMES
S-421-050	REACTOR BUILDING - MISCELLANEOUS STEEL - INCORE INSTRUMENTATION PLATFORM AND PIPE SUPPORTS
CRS-2060-C	INCORE INSTRUMENTATION TRENCH BARRIER DETAIL.

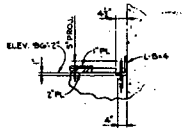


SECTION 1-1

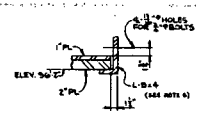


SECTION 2-2
SECTION 3-3
AS NOTED

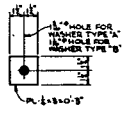
* NOTE:- REINFORCING BARS TO BE FURNISHED IN FIELD.



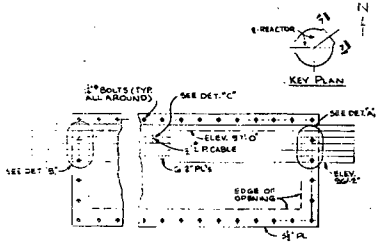
SECTION 4-4 - AS SHOWN
SECTION 5-5 - OPP. HAND



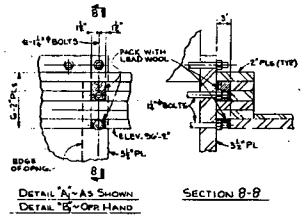
SECTION 6-6



WASHER TYPE "A" - 2 REQ.
WASHER TYPE "B" - 6 REQ.

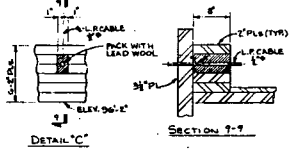


ELEVATION 7-7



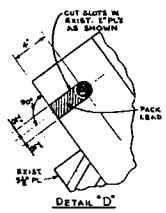
DETAIL "A" - AS SHOWN
DETAIL "B" - OPP. HAND

SECTION 8-8

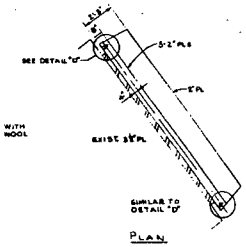


DETAIL "C"

SECTION 9-9



DETAIL "D"



PLAN

3	AS BUILT PER VAR 90-03-1-C		
2	AS BUILT PER MOD 72-2-2		
NO.	REVISIONS	BY	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
INCORE INSTRUMENTATION CABLE TRENCH SHIELD
PLANS, SECTIONS AND DETAILS

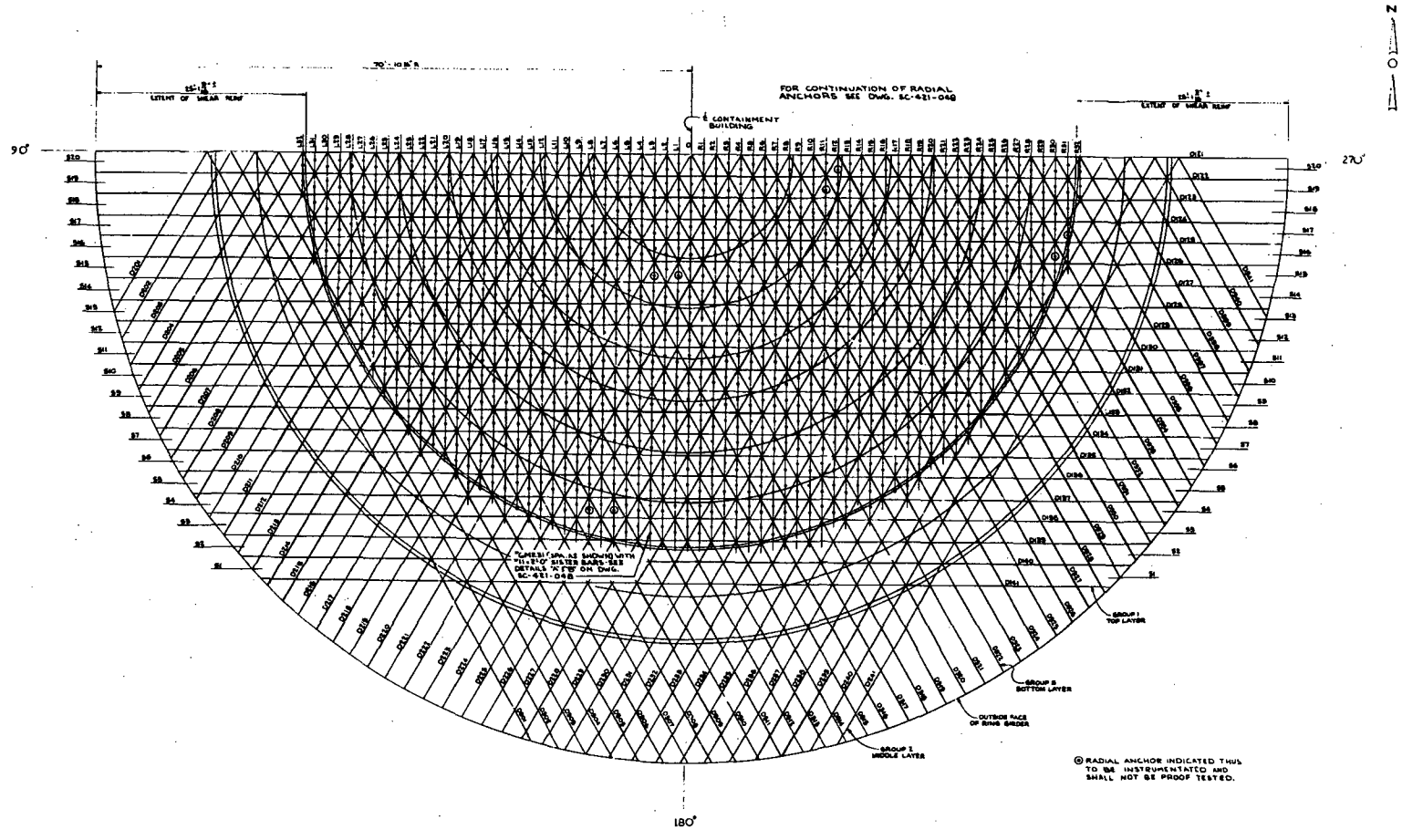
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION
FLORIDA POWER CORPORATION
A. C. Gilbert

SCALE	1/4"=1'-0"	DRAWING NO.	4782
		E-421-055	3
		SC-421-053	

A-1-74	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	

SEE 10-13



PLAN - RADIAL ANCHORS

NOTES:-
1. FOR NOTES AND REFERENCES, SEE DRAWING SC-421-048.

CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

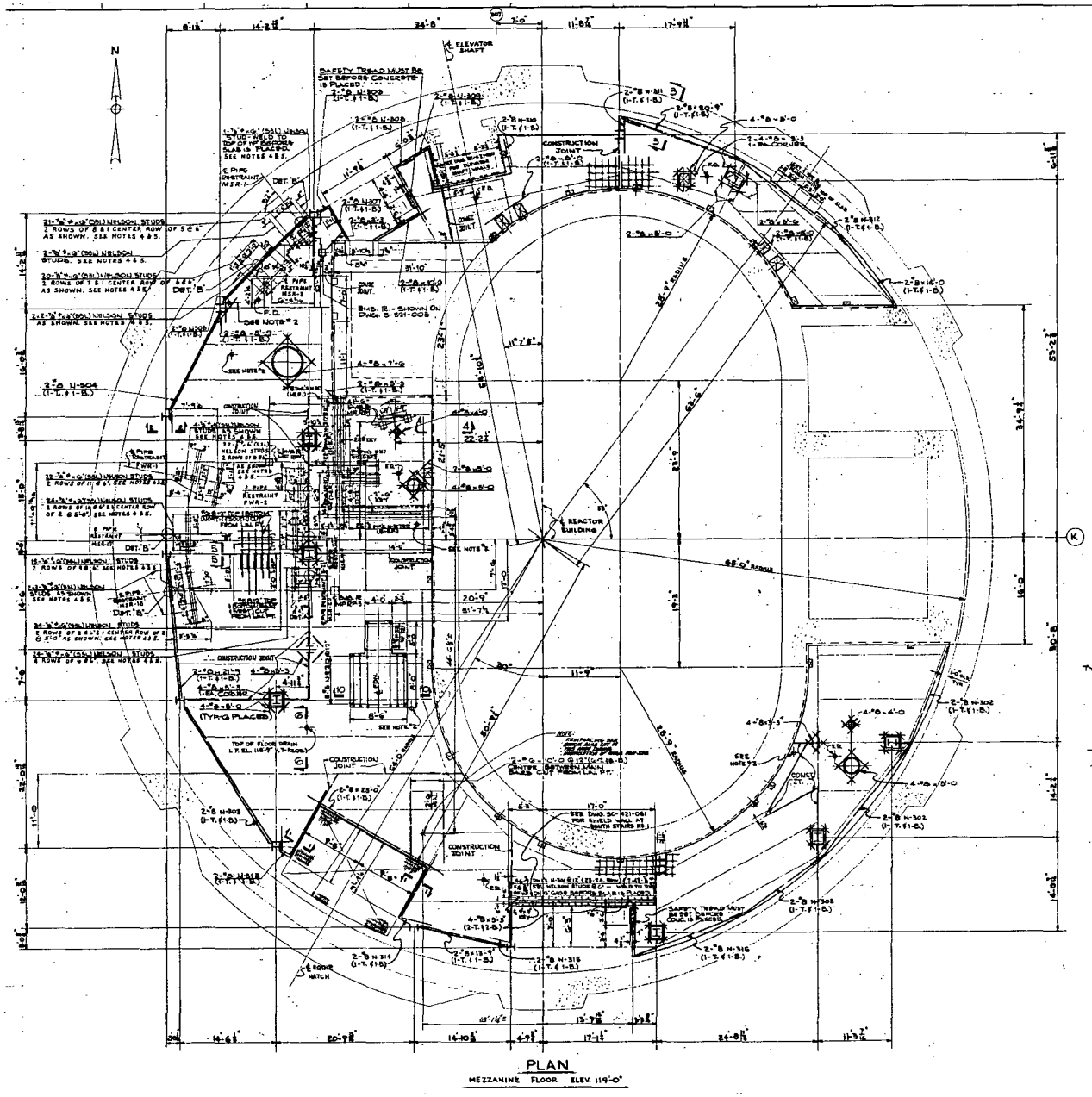
FLORIDA POWER CORPORATION
DE PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 BOILING SW

PLAN OF DOME
TENDON LAYOUT SOUTH HALF
SHOWING RADIAL ANCHORS

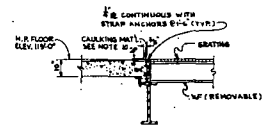
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

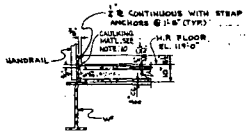
4209 | E-421-049 | 0 | SC-421-049



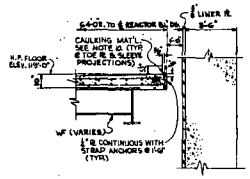
PLAN
MEZZANINE FLOOR ELEV. 119'-0"



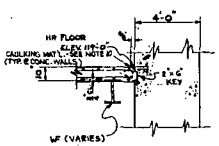
SECTION 1-1



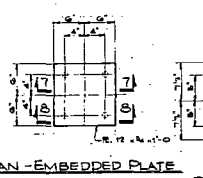
SECTION 2-2



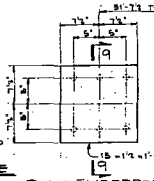
SECTION 3-3



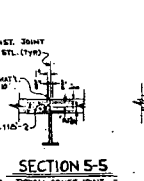
SECTION 4-4



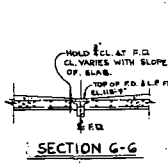
PLAN - EMBEDDED PLATE
MF RP-1 (2-REQ'D)
MF RP-2 (1-REQ'D)



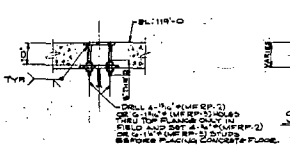
PLAN-EMBEDDED PLATE
MF RP-3 (1-REQ'D)



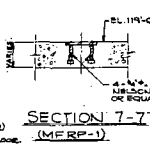
SECTION 5-5
TYPICAL CONST. JOINT



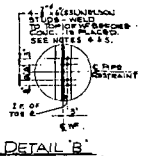
SECTION 6-6



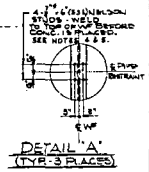
SECTION 8-8 (MFRP-2)
SECTION 9-9 (MFRP-3)



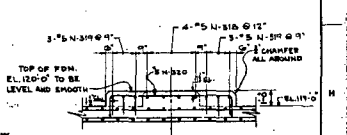
SECTION 7-7
(MFRP-1)



DETAIL 'B'
(TYP. 4 PLACES)



DETAIL 'A'
(TYP. 3 PLACES)



SECTION 10-10

NOTES:-
1. FOR GENERAL NOTES SEE DWG. SC-421-001.
2. FLOOR DRAINS AND PIPING MUST BE LOCATED AND SET AS SHOWN ON DWG. SC-211-012 BEFORE CONC. SLAB IS PLACED.
3. THIS DWG. MUST BE ORDERED IN CONJUNCTION WITH SLAB OPENING DWG. SC-421-002.
4. PIPE RESTRAINT LEGS MUST BE LOCATED AND SET AS SHOWN ON DWG. S-521-003 BEFORE CONCRETE IS PLACED.
5. FIELD DRILL ANCHOR STUDS TO TOP OF BEAM FLANGE AFTER VERIFYING THEY CLEAR EXACT PIPE RESTRAINT LEG LOCATION BUT BEFORE ACTUAL FIELD WELDING OF RESTRAINT LEGS TO BEAM.
6. ALL SAFETY TREADS SHALL BE TYPE 302 OR 304 STAINLESS STEEL IN ACCORDANCE WITH SP-6000.
7. ALL CONST. JOINTS & TERMINATIONS OF CONCRETE FLOORS SHALL HAVE EDGEWORKED ENDS AS SHOWN ON SECTIONS, THIS DRAWING.
8. FLOOR SLOPE TO ASSURE A 100% FLAT FINISH, SEE SPECIFICATION SP-6000.
9. FOR PAINTING & PROTECTIVE COATINGS ON CONCRETE FLOOR SEE SP-3101.
10. FOR CONCRETE MATERIALS SEE P.D. 3100.

REFERENCES:-
SC-421-001 SECONDARY SHIELD WALL PLAN-ELEV. 119'-0"
SC-424-250 REINFORCEMENT LIST
SC-424-350 REINFORCEMENT LIST

5	REMOVED SHEAR DESIGNATION FROM NELSON STUDS ON PLAN AND DETAILS "A" & "B"	K	8-8-13
4	FIELD CHANGE 79-237 / 79-248 ADDED CONST. JOINTS	K	7-18-79
3	FIELD CHANGE 79-237 / 79-248 ADDED CONST. JOINTS	K	7-18-79
2	CHANGED CONST. JT. LOCATIONS AS REQUESTED. — FIELD CHANGE NO. 204	K	6-5-79
1	ADDED DIMENSION FOR TOE & ON SECT. 3-3 / INDICATED CAULKING ON SECTS. 1-1 THRU 5-5, ADDED NOTES 6 THRU 10	K	5-9-12
NO.	REVISIONS	BY	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING FLOOR PLAN
MEZZANINE FLOOR ELEV. 119'-0"

GILBERT ASSOCIATES, INC.

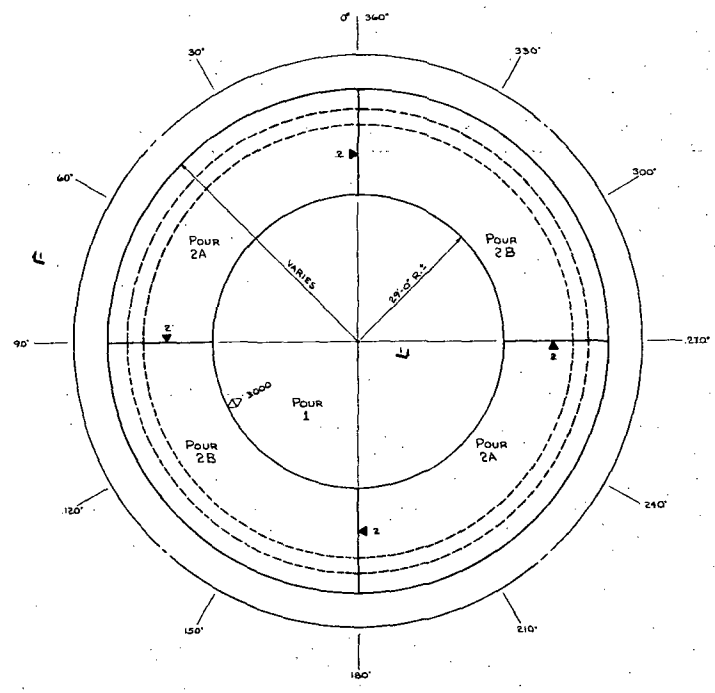
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

4-10-13	CONSTRUCTION	JWS	
	LIMITED CONSTRUCTION AS NOTED		
	PRELIMINARY, NOT FOR CONSTRUCTION		
5-4-12	BIDDING PURPOSES ONLY	JWS	
	REVIEW AND COMMENTS		
DATE	RELEASED FOR	ENGR.	

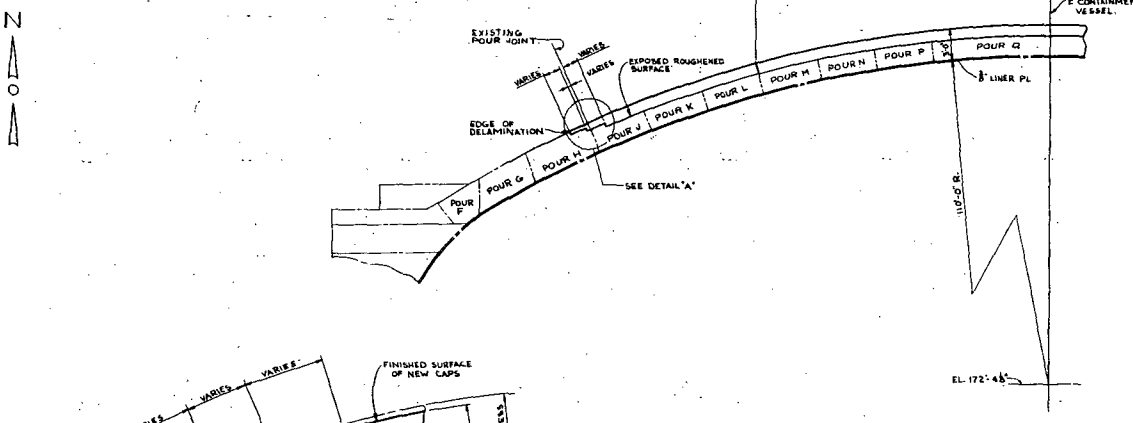
DESIGNED: KS | DRAWN: FG | TRACED: FG | CHECKED: JWS 4-10-13 | APPROVED: [illegible] 4-10-13

WORK ORDER 4203 | DRAWING NO. E-421-051 | REV. 6 | SC-421-051

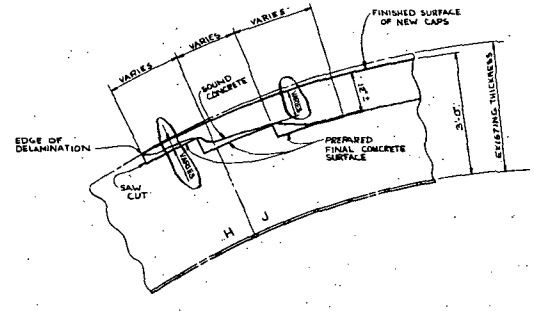
SCALE: 1/8" = 1'-0" | SIZE: E | E-10-13



PLAN ON DOME



SECTION 1-1



DETAIL 'A'

POUR PROCEDURE AND NOTES:-

1. Delete pour designation to industrial in the different angular locations, if desired, they may be poured simultaneously.
2. Rings which have more than one (1) pour, a minimum of 2 days must elapse before adjacent pour in same ring is commenced. (Typical ℄ ▷).
3. Between each ring of Pours the concrete must have reached 3000 PSI minimum or 7 days whichever is least. (Typical 3000<D>).
4. Pour 1 must be commenced at its outer edge for full 360° radially towards the center.
5. All construction joint faces must be coated with epoxy adhesive in accordance with specification SP-04634.
6. Electrical conduit shall be in place before concrete is poured. See Drawing E-210-R6.
7. Concrete - Specification SP-0060 and SP-0610
   Strength 5000 psi minimum at 28 days
   Class FF - 3/4in-1, Dia, aggregate 3/4"
   Reinforcing - Specification SP-0040 and SP-0060, except for cadwelding
   Unless otherwise noted
8. Removal and replacement of concrete - specification SP-0470
9. All cadwelding to be in accordance with specification SP-0462, "Cadwelding" (or equal).
10. Cadwelding locations indicated on drawings are for guidance. Actual location may be adjusted to suit field conditions. Minimum spacing of 9 feet to be maintained between cadwelds in any layer.
11. All radial and hoop bars are supplied with excess length. Field to cut bars to length as required.
12. Extent of reinforcement placement to bottom layer of radial and hoop bars to be determined by contractor after inspection of concrete excavation limits.

REFERENCES:-

SC-421-210	
1000	Ring Girder
SC-421-324	
SC-421-340	Concrete Dome Reinforcement
SC-421-345	Concrete Dome Detailing
SC-421-341	Reactor Building - Concrete Dome Repair - North Half-Top Reinforcement
SC-421-342	Reactor Building - Concrete Dome Repair - South Half-Top Reinforcement
SC-421-343	Reactor Building - Concrete Dome Repair - North Half-Bottom Reinforcement
SC-421-344	Reactor Building - Concrete Dome Repair - South Half-Bottom Reinforcement
SC-421-345	Reactor Building - Concrete Dome Repair - Sections and Details
SC-423-273	Anchor Bolt List
SC-434-715	Reinforcement List
SC-434-717	Reinforcement List
SC-434-718	Reinforcement List
SC-434-719	Reinforcement List
SC-434-720	Reinforcement List
SC-434-721	Reinforcement List
SC-434-722	Special Bar Bending Diagram
SC-421-344	Plan of Dome - North Half - Radial Anchors
SC-421-345	Plan of Dome - South Half - Radial Anchors
SC-434-723	Reinforcement List

2	ADDED VARIES DIM. TO DETAIL 'A' & ALSO ADDED REFERENCES AS IND.	MAH	9-17
1	ADDED NOTES & REFERENCES AS IND.	MAH	8-17-76
NO.	REVISION	BY	DATE

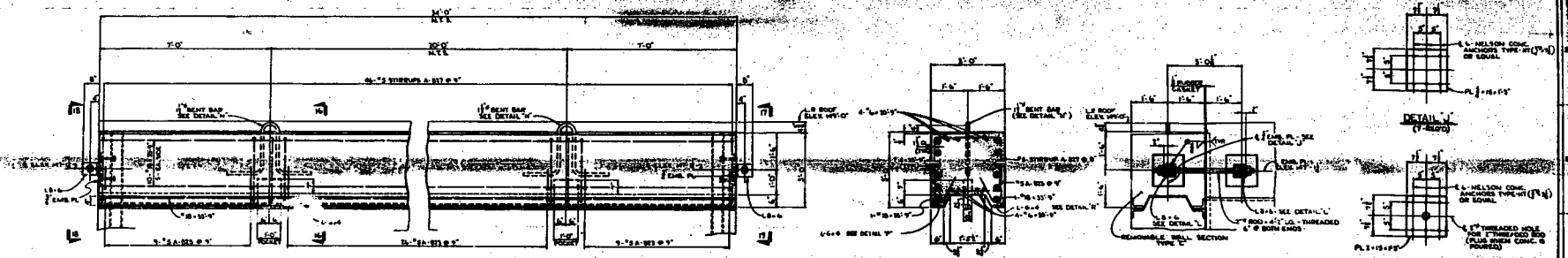
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
DOME - CONSTRUCTION JOINT AND POURING FOR DELAMINATED CAP

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

4-5-76	CONSTRUCTION	MJ			
3-1-76	LIMITED CONSTRUCTION AS NOTED				
	PRELIMINARY NOT FOR CONSTRUCTION	MJ			
	RECORD PURPOSES ONLY				
DATE	RELEASED FOR	SIGNED	SCALE: 1"=10'	4203	E-421-080	2	SC-421-050



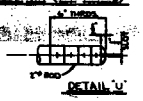
REMOVABLE WALL SECTION - TYPE 'C'
(1-REQ'D)

SECTION 16-16

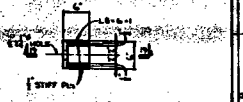
ELEVATION 17-17 (AS SHOWN)
ELEVATION 18-18 (OPP HAND)

DETAIL 'J'
(1-REQ'D)

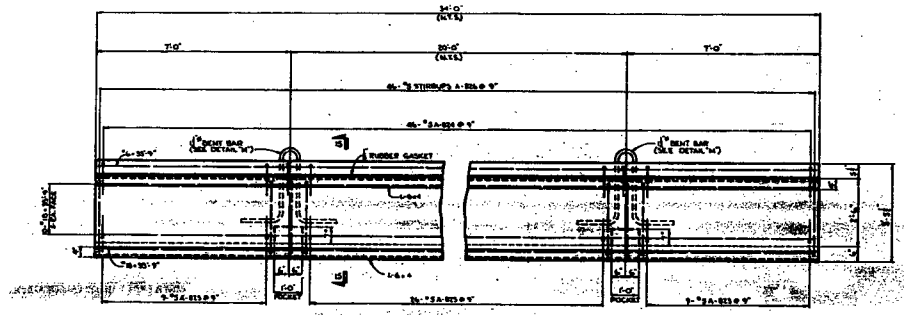
DETAIL 'K'
(1-REQ'D)



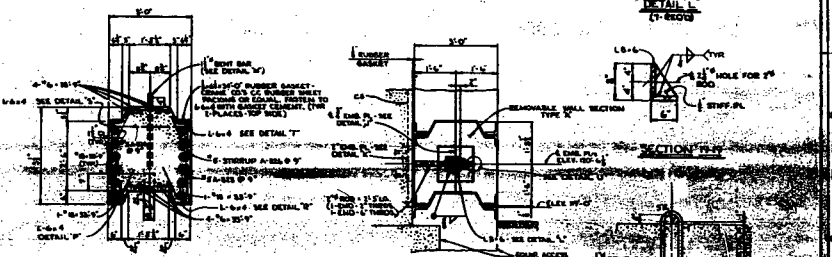
DETAIL 'U'



DETAIL 'L'
(1-REQ'D)

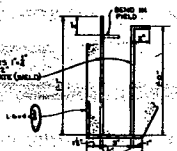


REMOVABLE WALL SECTION - TYPE 'B'
(8-REQ'D.)

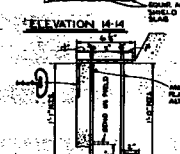


SECTION 15-15

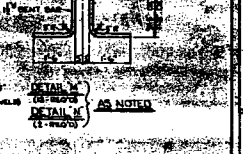
SECTION 19-19



DETAIL 'P' (AS SHOWN)
DETAIL 'R' (OPP HAND)



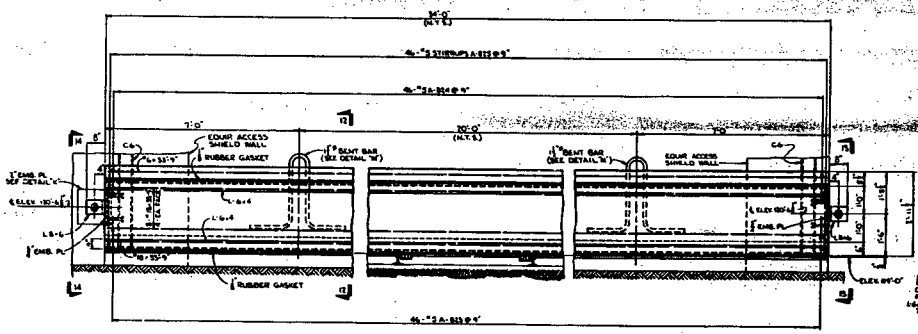
DETAIL 'S' (AS SHOWN)
DETAIL 'T' (OPP HAND)



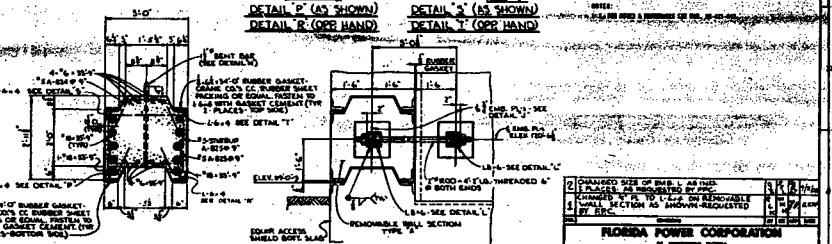
DETAIL 'M'
(8-REQ'D)

DETAIL 'N'
(2-REQ'D)

AS NOTED



REMOVABLE WALL SECTION - TYPE 'A'
(1-REQ'D.)



SECTION 11-11

ELEVATION 13-13

2	CHANGED SIZE OF ENB. L AS INDICATED, AS REQUESTED BY FPC.	
1	CHANGED W. PL. TO 1'-6"x2" ON REMOVABLE WALL SECTION AS SHOWN-REQUESTED BY FPC.	

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
EQUIPMENT ACCESS SHIELD STRUCTURE
DETAILS

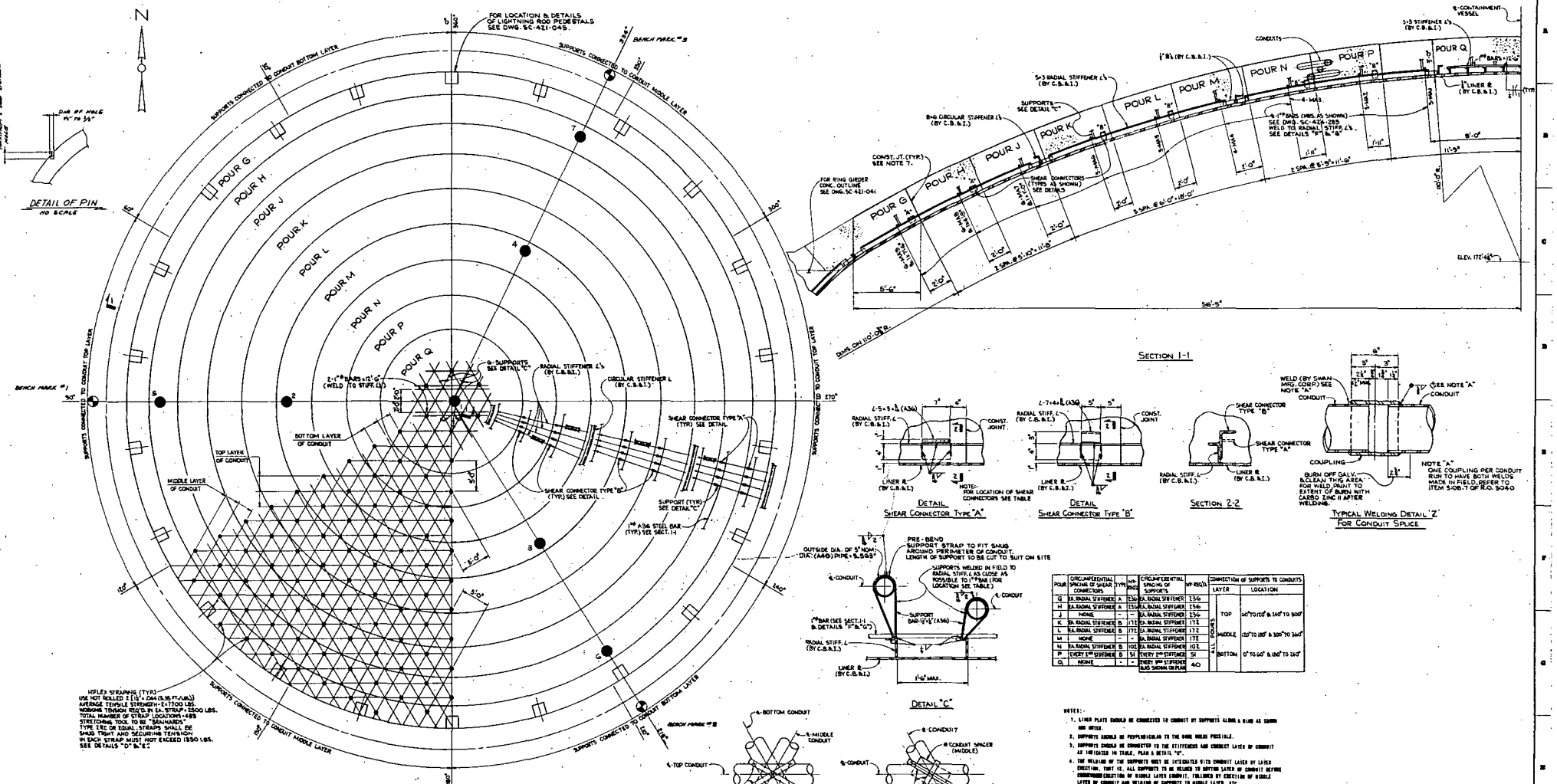
GILBERT ASSOCIATES, INC.
READING, PENNSYLVANIA

APPROVED
FOR CONSTRUCTION BY

DESIGNED	DRAWN	TRACED	CHECKED
J.F.	J.R.L.		E.J.S.
4-7-77	4-7-77		4-7-77

SCALE	4808	5-421-047
DATE	WORK ORDER NO.	DRAWING NO.

CODE	CONSTRUCTION	DATE
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	ISSUED PURPOSES ONLY	
DATE	RELEASED FOR	



POUR	CIRCUMFERENTIAL SPACING OF SHEAR CONNECTORS	TYP.	NO. REQ'D	CIRCUMFERENTIAL SPACING OF SUPPORTS	NO. REQ'D
G	8A. RADIAL STIFFENER	A	236	8A. RADIAL STIFFENER	236
H	8A. RADIAL STIFFENER	A	236	8A. RADIAL STIFFENER	236
J	NONE	-	-	8A. RADIAL STIFFENER	236
K	8A. RADIAL STIFFENER	B	172	8A. RADIAL STIFFENER	172
L	8A. RADIAL STIFFENER	B	172	8A. RADIAL STIFFENER	172
M	NONE	-	-	8A. RADIAL STIFFENER	172
N	8A. RADIAL STIFFENER	B	102	8A. RADIAL STIFFENER	102
P	EVERY 2ND STIFFENER	B	54	EVERY 2ND STIFFENER	54
Q	NONE	-	-	EVERY 2ND STIFFENER PLUS SHOWN ON PLAN	40

ALL POURS	LAYER	LOCATION
	TOP	60° TO 120° & 240° TO 300°
	MIDDLE	120° TO 180° & 300° TO 360°
	BOTTOM	0° TO 60° & 180° TO 240°

HOFLEX STRAPPING (TYP.)
USE HOT ROLLED 2 (½"x.04) (5.35 FT./LB.)
AVERAGE TENSILE STRENGTH = 21700 LBS.
WORKING TENSION REQ'D. IN EA. STRAP = 2500 LBS.
TOTAL NUMBER OF STRAP LOCATIONS = 495
STRETCHING TOOL TO BE "SIGNODE" TYPE CRC OR EQUAL. STRAPS SHALL BE SNUG TIGHT AND SECURING TENSION IN EACH STRAP MUST NOT EXCEED 1550 LBS. SEE DETAILS "D" & "E"

Plan
Arrangement Of Shear Connectors, Supports, 1"ø Bars & Conduit Straps
(No Scale)

NOTES:
1. LINER PLATE SHOULD BE CONNECTED TO CONDUIT BY SUPPORTS ALONG A RUN AS SHOWN AND NOTED.
2. SUPPORTS SHOULD BE PERPENDICULAR TO THE RUNS WHERE POSSIBLE.
3. SUPPORTS SHOULD BE CONNECTED TO THE STIFFENERS AND CONDUIT LAYER OF CONDUIT AS INDICATED IN TABLE, PLAN & DETAIL "E".
4. THE WELDING OF THE SUPPORTS MUST BE INTEGRATED WITH CONDUIT LAYER BY LAYER ERECTION. THAT IS, ALL SUPPORTS TO BE WELDED TO BOTTOM LAYER OF CONDUIT BEFORE COMMENCING ERECTION OF MIDDLE LAYER CONDUIT, FOLLOWED BY ERECTION OF MIDDLE LAYER OF CONDUIT AND WELDING OF SUPPORTS TO MIDDLE LAYER, ETC.
5. EVERY THIRD INTERSECTION OF RUNS TERMINATING CONDUITS ARE TO BE CLAMPED TOGETHER (SEE PLAN AND DETAILS "D" & "E").
6. ALL WELDING SHALL CONFORM TO ANS D1.1-69
7. THE PREPARATION OF THE CONSTRUCTION JOINTS AND THE APPLICATION OF THE "SIKA" EPOXY CONSTRUCTION JOINT BONDING COMPOUND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION CP-0116 ADDENDUM - 9.
8. ELECTRICAL GROUNDING SHALL BE IN PLACE BEFORE CONCRETE IS POURED - SEE DWG. E-319-001.

* NOTE: FROM 30° TO 90° & FROM 270° TO 270° A SPACER SHALL BE ADDED WHERE THE MIDDLE LAYER OF CONDUITS DO NOT OCCUR. (4 LOCATIONS EA. SECTOR. TOTAL 8 SPACERS REQ'D.)

REFERENCES:
SC-421-045 CONCRETE DOME REINFORCEMENT PLACING
SC-424-286-1 REACTOR BLDG. CONCRETE DOME - SPECIAL BARS

BASE LINE DATA	
DOME AREA SURFACE TEMP.	78°F
INTERNAL AMBIENT TEMP.	128°F
ELEVATION OF BENCH MARKS	
1	+.006
2	0.000
3	+.024

LOCATION	BASE LINE Δ EL.
1	17.936
2	18.574
3	13.563
4	13.438
5	6.475
6	6.714
7	6.729

Δ EL IS THE VERTICAL DISTANCE FROM THE EL=0" REFERENCE BENCH MARKS TO THE SURVEY POINTS ON THE DOME.

RECTANGULAR COORDINATES OF BENCH MARKS AND SURVEY POINTS			
BENCH MARK	1	0+68.520'W.	0+00.000'N.
	2	0+39.298'E.	0+54.129'S.
	3	0+30.143'E.	0+61.873'N.
SURVEY POINTS	1	0+01.460'E.	0+00.000'N.
	2	0+39.010'W.	0+00.005'N.
	3	0+16.627'E.	0+53.750'S.
	4	0+12.705'E.	0+26.025'N.
	5	0+49.200'W.	0+00.007'S.
	6	0+25.045'E.	0+60.149'S.
	7	0+61.681'E	0+44.030'N.

NO.	REVISIONS	BY	CK	APP.	DATE
3	AS BUILT PER MAR. 77-6-27				
2	REV. TYP. WELDING DETAIL FOR CONDUIT SPLICE, FIELD CHANGE NO. 72-552, REV. DWG. E-1-1-N				
1	INDICATED LIGHTNING ROD PEDESTALS, ADDED NOTE 8 CHANGED POUR DESIGNATIONS, RELEASED TYPICAL WELDING DETAIL AND REVISED CONST. STS. & RELATED EMB. SITE AS IND. ON SECT. I-I				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW
REACTOR BUILDING
CONCRETE DOME
OUTLINE AND EMBEDDED STEEL

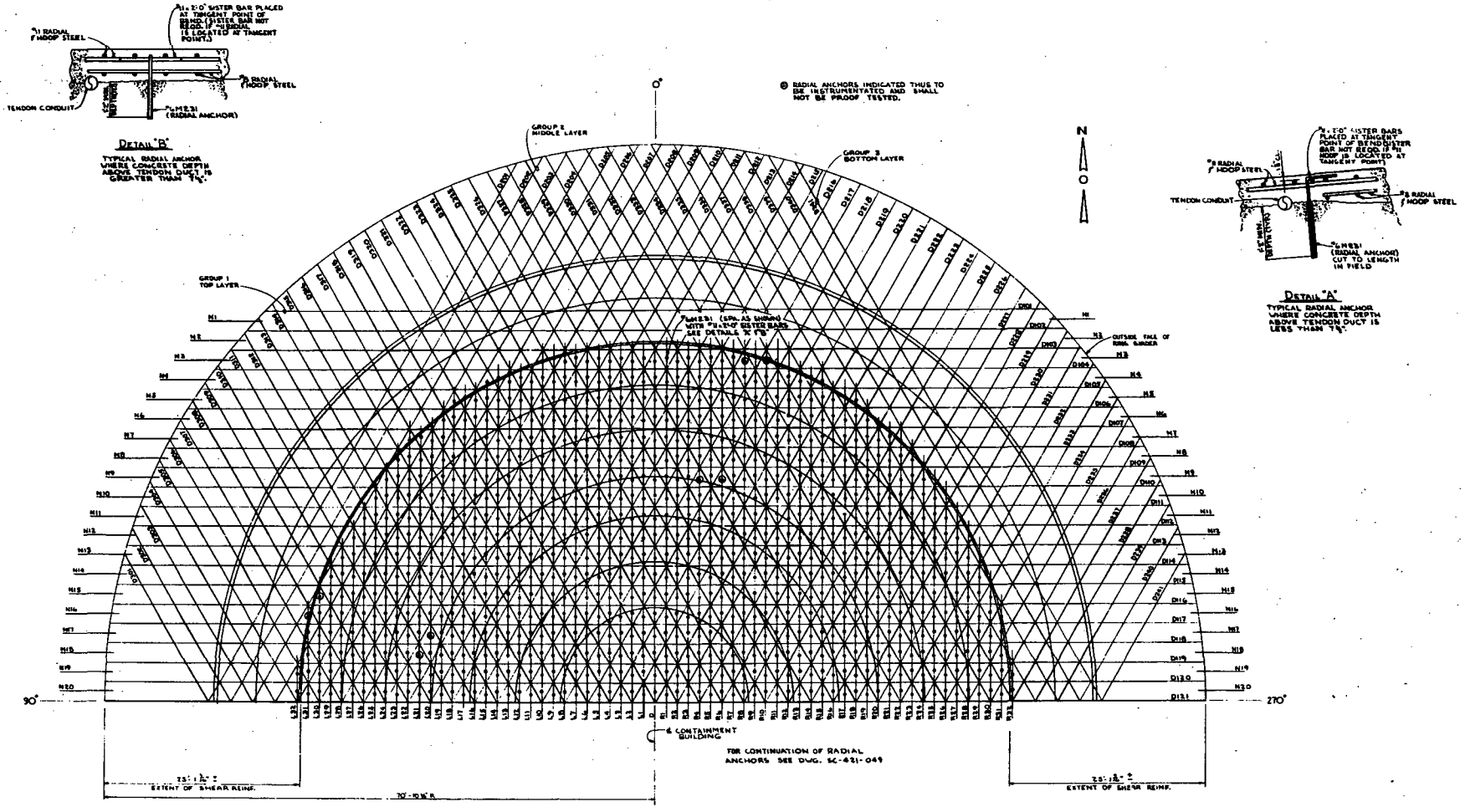
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

1-27-75	CONSTRUCTION		
	LIMITED CONSTRUCTION AS NOTED		
	PRELIMINARY NOT FOR CONSTRUCTION		
	BIDDING PURPOSES ONLY		
DATE	RELEASED FOR	ENGR.	

SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.
1/16"=1'-0"	4203	E	E-421-046	3

SC-421-046



FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
UNIT NO. 3 — 860,000 KW

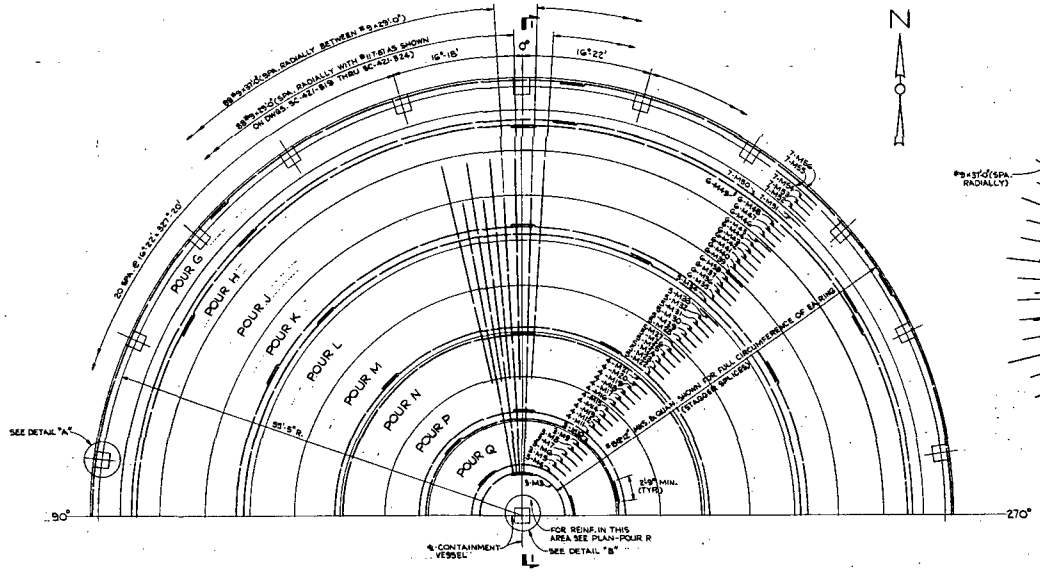
PLAN OF DOME
TENDON LAYOUT NORTH HALF
SHOWING RADIAL ANCHORS

GILBERT ASSOCIATES, INC.

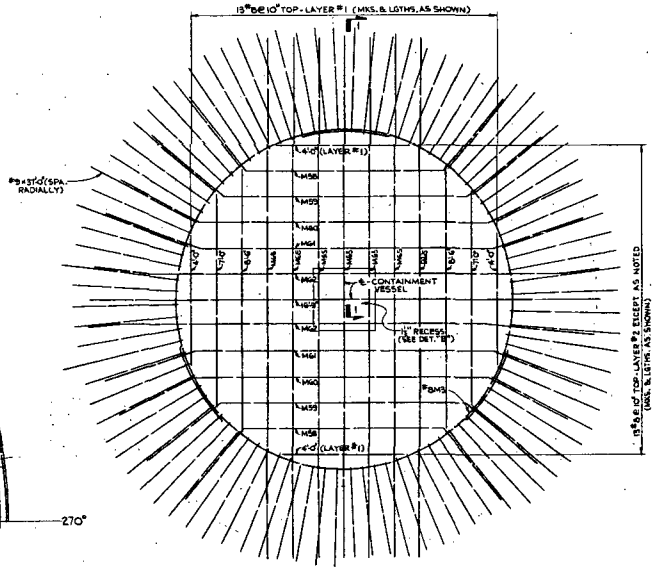
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
SHOWING PURPOSES ONLY
RELEASED FOR

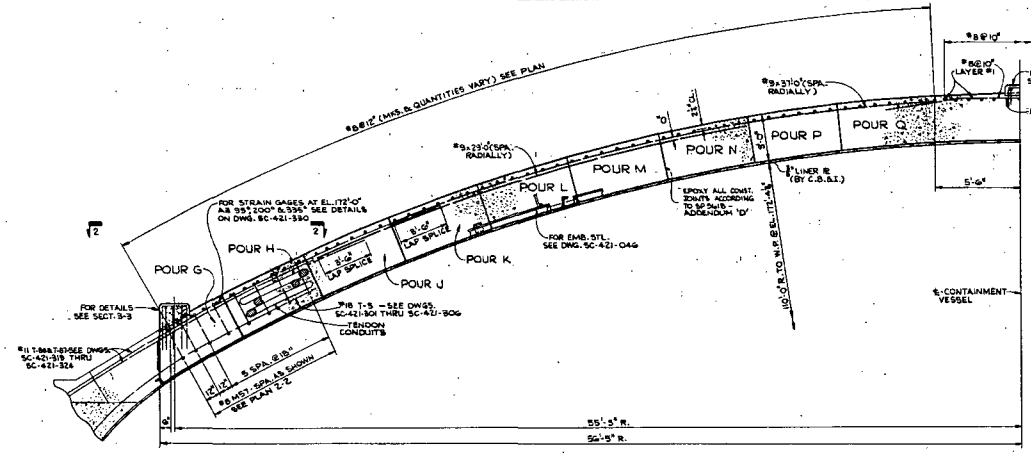
4805 — 5-421-048 — 0 — SC-421-048

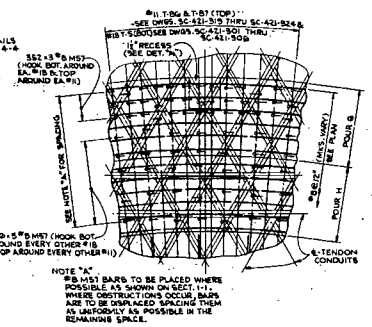


HALF PLAN
DOME REINFORCEMENT



PLAN
POUR R



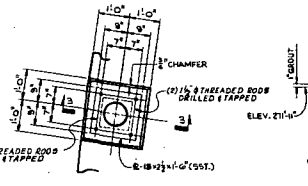


PLAN 2-2

NOTE "A"
#8 M57 BARS TO BE PLACED WHERE POSSIBLE AS SHOWN ON SECT. 1-1. WHERE OBSTRUCTIONS OCCUR, BARS ARE TO BE DISPLACED SPACING THEM AS UNIFORMLY AS POSSIBLE IN THE REMAINING SPACE.

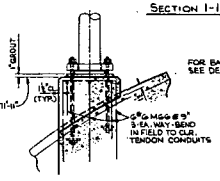
NOTES:-
1. CONCRETE: SPECIFICATIONS SP-0060 & SP-0610
STRENGTH 5,000 P.S.I. SLUMPS AT TIME OF PLACE
CLASS 70°-4000-2, MAX. AGGREGATE 1"
2. REINFORCING: SPECIFICATIONS SP-0060 & SP-0061
MATERIAL ASTM A615 GRADE 60
3. FOR ADDITIONAL NOTES & REFERENCES SEE DWG. SC-421-045

REFERENCES:-
SC-421-002-0 ANCHOR BOLT LIST
SC-421-220-0 REINFORCEMENT LIST
SC-421-221-0 REINFORCEMENT LIST
SC-421-258-1 REINFORCEMENT LIST
SC-421-288-1 REINFORCEMENT LIST

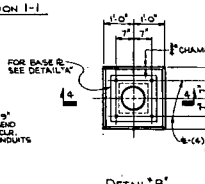


DETAIL "A"
(11-PLACES)

CIRCUMFERENTIAL POLE BASE
SCALE: ¾"=1'-0"

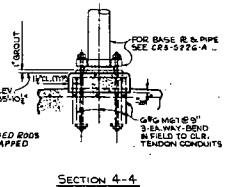


SECTION 3-3



DETAIL "B"
(1-PLACE)

CENTER POLE BASE
SCALE: ¾"=1'-0"



SECTION 4-4

NO.	REVISIONS	BY	CK	APP	DATE
2	AS-BUILT PER M.A.R. 78-6-10	D.R.H.			
1	CHANGED 9'-0" BAR TO #6 @ 9" & ADDED EPOXY NOTE	D.R.H.			

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
CONCRETE DOME REINFORCEMENT
PLAN, SECTIONS AND DETAILS

GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

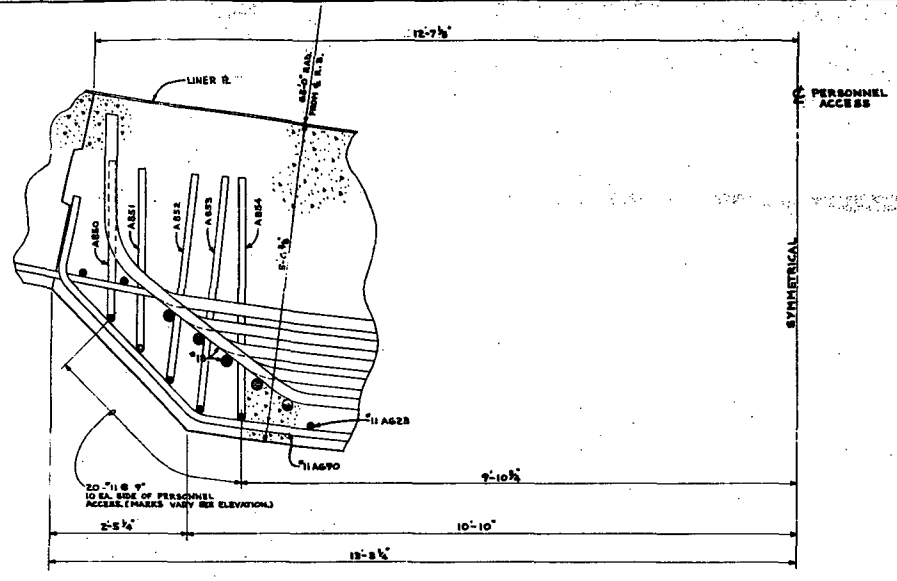
DRAWN	DES.	TRACED	CHECKED	APPROVED	DATE
R.H.H.	J.E.L.		E.H.Hunter	E.H.Hunter	6-17-76

SCALE	JOB NUMBER	DRAWING NO.	REV.
1"=1'-0"	4203	E-421-045	2

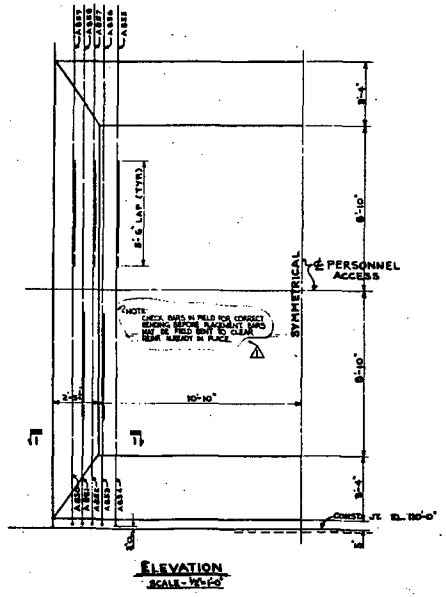
SC-421-045

	CONSTRUCTION	DATE
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
	RELEASED FOR	

E-1-043



SECTIONAL PLAN 1-1
SCALE - 1⅛" = 1'-0"



ELEVATION
SCALE - ⅛" = 1'-0"

NOTES:
1. [illegible]
2. [illegible]

REFERENCES:
- [illegible]

NOTE: REFER TO FIELD CHANGE # 111
9/4/72

NO.	REVISION	BY	CK	APP'D	DATE
1	REVISED NOTE IN ELEVATION				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
EXTERIOR WALL - PERSONNEL ACCESS OPENING
FIELD CHANGE - ADDITIONAL #11 REINFORCING BARS

GILBERT ASSOCIATES, INC. — READING, PENNSYLVANIA

APPROVED FOR CONSTRUCTION BY

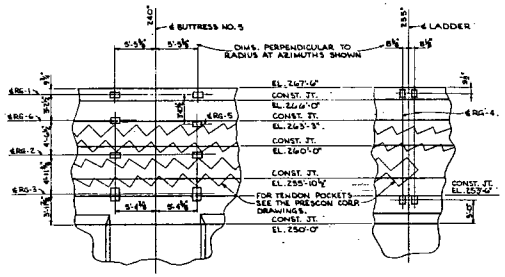
DESIGNED	DRAWN	TRACED	CHECKED	QUANTITIES	APPROVED
R.S.	M.C.	J.T.	J.S.H.		

JOB NUMBER	DRAWING NUMBER	REVISION
6823-72	E-421-044	1

SC-421-044

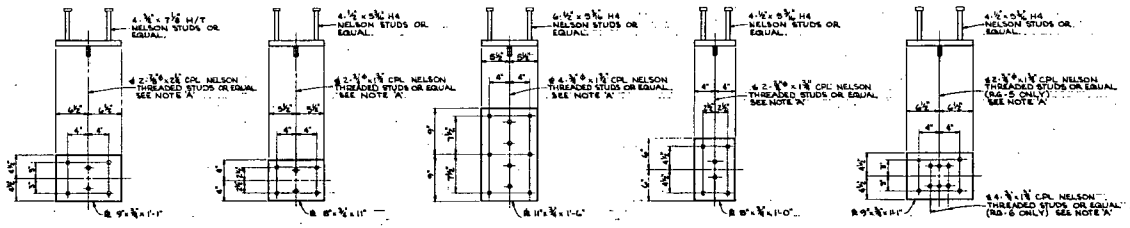
SCALE: 1/8" = 1'-0" — WHEN SHOWN FULL SIZE

NOTE 'A'
THREADED STUDS TO BE LOCATED & APPLIED IN FIELD AFTER CONCRETE IS POURED, TO SUIT PLANT VENT STEEL & LADDER.



ELEVATION 2-2
SC-421-041

ELEVATION 3-3
SC-421-041



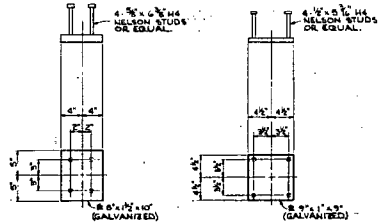
EMBEDDED PLATE RG-1 (2-REQ'D.)

EMBEDDED PLATE RG-2 (2-REQ'D.)

EMBEDDED PLATE RG-3 (2-REQ'D)

EMBEDDED PLATE RG-4 (4-REQ'D)

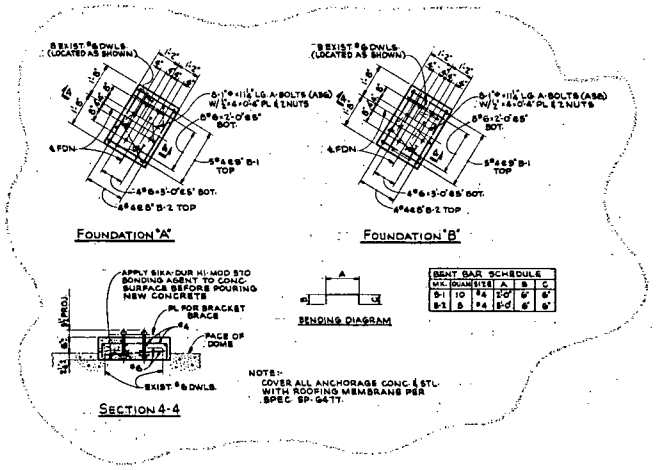
EMBEDDED PLATES RG-5 (1-REQ'D.) RG-6 (1-REQ'D.) SIMILAR EXCEPT AS NOTED



EMBEDDED PLATE RG-7 (150 REQ'D.)

EMBEDDED PLATE RG-8 (94 REQ'D.)

NOTE:
WHERE GALVANIZING IS REMOVED BY WELDING, SURFACES ARE TO BE PAINTED WITH ZRS, METAL HIDE OR EQUAL.



BENT BAR SCHEDULE					
MK.	QUAN.	SIZE	A	B	C
B-1	10	#4	2'-0"	6"	6"
B-2	8	#4	5'-0"	6"	6"

NOTE:
COVER ALL ANCHORAGE CONC. & STL. WITH ROOFING MEMBRANE PER SPEC. SP-G47T.

NOTES:-
1. FOR GENERAL NOTES AND REFERENCES SEE DRG. SC-421-001.
2. THIS DRG. TO BE READ IN CONJUNCTION WITH DRG. SC-421-043.

W.O. 04-4762-007

NO.	REVISIONS	DRAWN	CHECKED	ENGR.	DATE
2	ADDED FOUND. 'A' FOUND 'B', SECT. 4-4 AND BAR SCHEDULE FOR SKYCLIMBER EQUIP. TO REFLECT AS BUILT CONDITION.	D.S.B.	W.M.P.	J.J.P.	3-7-77
1	ADDED PLATES RG-7 & RG-8	R.C.D.	H.M.	J.J.P.	8-9-76

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
RING GIRDER - CONCRETE OUTLINE
ELEVATIONS, SECTIONS AND DETAILS

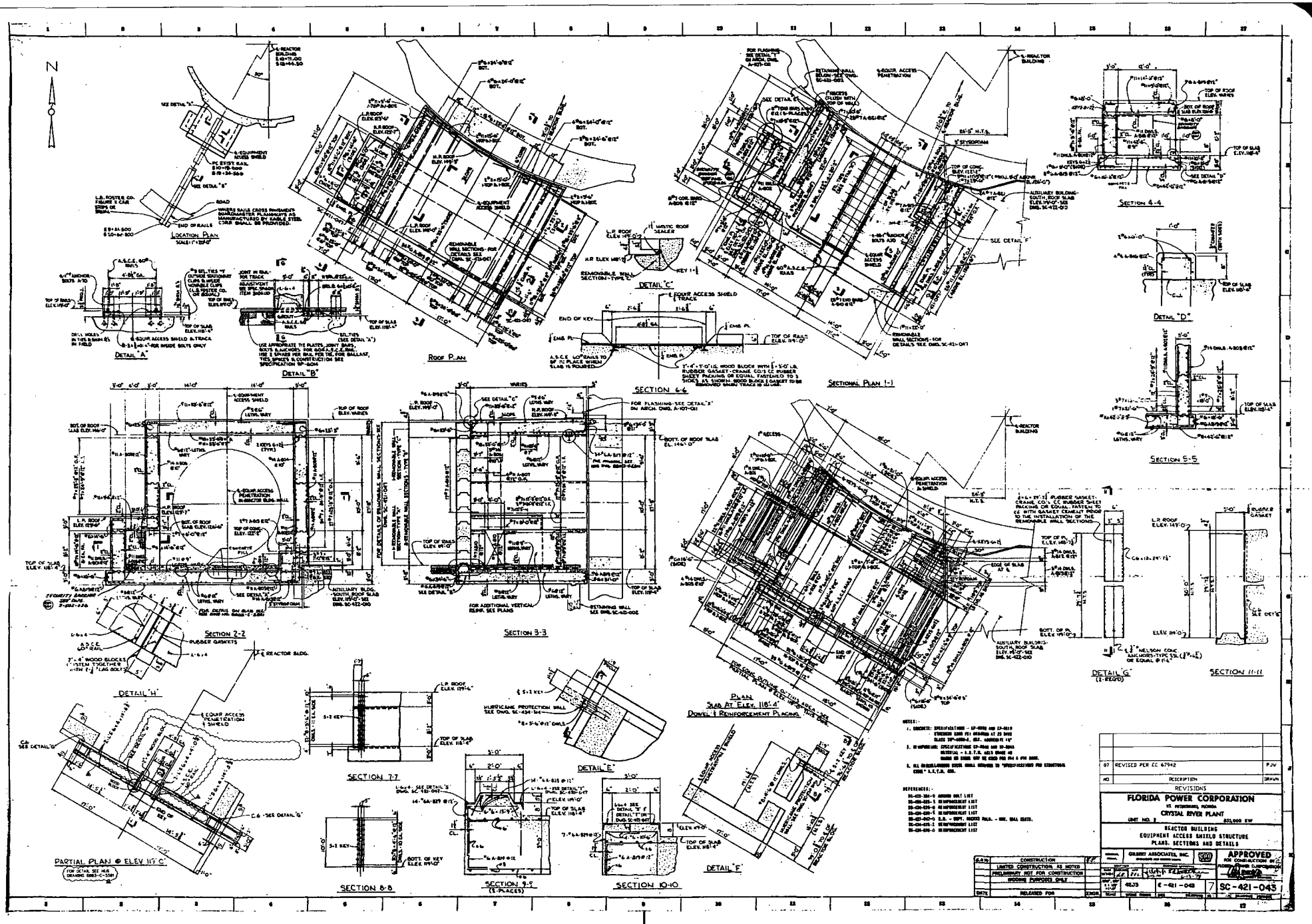
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	RELEASED FOR
3-8-77	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY

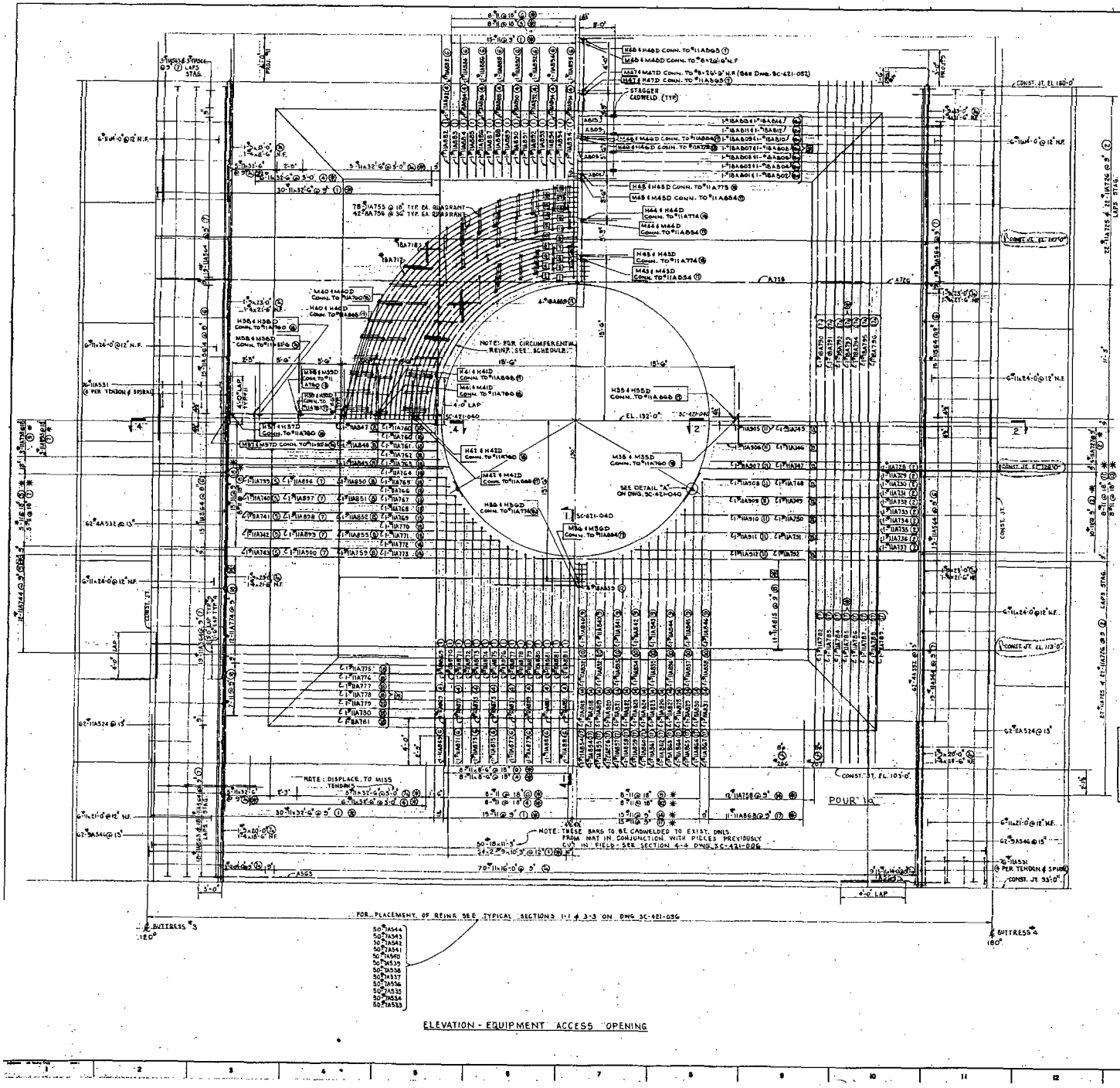
ENGR.	SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.
W.M.P. 11-76	1/4"	4203	E	SC-421-042	2

SC-421-042



LOCATION PLAN
ROOF PLAN
SECTIONAL PLAN 1-1
SECTION 4-4
DETAIL "A"
DETAIL "B"
DETAIL "C"
SECTION 6-6
DETAIL "D"
SECTION 5-5
SECTION 2-2
SECTION 3-3
DETAIL "H"
DETAIL "G"
SECTION 11-11
PLAN
SLAB AT ELEV. 118'-4"
DOWEL & REINFORCEMENT PLACING
PARTIAL PLAN @ ELEV. 119'-0"
SECTION 7-7
DETAIL "E"
SECTION 8-8
SECTION 9-9
SECTION 10-10
DETAIL "F"
07 REVISED PER EC 67942 PJW
NO DESCRIPTION DRAWN
REVISIONS
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
UNIT NO. 2 855,000 KW
REACTOR BUILDING
EQUIPMENT ACCESS SHIELD STRUCTURE
PLANS, SECTIONS AND DETAILS
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
WIDING PURPOSES ONLY
RELEASED FOR
4235
E-421-043
7
SC-421-043

SECTION 6-6
PLAN "A"
SI-2 MAT FOUND.
SECTION 7-7
PLAN-RING GIRDER
70'-10 5/8" R. TO OUTSIDE FACE OF RING GIRDER
66'-3" RAD. TO INSIDE DOME TENDON TEMPLATE
NOTE: ELECTRICAL GROUNDING MUST BE IN PLACE BEFORE CONCRETE IS POURED. SEE DWG. E-219-061.
SECTION 1-1
ELEVATION 4-4
DETAIL 'A'
SECTION 5-5
SECTION 5a-5a
ENLARGED DETAIL "D"
TYP. SUPPORT BEAM CONNECTION
DETAIL "B"
DETAIL "C"
5 ADDED FOUNDS & SECT. 7-7 FOR SKYCLIMBER EQUIPMENT TO REFLECT AS-BUILT CONDITION.
4 ADDED FOUNDATION FOR SEISMIC EQUIPMENT AND RELATED SECTIONS AS INDICATED
1 REMOVED HOLD FROM SCAFFOLD SUPPORT ANCHOR LOCATIONS AND INSERTS.
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
REACTOR BUILDING
RING GIRDER
CONCRETE OUTLINE - PLAN AND SECTIONS
GILBERT ASSOCIATES, INC.
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION
4203
E-421-041
5
SC-421-041



ELEVATION - EQUIPMENT ACCESS OPENING

SCHEDULE OF CIRCUMFERENTIAL REINF.									
QUAN.	SIZE	MARK	LAYER ○	RING □	QUAN.	SIZE	MARK	LAYER ○	RING □
5	#18	A700	3	1	5	#18	A707	15	8
3	#18	A700	15	1	3	#18	A708	3	9
5	#18	A700	16	1	5	#18	A708	15	9
					5	#18	A708	16	9
3	#18	A701	15	2	3	#18	A709	15	10
5	#18	A701	16	2	3	#18	A709	16	10
3	#18	A702	3	3	4	#18	A710	3	11
					4	#18	A710	15	11
3	#18	A702	15	3	4	#18	A710	16	11
5	#18	A702	16	3	4	#18	A711	16	12
					4	#18	A712	3	13
3	#18	A703	15	4	4	#18	A712	16	13
5	#18	A703	16	4	4	#18	A713	16	14
3	#18	A704	3	5	4	#18	A714	3	15
3	#18	A704	15	5	4	#18	A714	15	15
3	#18	A704	16	5	4	#18	A715	16	16
3	#18	A705	15	6	4	#18	A716	3	17
5	#18	A705	16	6	4	#18	A716	16	17
3	#18	A706	3	7	4	#18	A717	16	18
3	#18	A706	15	7	4	#18	A718	3	19
3	#18	A706	16	7	4	#18	A718	16	19

NOTE: FOR LAYERS OF REINF. SEE DWG. SC-421-040.

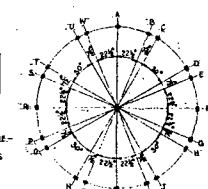
CADWELD SCHEDULE FOR CIRCUMFERENTIAL REINF.																
RING	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LAYER ○	A TO L OW	R UP ST	U P ST	A TO L OW	T O P	N E A R	A T D O W N	B E N D	R I G H T	U P ST	T O P	C A D W E L D	A T L O W	T O P	C A D W E L D	A T L O W
3																
15																
16																

LETTERS INDICATE CADWELD LOCATIONS - SEE CADWELD DETAILS BELOW

HORIZONTAL RADIUS Ⓐ = 70'-3"
HORIZONTAL RADIUS Ⓑ = 70'-3"
HORIZONTAL RADIUS Ⓒ = 65'-10"
⊕ DIM. TO OUTSIDE OF BAR

VERTICAL CIRCULAR (18) BARS TO ALSO BE BENT ON A HORIZONTAL RADIUS (SEE TABLE ABOVE) IN FIELD AFTER CADWELDS ARE MADE. CADWELDS MUST BE ORIENTED ACCORDING TO CADWELD DETAILS BEFORE BENDING.

18 CIRC. BEND TABLE



CADWELD DETAILS

NOTE:
- ⊕ REINF. INDICATED THUS IS SYMMETRICAL ABOUT VERT. ℄ OF OPN'G.
- ⊕ REINF. INDICATED THUS IS SYMMETRICAL ABOUT HORIT. ℄ OF OPN'G.
- ✱ REINF. INDICATED THUS IS SYMMETRICAL ABOUT HORIT. & VERT. ℄ OF OPN'G.

STRAIN GAGE NOTES:-
1. FOR STRUCTURAL INTEGRITY TESTING AND STRAIN GAGE SPECIFICATIONS SEE SP-4871.
2. FOR STRAIN GAGE LOCATIONS SEE THIS DRAWING. IF THE LOCATIONS OF THE INTERFERING BARS VARY FROM THE LOCATIONS SHOWN, AS-BUILT DIMENSIONS SHALL BE OBTAINED BY THE E.T.I. CONTRACTOR.
3. A "THRUST GAGE" AS SPECIFIED IS SPICED, SHALL BE CONNECTED TO # 84 AND 5'-0" LONG, SUPPLIED BY THE E.T.I. CONTRACTOR, LOCATED ADJACENT AND PARALLEL TO EACH STRAIN GAGE.
4. STRAIN GAGES ARE MARKED THUS 625 A 5060 OR 600 A 5060 ETC., "A" INDICATES A STRAIN GAGE ORIENTED IN THE CIRCUMFERENTIAL DIRECTION. "H" INDICATES A STRAIN GAGE ORIENTED IN THE HOOP DIRECTION. "R" INDICATES A "RADIAL GAGE". THE NUMBER (5060) REFERS TO THE RADIUS IN INCHES OF THE STRAIN GAGE IN SP-4871.

NOTES:-
1. THIS DWG. IS TO BE READ IN CONJUNCTION WITH DWG. SC-421-032, SC-421-038 & SC-421-048.
2. FOR GENERAL NOTES & REFERENCE SEE DWG. SC-421-032.
3. WRAP BARRIER TIGHTLY WITH LAYERS OF 6 MILS MINIMUM VINYL SHEETS.

REFERENCES:-
- SC-434-336-2 REINFORCEMENT 1 OF 2
- SC-434-338-3 REINFORCEMENT 2 OF
- SC-434-337-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF
- SC-434-339-0 REINFORCEMENT 1 OF

NO.	REVISIONS	BY	CK	APP	DATE
5	ADDED CONSTRUCTION JOINTS ALLOCATED TOP/BOT				
4	REFERRED TO DETAIL "A" & IND. 3% BY C.B.S.T. (5-PLACES)				
3	ADDED STRAIN GAGES (14-PLACES) & NOTES				
2	REVISED PLACING & QUANTITY OF #3 @ 5'-0" B.C.				
1	RELEASED FOR CONSTRUCTION				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
EXTERIOR WALL - EQUIPMENT ACCESS OPENING
REINFORCEMENT PLACING

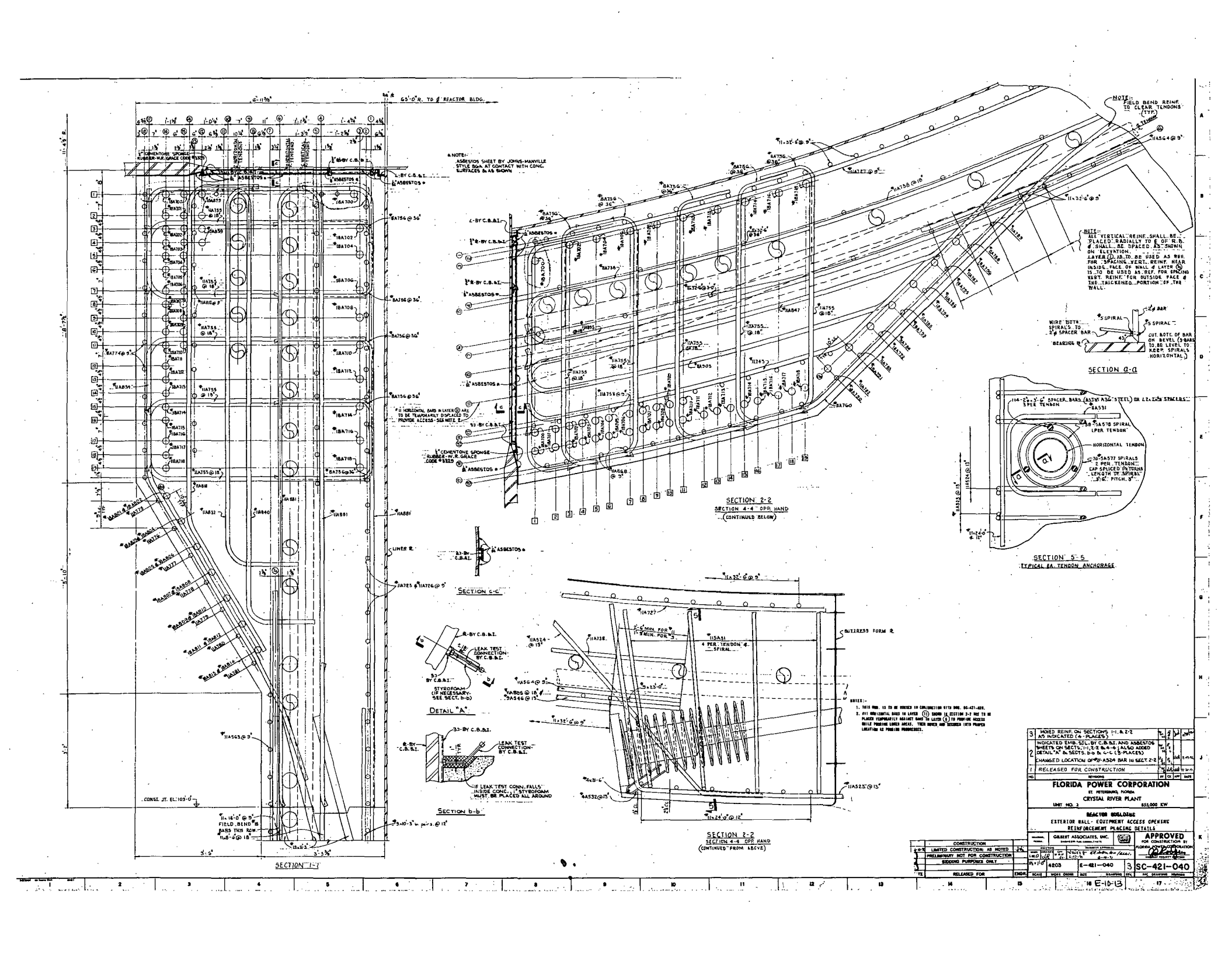
GILBERT ASSOCIATES, INC.

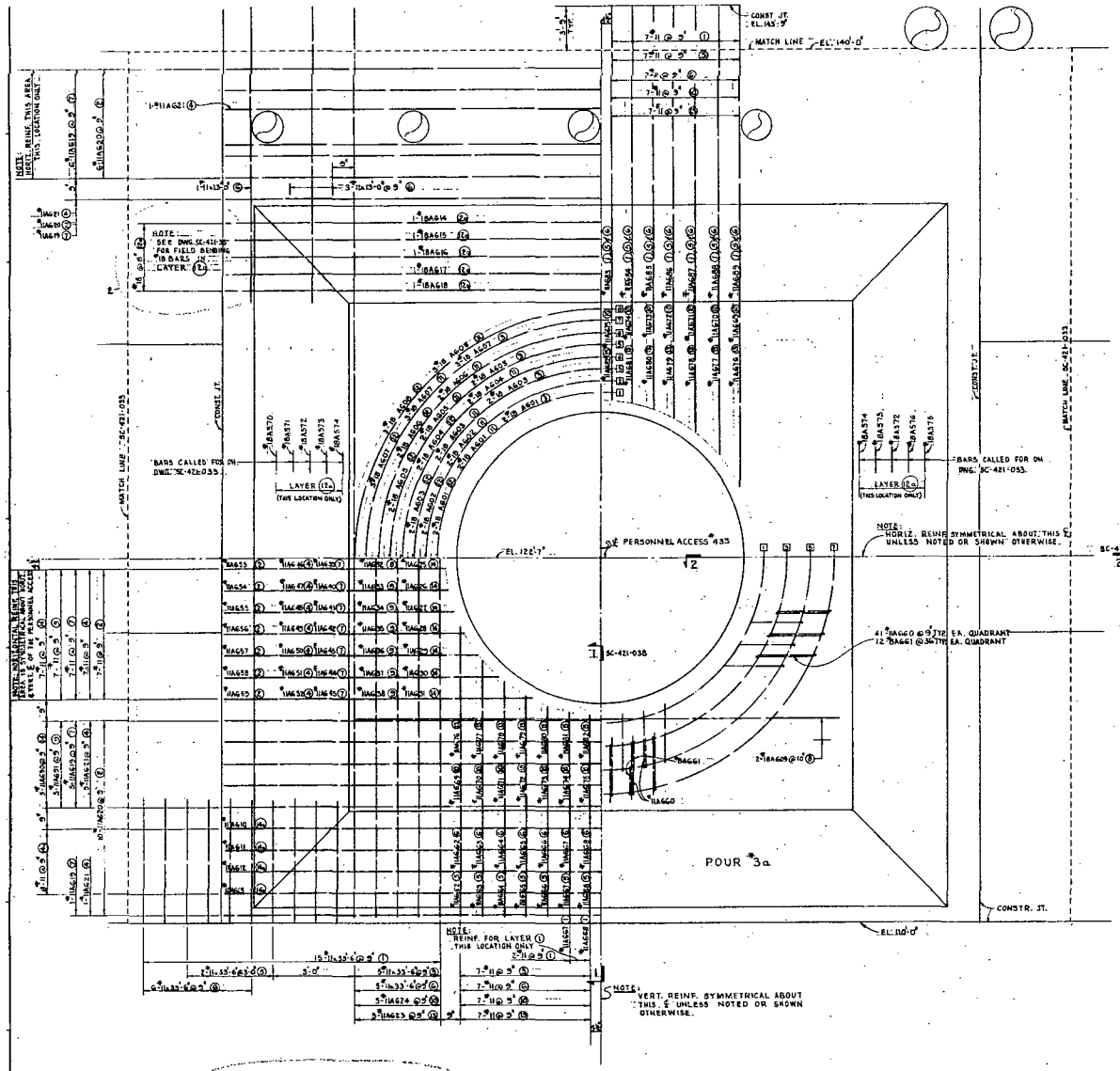
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE RELEASED FOR	ENGR.

SCALE	WORK ORDER	SIZE	DRAWING NO.	REV.
1/4"=1'-0"	4203	E-421-039	SC-421-039	5

18 E-10-13

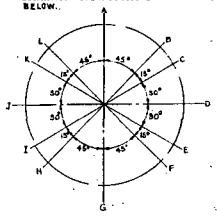

SECTION 1-1
SECTION 2-2
SECTION 4-4 OPP HAND
(CONTINUED BELOW)
SECTION 2-2
SECTION 4-4 OPP HAND
(CONTINUED FROM ABOVE)
SECTION c-c
SECTION b-b
DETAIL "A"
SECTION a-a
SECTION 5-5
TYPICAL EA. TENDON ANCHORAGE
NOTE: FIELD BEND REINF. TO CLEAR TENDONS (TYP.)
NOTE: ALL VERTICAL REINF. SHALL BE PLACED RADIALLY TO ℄ OF R.B. & SHALL BE SPACED AS SHOWN ON ELEVATION. LAYER (I) IS TO BE USED AS REF. FOR SPACING VERT. REINF. NEAR INSIDE FACE OF WALL & LAYER (E) IS TO BE USED AS REF. FOR SPACING VERT. REINF. FOR OUTSIDE FACE & THE THICKENED PORTION OF THE WALL.
NOTES:-
1. THIS DWG. IS TO BE DRAWN IN CONJUNCTION WITH DWG. SC-421-039.
2. #11 HORIZONTAL BARS IN LAYER (I) SHOWN IN SECTION 2-2 ARE TO BE PLACED TEMPORARILY AGAINST BARS IN LAYER (E) TO PROVIDE ACCESS WHILE PLACING LINER AREAS. THEN BENT AND SECURED INTO PROPER LOCATION AS POURING PROGRESSES.
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
MOVED REINF. ON SECTIONS 1-1 & 2-2 AS INDICATED (4 PLACES)
INDICATED EMB. STL. BY C.B.&I. AND ASBESTOS SHEETS ON SECTS. 1-1, 2-2 & 4-4 (ALSO ADDED DETAIL "A" & SECTS. b-b & c-c (5 PLACES)
CHANGED LOCATION OF #11-A526 BAR IN SECT. 2-2
RELEASED FOR CONSTRUCTION
REVISIONS
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
825,000 KW
REACTOR BUILDING
EXTERIOR WALL - EQUIPMENT ACCESS OPENING
REINFORCEMENT PLACING DETAILS
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-040
3
SC-421-040
E-10-13



CADWELD SCHEDULE

RING	1	2	3	4	5	6	7	8
LAYER (12)	A	B	F	N	O	B	P	A
LAYER (1)	A	B	F	N	O	D	P	D

LETTERS INDICATE CADWELD LOCATIONS-SEE CADWELD DETAILS BELOW.

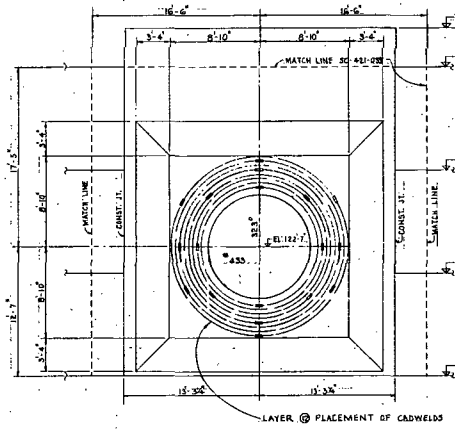


CADWELD - DETAILS

HORIZONTAL RADIUS (A)	= 69'-11⅞"
HORIZONTAL RADIUS (B)	= 69'-5½"
HORIZONTAL RADIUS (C)	= 66'-0"

VERTICAL CIRCULAR (#8) BARS TO ALSO BE BENT ON A HORIZONTAL RADIUS. SEE TABLE ABOVE.

#18 CIRC. BEND TABLE



ELEVATION - PERSONNEL ACCESS OPENING

NOTE:- FOR ENGINEERING APPROVAL OF CUTTING AND BENDING #11 & #18 BARS TO SUIT FIELD CONDITIONS SEE DWG. SC-421-033 AND FOR ADDITIONAL REINF. TO SUIT FIELD CONDITIONS SEE DWG. SC-421-044.

NOTES:-
1. THIS DWG. IS TO BE READ IN CONJUNCTION WITH DWG. SC-421-033.
2. FOR SECTIONS 1-1 & 2-2 SEE DWG. SC-421-036.

REFERENCES:
SC-426-107-2 REINFORCEMENT LIST
SC-426-108-1 REINFORCEMENT LIST
SC-426-109-1 REINFORCEMENT LIST
SC-426-106-2 REINFORCEMENT LIST
SC-426-103-1 REINFORCEMENT LIST
SC-426-102-1 REINFORCEMENT MOUNTING DIAGRAM
SC-426-013-O REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP	DATE
4	REVISED NOTE AS INDICATED (1) PLACE				
3	REMOVED PRECAST CONCRETE NOTE AS INDICATED				
2	#18 BARS IN LAYER (12) REVISED TO SUIT THE FIELD				
1	MOVED CONSTRUCTION JOINTS & REVISED REINF.				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
EXTERIOR WALL - PERSONNEL ACCESS OPENING
REINFORCEMENT PLACING

GILBERT ASSOCIATES, INC.

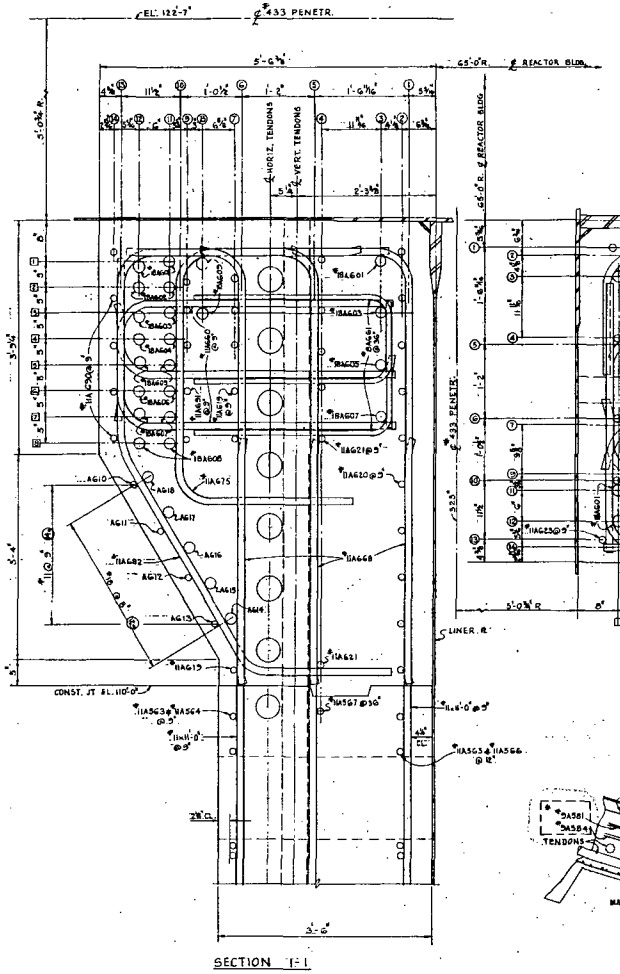
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

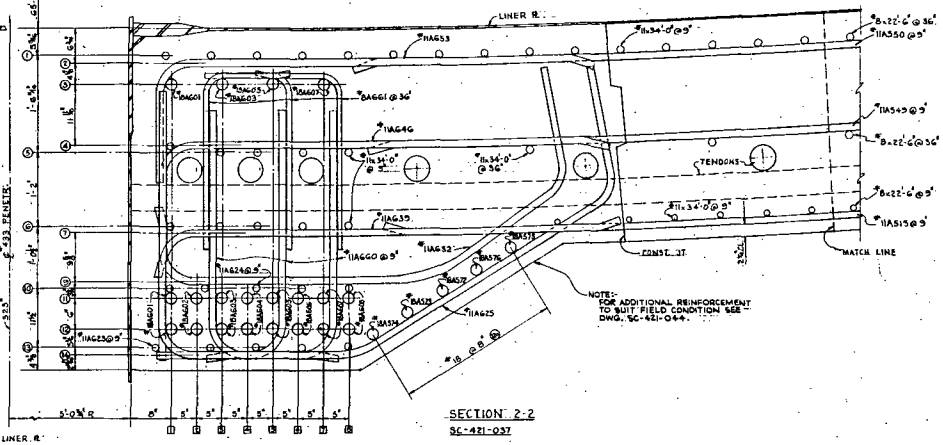
STATUS	
	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY
DATE	RELEASED FOR

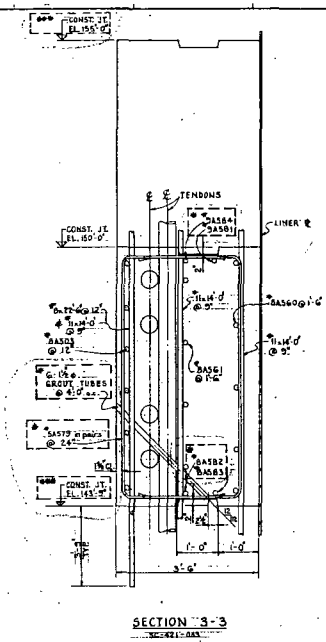
ENGR.	SCALE	WORK ORDER	SIZE	DRAWING SEC.
		4203	E	421

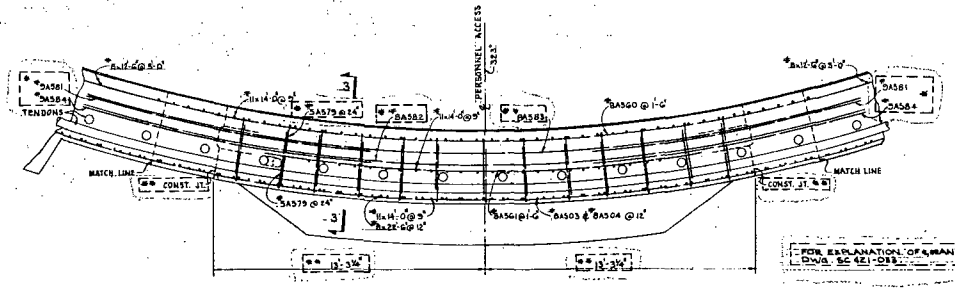
DRAWING NUMBER: SC-421-037
REV. NUMBER: 4
P/C DRAWING NUMBER:

16 E-10-13









FOR EXPLANATION OF S, MAND ### SEE DWG. SC-421-038.

NOTES:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DWG. SC-421-037.

NO.	REVISIONS	BY	CK	APP	DATE
4	ADDED NOTES ##, ##, AND ###				
3	ADDED NOTE TO SECT. 2-2 & SIM. (1) PLACE				
2	PREPACKED CONC. NOTE DELETED FROM SECT 1-1				
1	REVISED SECT. 2-2, ADDED SECTIONS 3-3 & 4-4				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
EXTERIOR WALL - PERSONNEL ACCESS OPENING
REINFORCEMENT PLACING DETAILS & SECTIONS

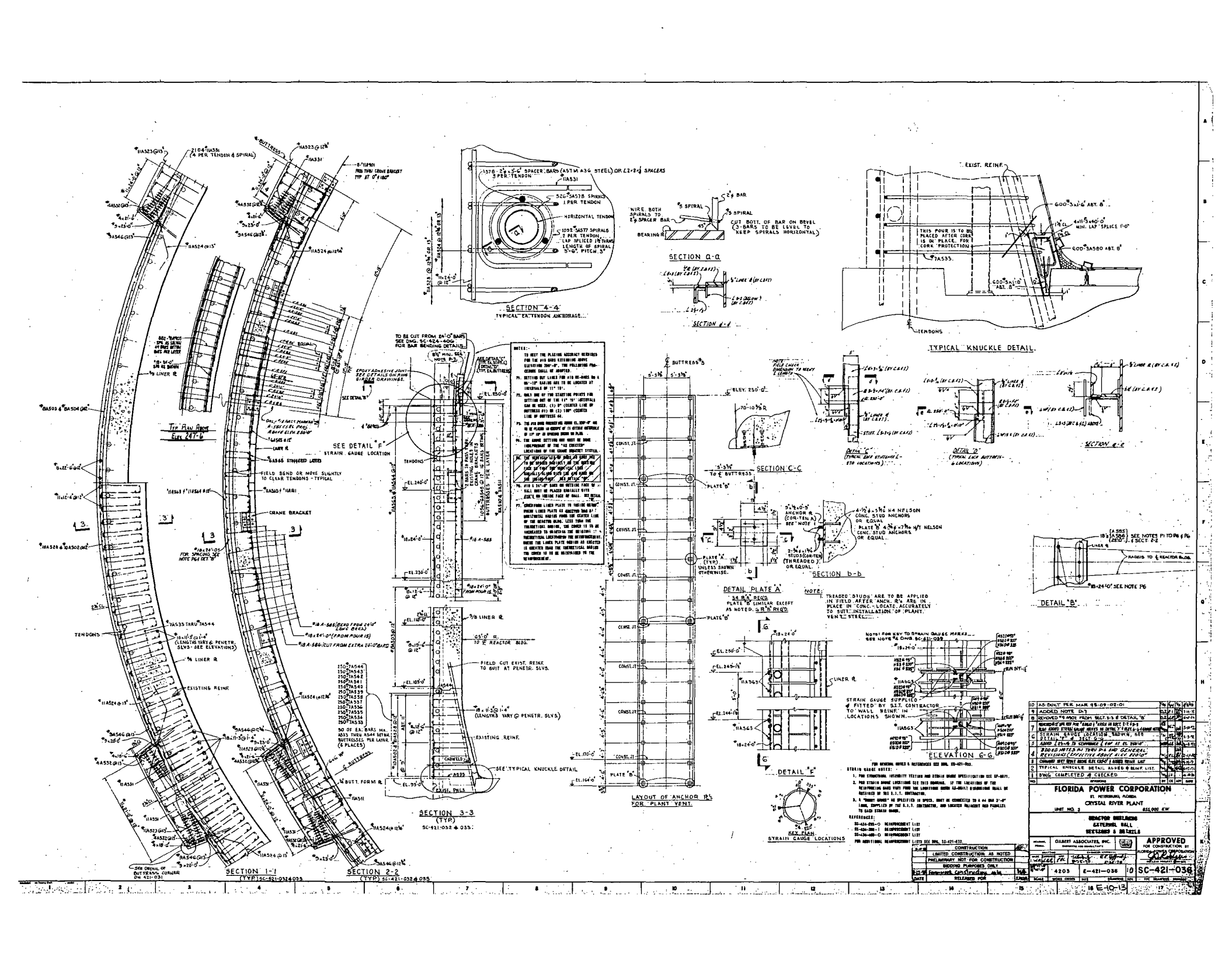
GILBERT ASSOCIATES, INC.

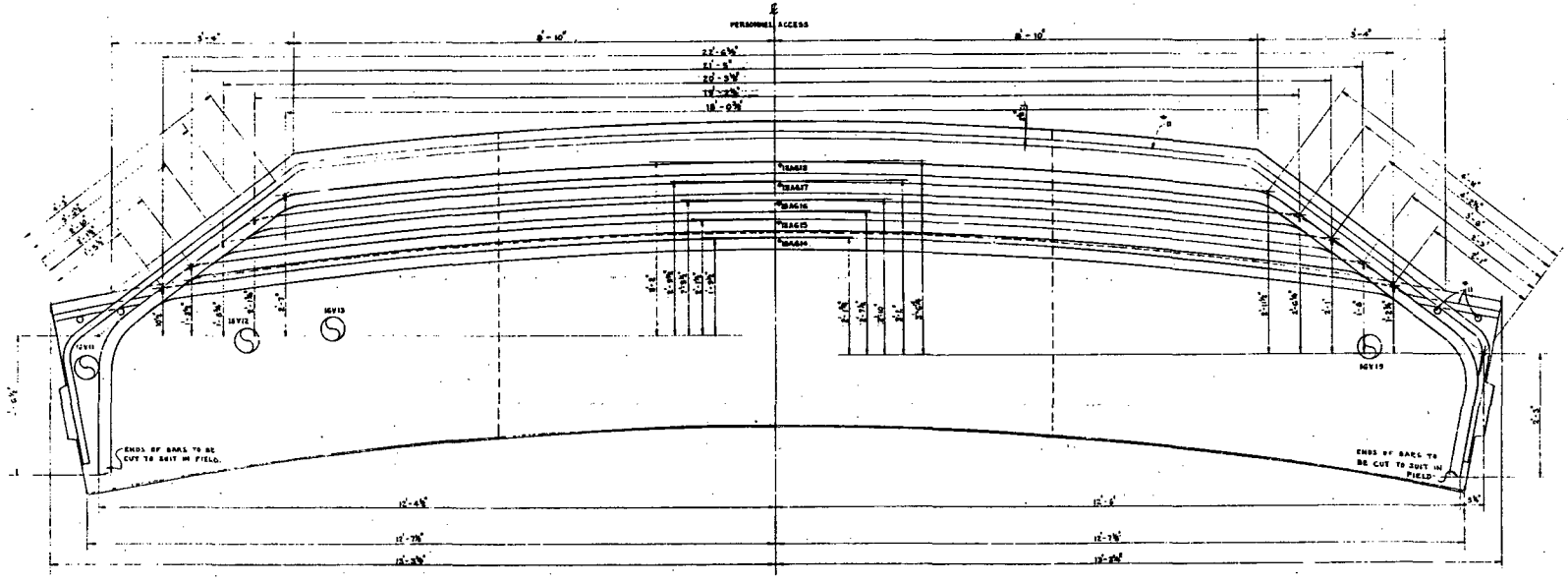
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE RELEASED FOR	ENGR

DRAWN LMG | CHECKED JER | 4203 | E-421-038 | 4 | SC-421-038

18 E-10-13


SECTION 1-1
(TYP) SC-421-032 & 033
SECTION 2-2
(TYP) SC-421-032 & 033
SECTION 3-3
(TYP)
SC-421-032 & 033
SECTION 4-4
TYPICAL TENDON ANCHORAGE
SECTION A-A
SECTION C-C
SECTION b-b
TYPICAL KNUCKLE DETAIL
DETAIL 'A'
DETAIL 'B'
DETAIL 'C'
DETAIL 'D'
SECTION E-E
DETAIL 'E'
DETAIL 'F'
SEE DETAIL 'F'
STRAIN GAUGE LOCATION
LAYOUT OF ANCHOR R's
FOR PLANT VENT.
ELEVATION G-G
STRAIN GAUGE LOCATIONS
TYP R'W ABOVE
ELEV 247'-6"
TENDONS
EXISTING REINF
CRANE BRACKET
FIELD BEND OR MOVE SLIGHTLY
TO CLEAR TENDONS - TYPICAL
FIELD CUT EXIST. REINF.
TO SUIT AT PENETR. SLVS.
EXISTING REINF.
SEE 'TYPICAL KNUCKLE DETAIL'
BUTTRESS
EL. 250'-0"
EL. 240'-0"
EL. 230'-0"
EL. 105'-0"
EL. 95'-0"
EL. 170'-0"
EL. 164'-0"
CONST. JT.
TYPICAL KNUCKLE DETAIL
EXIST. REINF.
TENDONS
THIS POUR IS TO BE PLACED AFTER CORK IS IN PLACE, FOR CORK PROTECTION
SECTION E-E
DETAIL 'C'
DETAIL 'D'
DETAIL 'A'
DETAIL 'B'
DETAIL 'E'
DETAIL 'F'
SECTION A-A
SECTION C-C
SECTION b-b
SECTION 4-4
SECTION 1-1
SECTION 2-2
SECTION 3-3
LAYOUT OF ANCHOR R's
FOR PLANT VENT.
ELEVATION G-G
STRAIN GAUGE LOCATIONS
KEY PLAN
NOTES:
TO MEET THE PLACING ACCURACY REQUIRED FOR THE #18 BARS EXTENDING ABOVE ELEVATION 250'-0", THE FOLLOWING PROCEDURE SHALL BE ADOPTED.
P1. SETTING OUT LINES FOR #18 BE-BARS IN A 90°-0" RADIUS ARE TO BE LOCATED AT INCREMENTS OF 11° 15'.
P2. ONLY ONE OF THE STARTING POINTS FOR SETTING OUT OF THE 11° 15' INCREMENTS CAN BE USED. (1) 9" COUNTER LINE OF BUTTRESS #1) OR (2) 1'-00" COUNTER LINE OF BUTTRESS #4.
P3. THE #18 BARS PROJECTING ABOVE EL. 250'-0" ARE TO BE PLACED IN GROUPS OF 11 EITHER SIDE OF 11° 15' (2 SPACING SHOWN ON PLAN.
P4. THE ABOVE SETTING OUT MUST BE DONE 100% PRECISE OF THE "AS ERECTED" LOCATIONS OF THE CRANE BRACKET SYSTEM.
P5. THE SUPERSTRUCTURE #18's AT EACH 90° TO BE SPACED ACCURATELY AT THE BOTTOM FACE OF THAT TOP HORIZONTAL LOOP. SPACING AT ANY OTHER LEVEL MAY VARY FROM THE BOTTOM SPACING BY AN AMOUNT NOT EXCEEDING 1/2".
P6. #18 & 24'-0" BARS ON OUTSIDE FACE OF R WALL SHALL BE PLACED RADIALLY WITH JOINTS ON INSIDE FACE OF WALL. SEE DETAIL 'B'.
P7. CURVED FORM LINER PLATE TO INSIDE RADIUS. CURVED LINER PLATE AS DIRECTED SHALL BE HORIZONTAL RADIUS FROM THE CENTER LINE OF THE REACTOR BLDG. LESS THAN THE THEORETICAL RADIUS, THE CURVE IS TO BE INCREASED TO CONFORM TO THE ACTUAL THEORETICAL LOCATIONS FROM THE REINFORCEMENT. WHERE THE LINER PLATE RADIUS AS ERECTED IS GREATER THAN THE THEORETICAL RADIUS THE CURVE IS TO BE DETERMINED TO THE REINFORCEMENT.
NOTE:
THREADED STUDS ARE TO BE APPLIED IN FIELD AFTER ANCH. R's ARE IN PLACE IN CONC. - LOCATE ACCURATELY TO SUIT INSTALLATION OF PLANT VENT STEEL.
NOTE: FOR KEY TO STRAIN GAUGE MARKS SEE NOTE #4 DWG. SC-421-032
STRAIN GAUGE SUPPLIED & FITTED BY S.I.T. CONTRACTOR TO WALL REINF. IN LOCATIONS SHOWN.
STRAIN GAUGE NOTES:
1. FOR STRUCTURAL INTEGRITY TESTING AND STRAIN GAUGE SPECIFICATION SEE SP-8871.
2. FOR STRAIN GAUGE LOCATIONS SEE THIS DRAWING. IF THE LOCATIONS OF THE REINFORCING BARS VARY FROM THE LOCATIONS SHOWN AS-BUILT DRAWINGS SHALL BE MARKED BY THE S.I.T. CONTRACTOR.
3. A "ROSETTE GAUGE" AS SPECIFIED IN SPEC. SHALL BE CONNECTED TO A #4 BAR 3'-0" LONG, SUPPLIED BY THE S.I.T. CONTRACTOR, AND LOCATED TOUCHING AND PARALLEL TO EACH STRAIN GAUGE.
REFERENCES:
SC-424-003-0 REINFORCEMENT LIST
SC-424-300-1 REINFORCEMENT LIST
SC-424-400-0 REINFORCEMENT LIST
FOR ADDITIONAL REINFORCEMENT LISTS SEE DWG. SC-421-032.
FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-032.
10 AS-BUILT PER MAR. 98-09-02-01
9 ADDED NOTE D1
8 REVISED TO MAKE FROM SECT. B-B & DETAIL 'B'
7 ADD #18 BARS AT EL. 250'-0" & SECT. E-E
6 STRAIN GAUGE LOCATION SHOWN, SEE DETAIL 'A' & SECT. E-E
5 ADDED SECT. E-E
4 REVISIONS (EFFECTIVE ABOVE ELEV 250'0")
3 CHANGED NOT TO SCALE
2 TYPICAL KNUCKLE DETAIL ADDED
1 DWG. COMPLETED & CHECKED
NO. REVISIONS
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
REACTOR BUILDING
EXTERNAL WALL
SECTIONS & DETAILS
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION
CONSTRUCTION
LIMITED CONSTRUCTION: AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
4203
E-421-036
10
SC-421-036



NOTES:

1. FOR NOTES & REFERENCES SEE DWG. SC-421-032.
2. THIS DWG. IS TO BE REVISED IN CONJUNCTION WITH DWGS. SC-421-033, 037, 038.
3. THIS DRAWING APPLIES FOR BARS ADDED AS LAYER 2 TO BE REMOVED SC-421-032 WHERE AND BELOW THE ACCESS OPENING STRUCTURAL ABOVE THE HORIZONTAL CENTER LINE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

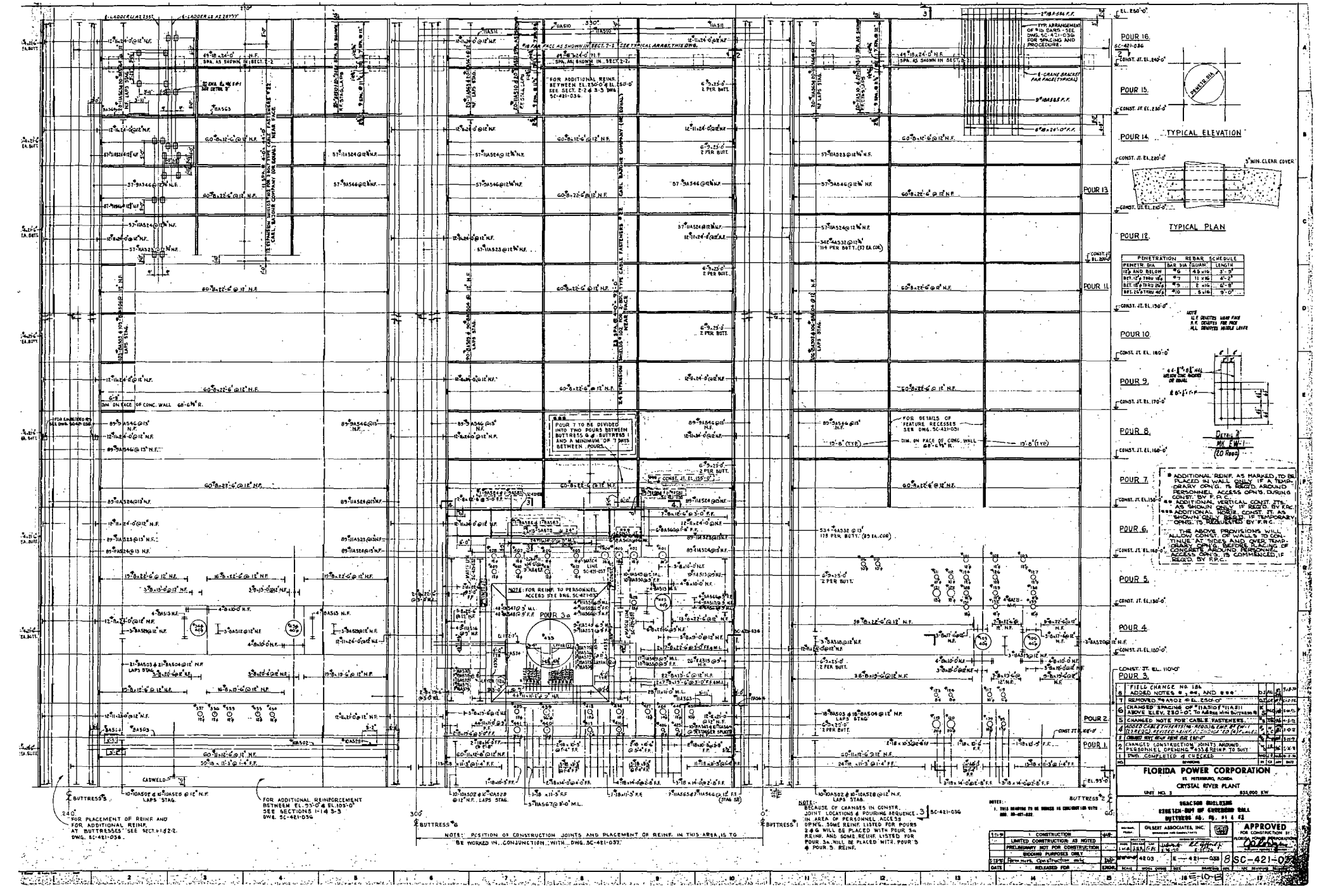
REACTOR BUILDING
EXTERIOR WALL - PERSONNEL ACCESS OPENING
REINFORCEMENT BENDING TO SUIT FIELD CONDITIONS

GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

4803	E-421-036	0	SC-421-035

CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
DRAWING PURPOSES ONLY
RELEASED FOR



NO.	REVISIONS	BY	CK	APP	DATE
1	"FIELD CHANGE NO. 184 ADDED NOTES *, **, AND ***	DJ	AC		7-8-71
7	REMOVED **& ***2 @ EL. 250'-0"	DJ	AC		7-8-71
6	CHANGED SPACING OF #11A510 & #11A511 ABOVE ELEV. 230'-0", TO AS REQ. MIN. BUTTRESS 6	K	SC		6-16-71
5	CHANGED NOTE FOR CABLE FASTENERS.	K	SC		5-13-71
4	ADDED CABLE THRUSTS & ADDED & DEL. BY CHG. #2 TO SEC. I REVISED MARK NUMBERS DUE TO ADDITIONS	K	SC		4-19-71
3	CHANGED KEY MAP FROM EL. 150'-0"	K	SC		3-10-71
2	CHANGED CONSTRUCTION JOINTS AROUND PERSONNEL OPENING #33 & REINF. TO SUIT	K	SC		2-10-71
1	DWG. COMPLETED & CHECKED	K	SC		1-29-71

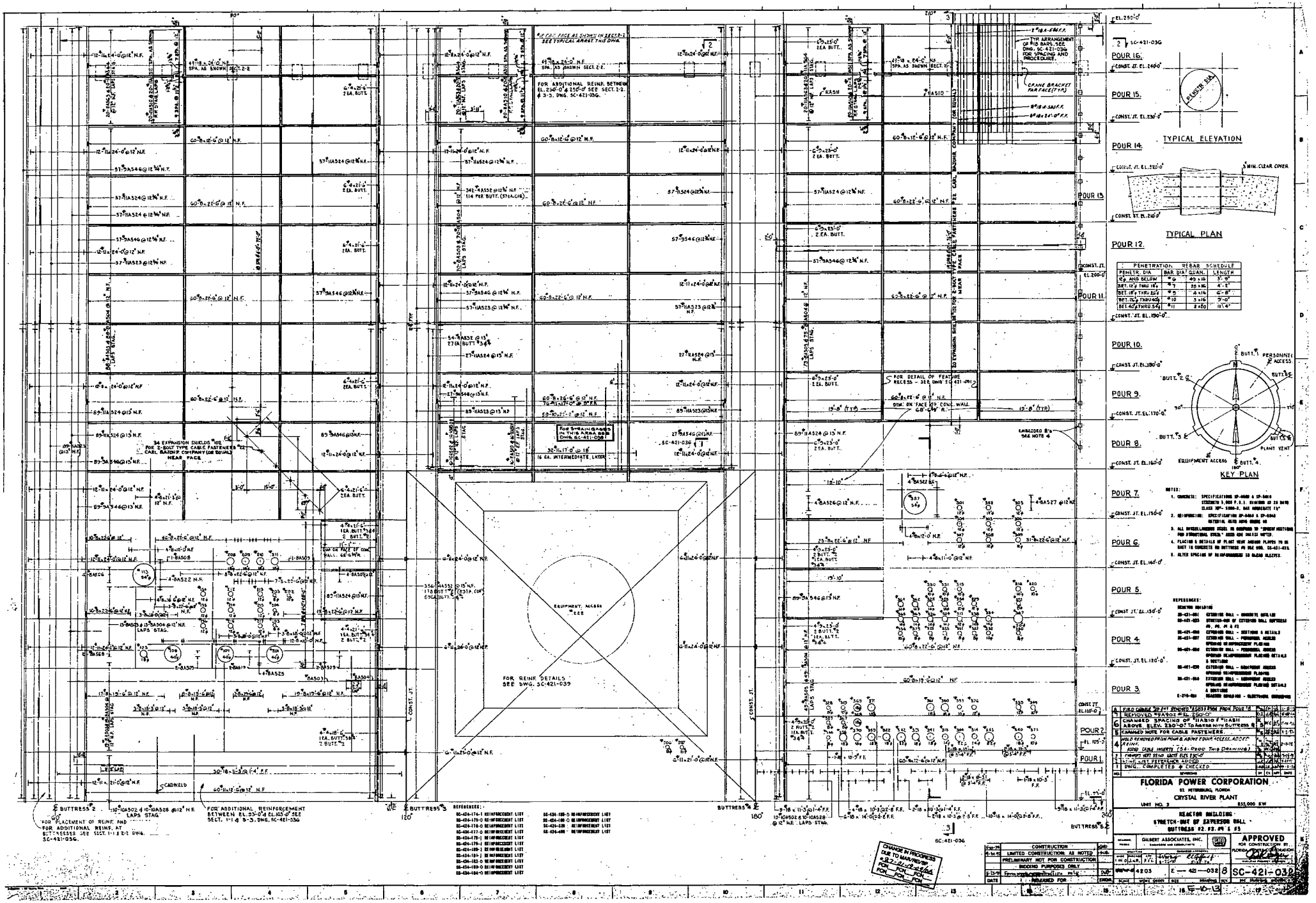
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
CONCRETE - 80% OF CONTAINMENT SHELL
BUTTRESS NOS. 1, 2, 3, 4 & 5

GILBERT ASSOCIATES, INC. — APPROVED FOR CONSTRUCTION BY: FLORIDA POWER CORPORATION

STATUS		BY	DATE
1	CONSTRUCTION		
	LIMITED CONSTRUCTION AS NOTED		
	PRELIMINARY NOT FOR CONSTRUCTION; BIDDING PURPOSES ONLY		
5-13-71	Form Work, Construction only	DJ	
DATE	RELEASED FOR	ENGR.	

SCALE: 1/8" = 1'-0" | WORK UNDER JOB NO. 4203 | DRAWING NO. E-421-033 | SC DRAWING NO. 8 SC-421-033



PENETRATION	REBAR SCHEDULE		
PENETR. DIA	BAR DIA	QUAN.	LENGTH
6" & AND BELOW	#9	4 #16	3'-6"
BET. 12" & THRU 18"	#7	2 #16	4'-5"
BET. 18" & THRU 24"	#8	4 #16	6'-8"
BET. 24" & THRU 40"	#10	3 #16	9'-0"
BET. 40" & THRU 54"	#11	2 #20	11'-4"

NOTES:
1. CONCRETE: SPECIFICATIONS SP-6000 & SP-5000
STRENGTH 5,000 P.S.I. RUNNING AT 28 DAYS
CLASS "SP"- 5000-3, AIR ENTRAINED 1½"
2. REINFORCING: SPECIFICATION SP-5060 & SP-5060
MATERIAL GRADE 60000 GRADE 60
3. ALL DIMENSIONS SHOWN ARE TO BE CHECKED TO "SHOP DRAWINGS FOR STRUCTURAL STEEL" NEED NOT BE LISTED.
4. PLACING & DETAILS OF PLANT VENT ANCHOR PLATES TO BE SAME AS CONCRETE IN BUTTRESS #4 SEE DWG. SC-421-036.
5. ALTER SPACING OF REINFORCEMENT IN BLOCK OUTS.

REFERENCES:
SC-424-176-1 REINFORCEMENT LIST
SC-424-175-0 REINFORCEMENT LIST
SC-424-178-0 REINFORCEMENT LIST
SC-424-177-0 REINFORCEMENT LIST
SC-424-173-1 REINFORCEMENT LIST
SC-424-179-1 REINFORCEMENT LIST
SC-424-180-1 REINFORCEMENT LIST
SC-424-181-1 REINFORCEMENT LIST
SC-424-182-0 REINFORCEMENT LIST
SC-424-183-0 REINFORCEMENT LIST
SC-424-184-0 REINFORCEMENT LIST
SC-424-185-0 REINFORCEMENT LIST
SC-424-186-0 REINFORCEMENT LIST
SC-424-187-0 REINFORCEMENT LIST
SC-424-188-0 REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP'D	DATE
6	ADD CURVE "SE 241" (RADIUS "45683") FROM POUR 14 TO POUR 16				
5	REMOVED "#9A901" EL. 250'-0"				
6	CHANGED SPACING OF "11A810 & "11A811 ABOVE ELEV. 230'-0" TO MATCH NEW BUTTRESS #3				
5	CHANGED NOTE FOR CABLE FASTENERS.				
4	WALL REMOVED FROM POUR 8 ABOVE POUR 10 ACCESS. ADDED EDGE CABLE INSERTS (SEE DWG. THIS DRAWING)				
3	PARAPET WALL REMOVED ABOVE ELEV 230'-0"				
2	SIGNAGE NOT REQUIRED ADDED				
1	DWG. COMPLETED & CHECKED				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
STRETCH-OUT OF EXTERIOR WALL
BUTTRESS #2, #3, #4 & #5

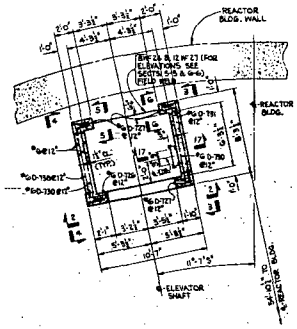
GILBERT ASSOCIATES, INC. — ENGINEERS and CONSULTANTS

10-24-75	CONSTRUCTION	GMD
10-14-75	LIMITED CONSTRUCTION AS NOTED	SHB
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
5-15-75	RELEASED FOR :	DWG
DATE		ENGR

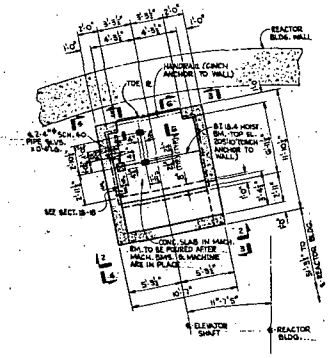
APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DRAWING NO. 4203 — E — 421 — 032 — 8 — SC-421-032

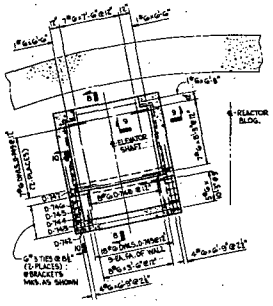
BUTTRESS No 1
BUTTRESS No 2
BUTTRESS No 3
BUTTRESS No 4
BUTTRESS No 5
BUTTRESS No 6
N
REACTOR BUILDING
90°
270°
180°
120°
60°
37°
38°
21° 45'
60°
65'-0" R
70'-0¾" R
72'-0¾" R
℄ PERSONNEL ACCESS 323° PENETR. #333 EL. 122'-7"
℄ EQUIPMENT ACCESS 150° PENETR. #222 EL. 132'-0"
8'-10"
5'-4"
5'-10"
20'-0"
68'-6¾" R
EMBEDDED PL'S FOR PLANT VENT SEE DWG. SC-421-036
HORIZONTAL AND VERTICAL RECESS FOR FEATURE STRIP IN CONC. TO EXPOSED VISUAL SURFACE ONLY.
⅜" CAULKING SEE RO-3051
¼" R
SECTIONAL PLAN
℄ ANCHORAGE
SEE DETAIL OF BUTTRESS CORNER THIS DWG.
¾" BUTTRESS FORM PL SEE DWG. S-521-025
℄ ANCHORAGE
℄ BUTTRESS
ENLARGED SECTIONAL PLAN OF BUTTRESS (TYP)
∠1¾" x 1¾" (APPROX.)
℄ ASSUMED LOCATION
℄ TENDON ANCHORAGE
DETAIL - BUTTRESS CORNER (TYPICAL)
℄ PERSONNEL ACCESS EL. 122'-7"
65'-0" R. TO ℄ REACTOR BLDG.
SECTION C-C
℄ EQUIPMENT ACCESS EL. 132'-0"
65'-0" R. TO ℄ REACTOR BLDG.
SECTION B-B
TOP OF CONC. EL. 93'-0"
ELEV. 285'-4½"
TANGENT POINT - END DOME RADIUS, BEGIN STRAIGHT PORTION AT RING GIRDER
FOR RING GIRDER CONCRETE OUTLINE SEE DWG. SC 421-041
H.P. ELEV 247'-6"
TANG. PT.
80'-8" R
110'-0" R
EL. 250'-0"
44'-0"
45'-0"
⅜" STEEL LINER PL
15 SPA. @ 10'-0" = 150'-0"
157'-0" HT.
2" x 12" KEY (TYP)
45'-0" R TO ℄ REACTOR BLDG.
20'-0" R
1'-0" (TYP)
DETAIL "D"
EL. 95'-0"
TOP OF LINER PL EL. 95'-0"
SECTION A-A
⅜" STEEL LINER PL
EL. 95'-0"
CAULK
¾" STEEL KNUCKLE PL
10" R
½" STEEL LINER PL
EL. 93'-0"
ST 4 WF
APPLY EPOXY COATING FOR GOOD BOND TO EXIST. CONC.
63'-4⅜" R. TO ℄ REACTOR BLDG.
ELEV. 177'-4½"
SYM. ABT. ℄ REACTOR BUILDING
SELF-EXPANDING CORK MATERIAL EXPANSION JOINT FILLER CODE 4324 (W.R. GRACE Co. OR EQUAL) ATTACH TO LINER PL'S AS RECOMMENDED BY MFG.
DETAIL "D"
NOTES:
1. FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-027.
4 AS-BUILT PER MAR 95-09-02-01 & FCN 1
3 REMOVED HOLD FROM RING GIRDER & ADDED CONST. JTS.
2 DELETED ENLARGED DETAIL AND REPLACED WITH DETAIL "D"
1 REMOVED HOLD ON SECTION A-A UP TO EL. 240'-0"
NO. REVISIONS BY CK APP DATE
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW
REACTOR BUILDING
EXTERIOR WALL-CONCRETE OUTLINE
GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS
APPROVED FOR CONSTRUCTION BY: FLORIDA POWER CORPORATION
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
DATE RELEASED FOR
4208
E-421-031 4
SC-421-031
E-10-13



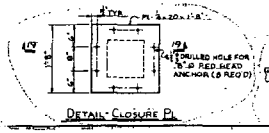
SECTIONAL PLAN 1-1



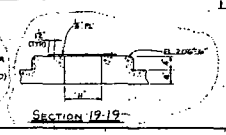
PLAN
MACHINE ROOM FLOOR ELEV. 196'-10"



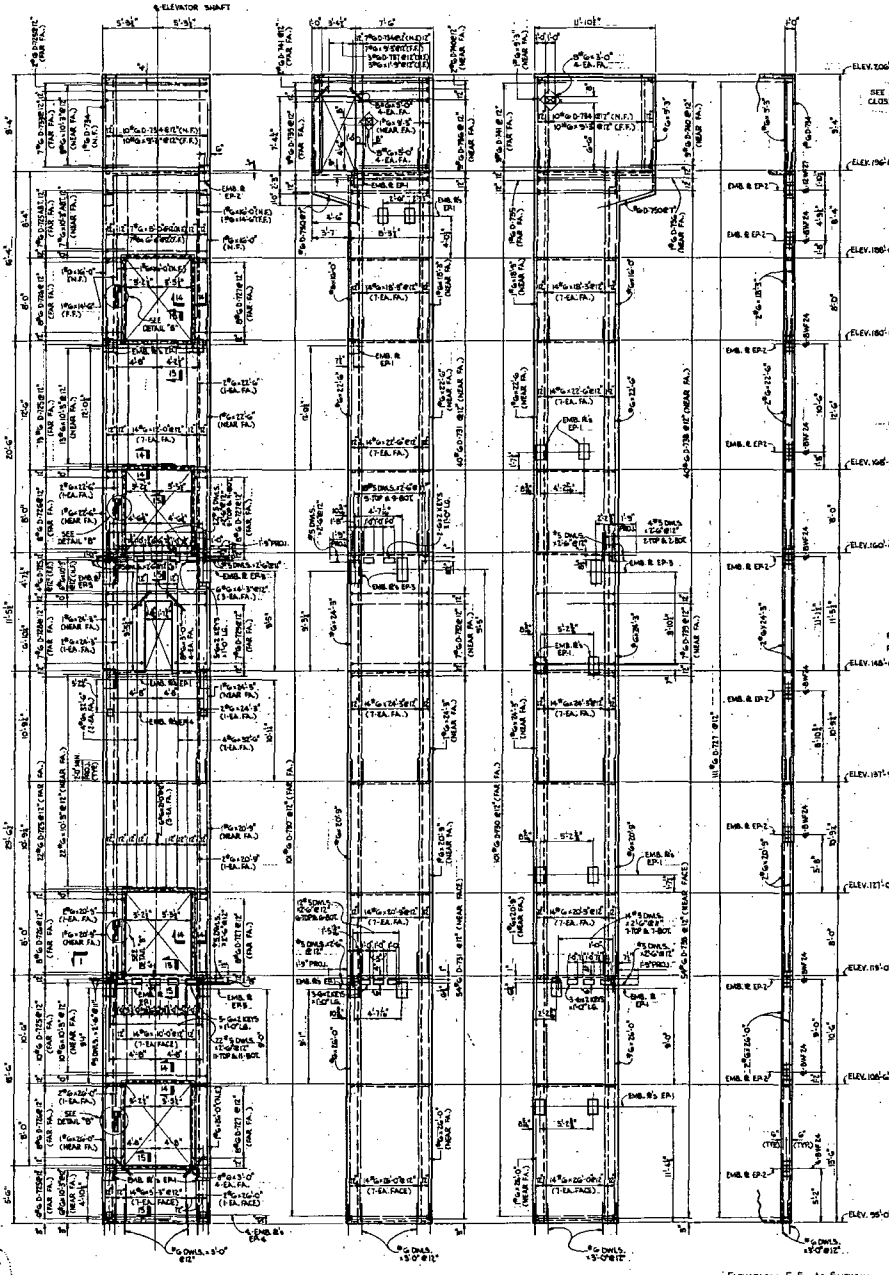
PLAN - MACHINE ROOM FLOOR
REINFORCEMENT PLACING



DETAIL - CLOSURE PL



SECTION 19-19

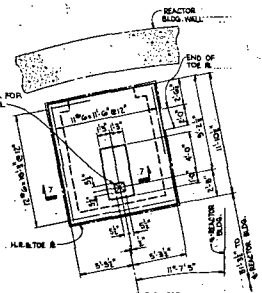


ELEVATION 2-2

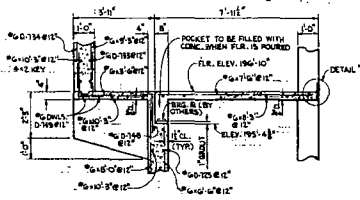
ELEVATION 3-3

ELEVATION 4-4

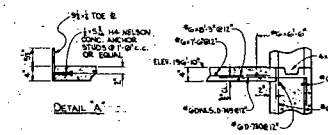
ELEVATION 5-5 - AS SHOWN
ELEVATION 6-6 - OPP. HAND



PLAN
ROOF ELEV. 206'-2"

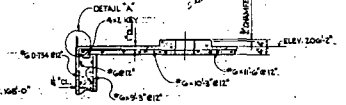


SECTION 8-8

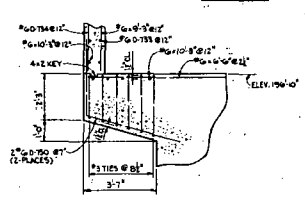


DETAIL "A"

SECTION 9-9



SECTION 7-7



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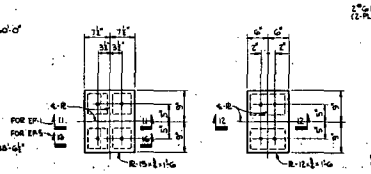
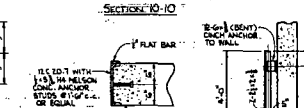


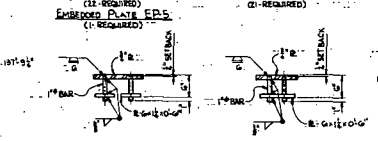
EMBEDDED PLATE EP-1
(12-REQUIRED)

EMBEDDED PLATE EP-2
(2-REQUIRED)

EMBEDDED PLATE EP-5
(1-REQUIRED)

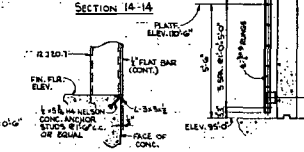


SECTION 14-14



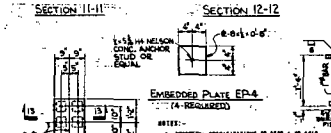
SECTION 11-11

SECTION 12-12



SECTION 15-15

SECTION 17-17

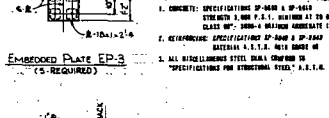


EMBEDDED PLATE EP-4
(4-REQUIRED)

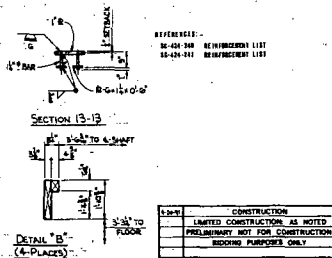
SECTION 16-16

SECTION 18-18

NOTES:-
1. CONCRETE: SPECIFICATIONS SP-5608 & SP-5609
STRENGTH 3,000 P.S.I. MINIMUM AT 28 DAYS
CLASS OF CONC. 3000-A MINIMUM AGGREGATE 1½"
2. REINFORCING: SPECIFICATIONS SP-5060 & SP-5062
MATERIAL A.S.T.M. A615 GRADE 60
3. ALL MISCELLANEOUS STEEL SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL STEEL" A.I.S.C. AND.



EMBEDDED PLATE EP-3
(5-REQUIRED)



SECTION 13-13

DETAIL "B"
(4-PLACES)

REFERENCED:-
SC-424-348 REINFORCEMENT LIST
SC-424-341 REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP.	DATE
3	ADDED CLOSURE PL AT OPENING AS SHOWN PER FPC LETTER DATED 7-22-74 & GAI MEMO DATED 7-22-74	R	E	WJ	7-31-74
2	CORRECTED JET ELEV. EP-3	J.G.	WJ	WJ	3-1-74
1	REVISED JET ELEV'S & EMBMENT & SIZES SHT 11-16	MCMO	TMF	TMF	11-1-73

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

REACTOR BUILDING
ELEVATOR SHAFT, MACHINE ROOM FLOOR & ROOF PLANS, ELEVATIONS & DETAILS

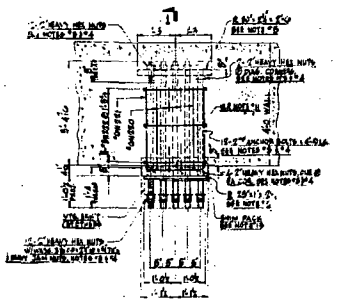
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

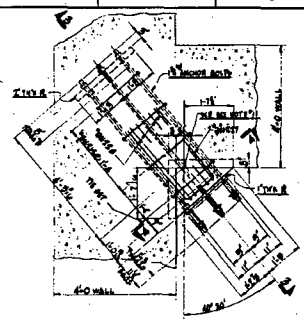
DATE		ENGR.
5-24-74	CONSTRUCTION	AM
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
	RELEASED FOR	

SCALE	WORK ORDER	SIZE	DRAWING SEQ.	SC-421—030
1/8"=1'-0"	4203	E	421—030	3

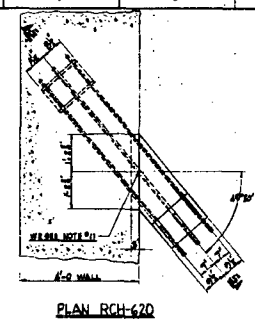
SC-421—030



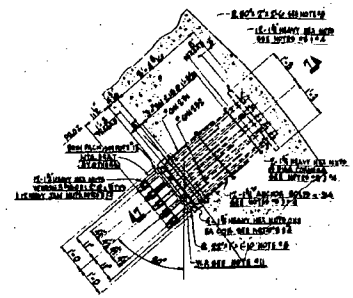
PLAN RCH5-1D



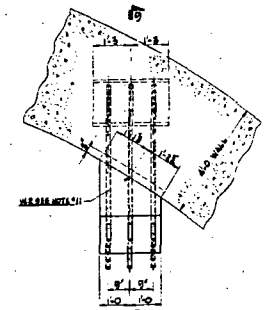
PLAN RCH5-7D



PLAN RCH-620



PLAN RCH5-4D



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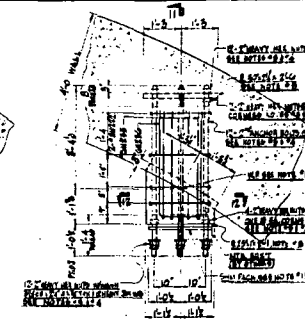

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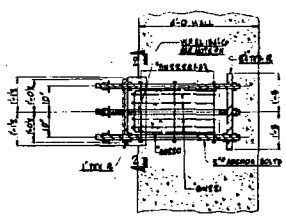
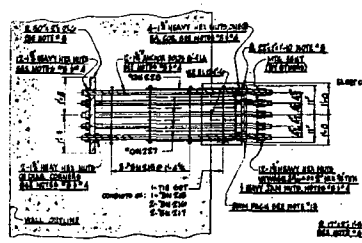
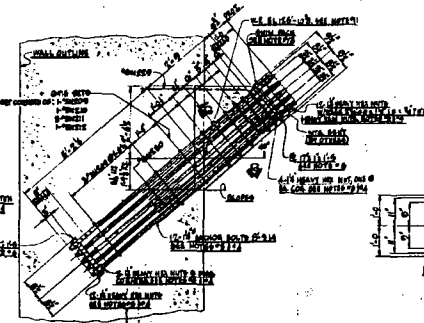


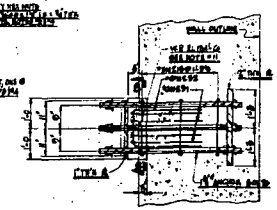
SECTION 1-1



SECTION 3-3



SECTION 5-5



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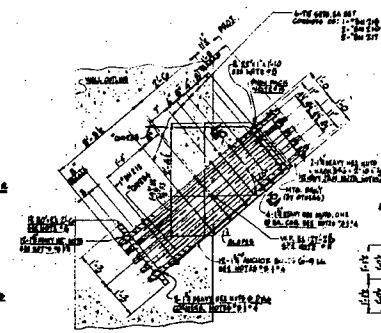
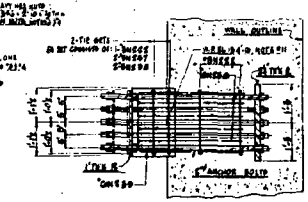


SECTION 9-9



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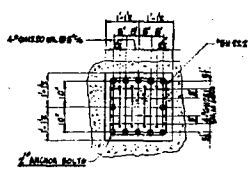

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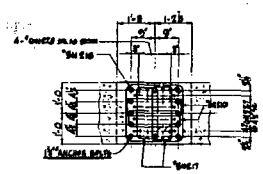

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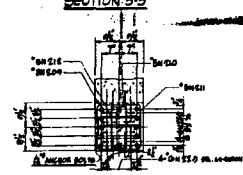

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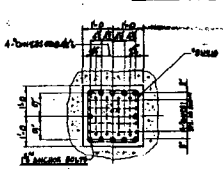
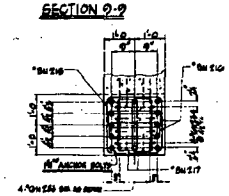


SECTION 8-8



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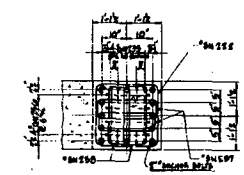

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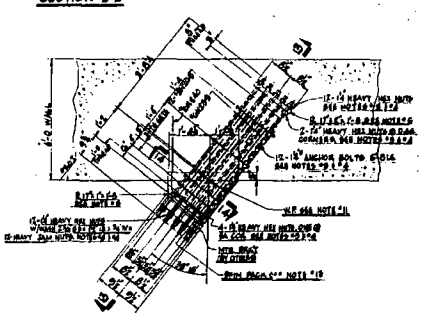
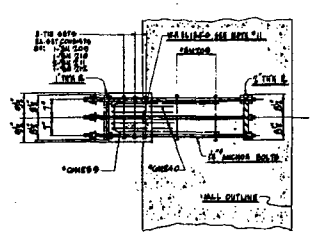


PLAN RCH5-8D



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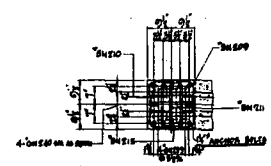


SECTION 14-14

NO.	REVISIONS	BY	DATE
2	As Built Per L&R 84-11-02-01		
1	RELEASED FOR CONSTRUCTION		

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING INTERIOR WALLS
ANCHOR BLOCKS FOR REACTOR COOLING PUMP "D"
HYDRAULIC SUPPRESSORS

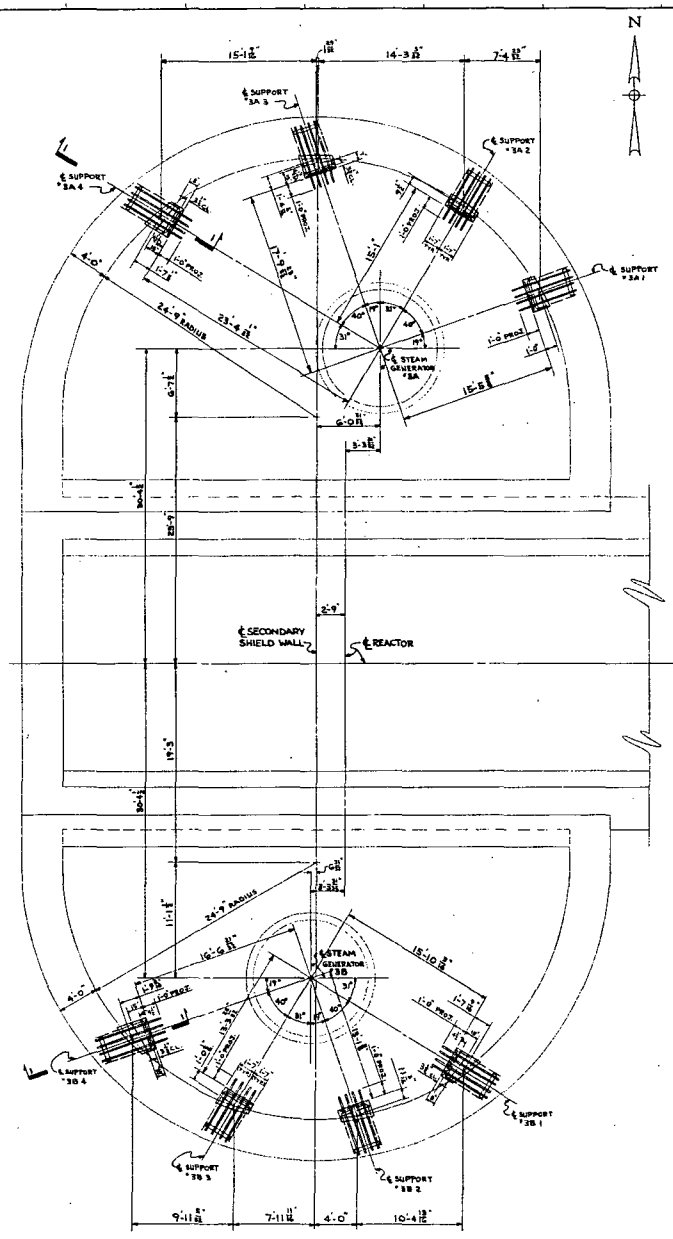
GILBERT ASSOCIATES INC.

APPROVED

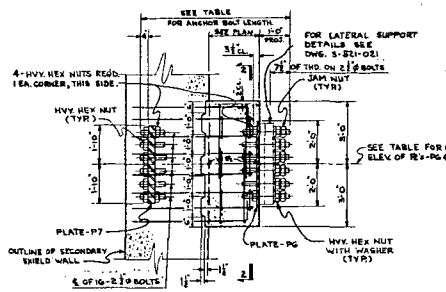
DATE	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	DRAWING PURPOSES ONLY
	RELEASED FOR

DRAWN	DESIGN	TRACED	CHECKED	APPROVED
BR				

SCALE	JOB NO.	DRAWING NO.	SHEET NO.
1/4"=1'-0"	4203	E-421-028	SC-421-028



PLAN



SECTION 1-1
(TYP.)
WORK THIS SECTION WITH TABLE BELOW

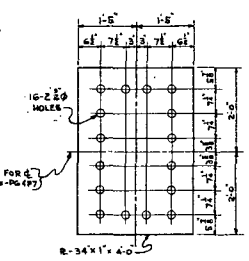


PLATE-PG
(8 REQ'D.)

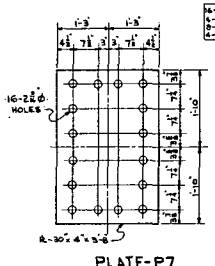
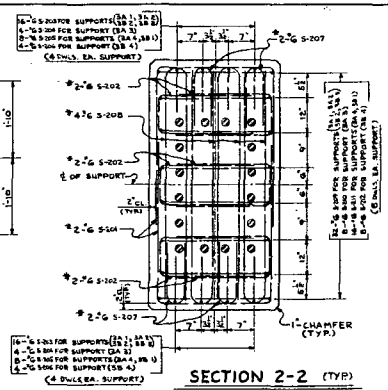


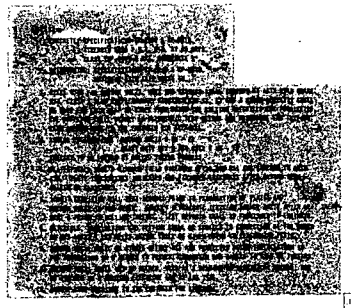
PLATE-P7
(8 REQ'D.)



SECTION 2-2 (TYP.)

QUANTITIES INDICATED THUS *, ARE FOR ONE LAYER OF REINFORCING. FOR NUMBER OF LAYERS AT EACH SUPPORT SEE PLAN.

℄ ELEV. OF SUPPORT 12"x-PG, P7 ℄ ANCHOR BOLT LENGTHS		
SUPPORT No.	℄ ELEVATION AT WALL	BOLT LENGTH
3A 1	158'-9 5/8"	5'-2"
3A 2	158'-10 5/16"	5'-2"
3A 3	158'-8 1/4"	5'-2"
3A 4	157'-6 1/4"	5'-10"
3B 1	158'-8 1/16"	5'-10"
3B 2	159'-1 1/16"	5'-2"
3B 3	159'-1 3/16"	5'-2"
3B 4	158'-7 1/16"	6'-0"



REFERENCE:-
S-521-101 STEAM GENERATOR LATERAL SUPPORTS
S-424-351-0 REINFORCEMENT LIST

NO.	REVISIONS	BY	CK	APP	DATE
1	CHANGED REINF. LIST NUMBER AS INDICATED, CHANGED SIZE OF SEAT FROM 24"TO 31"	K.S.	J.G.		5-1-73

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING INTERIOR WALLS
STEAM GENERATOR LATERAL SUPPORT
ANCHOR BLOCKS

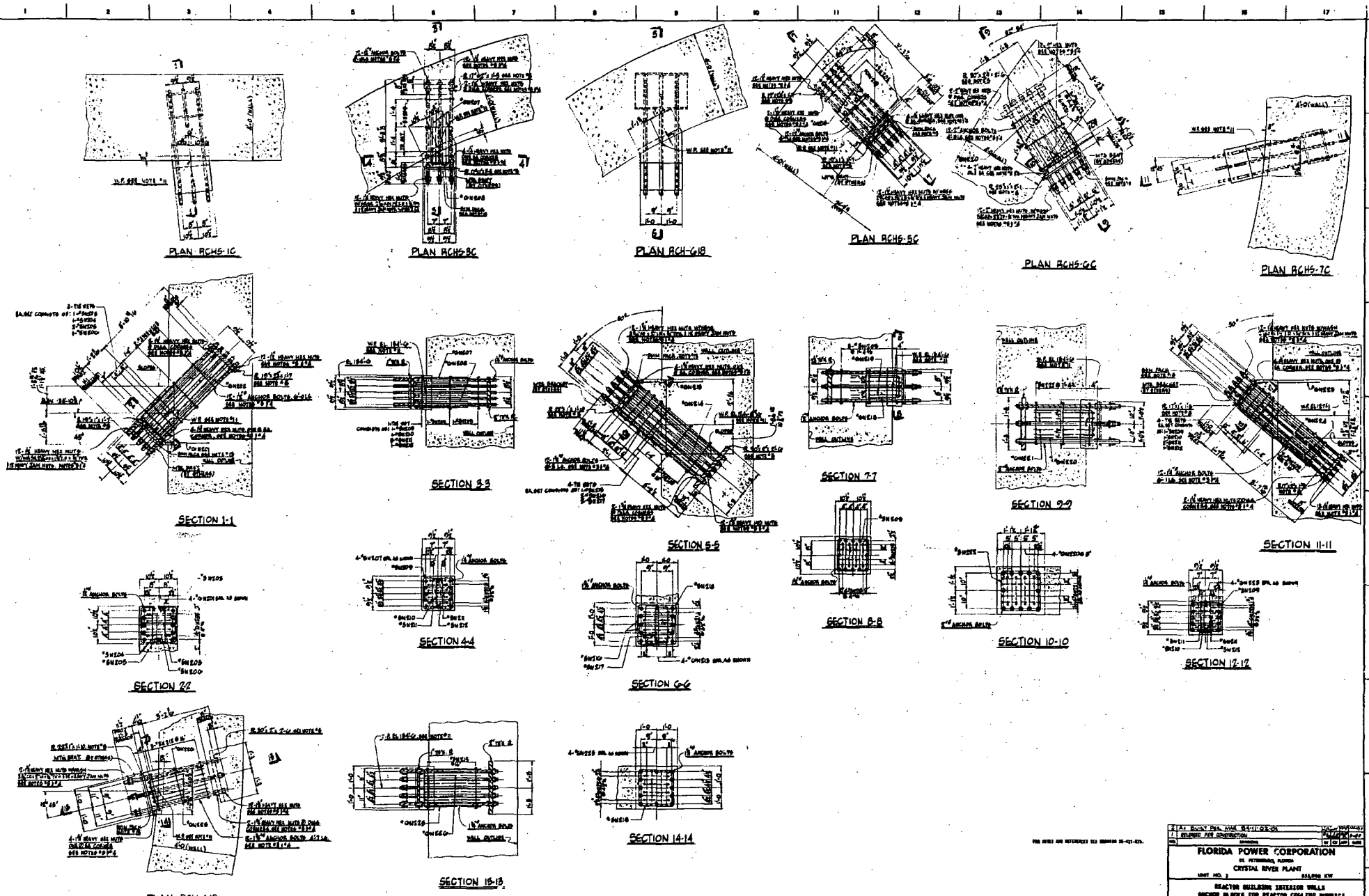
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

DATE	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY
9-27-71	REVIEW AND COMMENT
DATE	RELEASED FOR

DRAWN K.S. 1/18/73 | CHECKED | ENGINEER | ENGR. | SCALE | WORK ORDER 4203 | DATE | DRAWING NO. E-421-029 | APP. | PIC DRAWING NUMBER 1 | SC-421-029

16 E-40-13



FOR NOTES AND REFERENCES SEE DRAWING SC-421-023.

NO.	REVISIONS	BY	CK	APP	DATE
2	A: BUILT PER MAR 84-11-02-01				
1	RELEASED FOR CONSTRUCTION				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

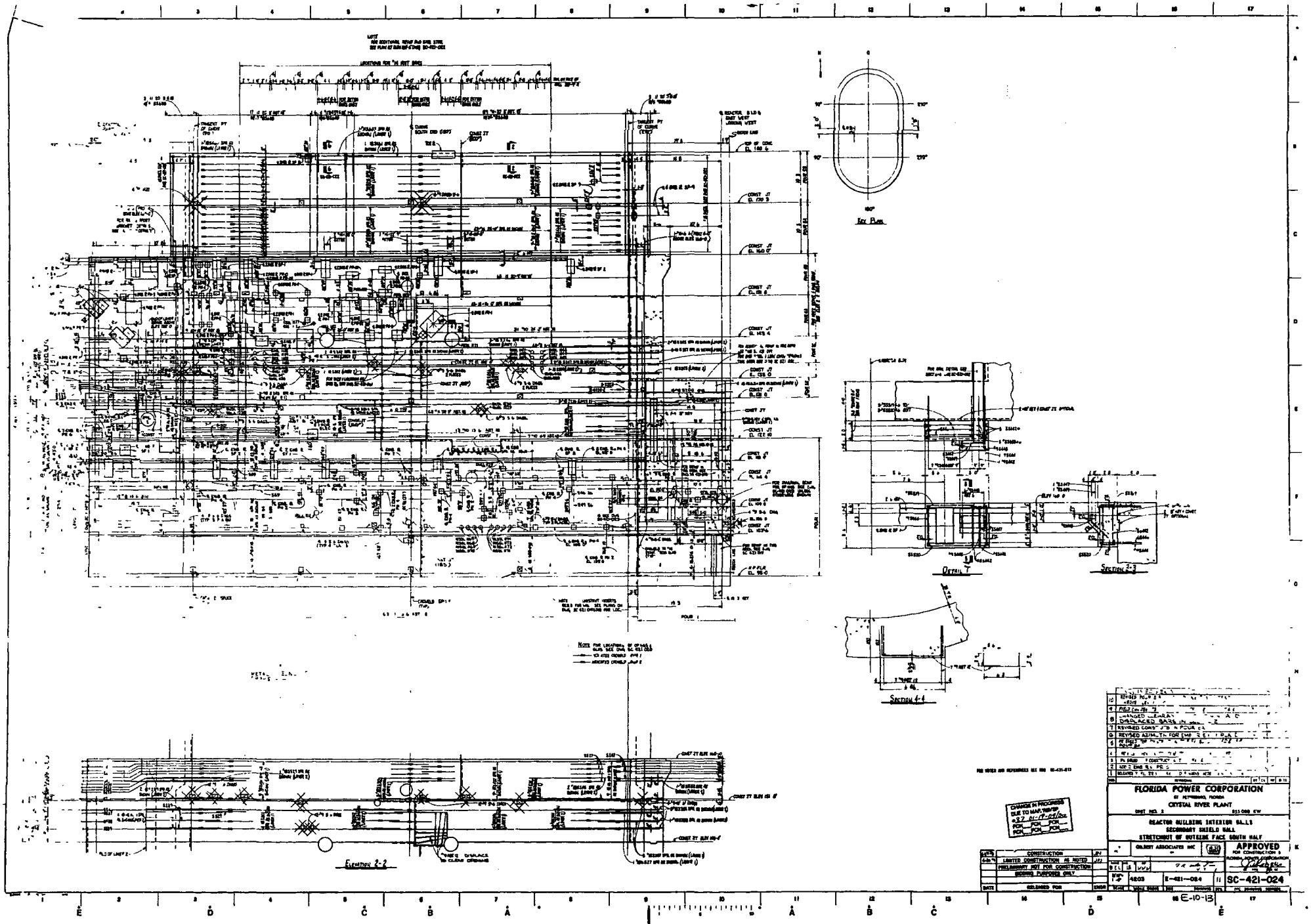
REACTOR BUILDING INTERIOR WALLS
ANCHOR BLOCKS FOR REACTOR COOLING PUMP "C"
HYDRAULIC SUPPRESSORS

GILBERT ASSOCIATES, INC.

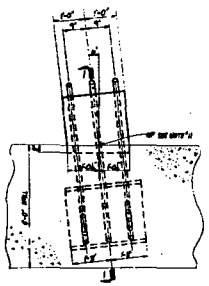
APPROVED FOR CONSTRUCTION BY

DATE	RELEASED FOR	ENGR.
2-15-81	CONSTRUCTION	
2-24-81	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	INDEXING PURPOSES ONLY	

SCALE: 4203 — WORK ORDER: E-421-027 — 2 — SC-421-027



Key Plan
Detail T
Section 3-3
Section 4-4
Elevation 2-2
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
STRETCHOUT OF OUTSIDE FACE SOUTH HALF
GILBERT ASSOCIATES INC
APPROVED
FOR CONSTRUCTION
CHANGE IN PROGRESS
DUE TO MAR. 1969
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
4203
E-421-024
SC-421-024
E-10-13



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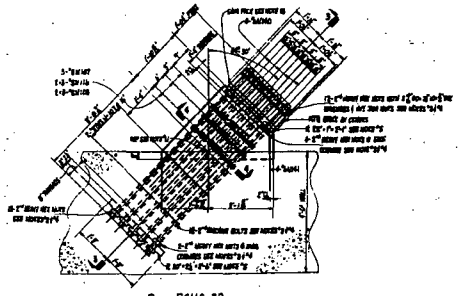

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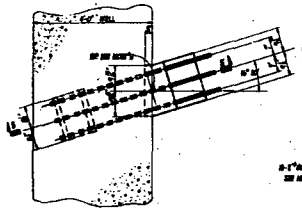
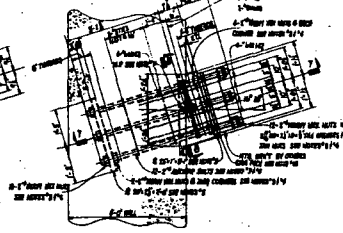


PLAN RCHS-4B



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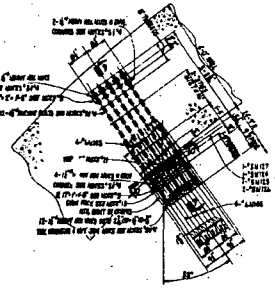

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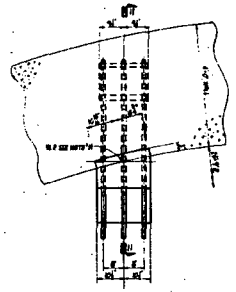
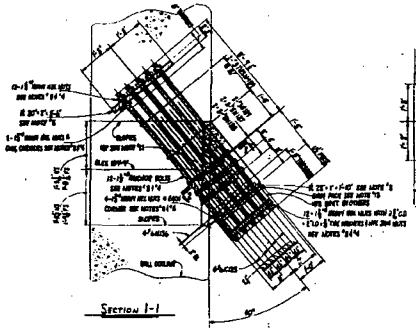
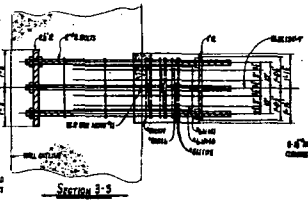


PLAN RCH-624



SECTION 1-1



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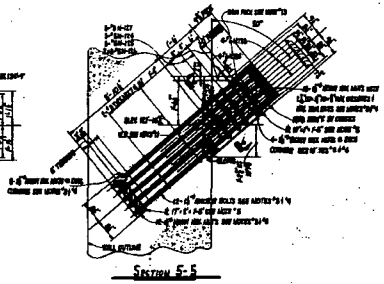

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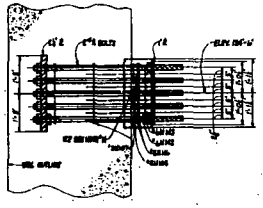

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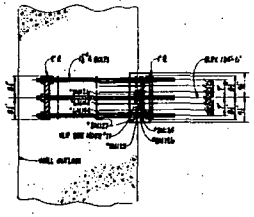

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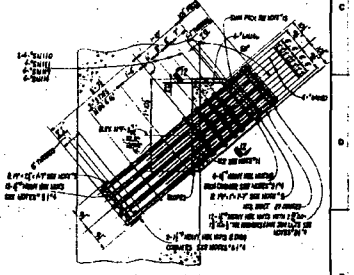

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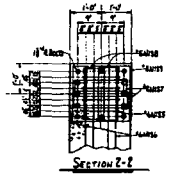
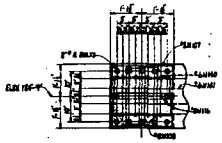


SECTION 2-2



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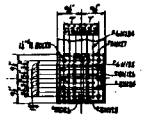

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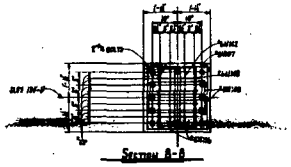

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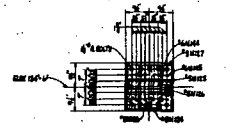

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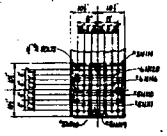

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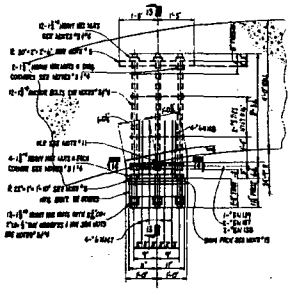
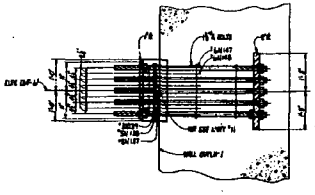


PLAN RCHS-8B



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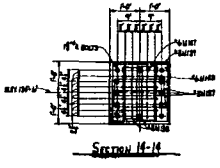


SECTION 14-14

FOR NOTES AND REFERENCE ELE DRAWING 13-421-026.

NO.	REVISION	BY	CH	APP	DATE
2	PER CHNGE PER MEMO 84-11-05-01				
1	RELEASED FOR CONSTRUCTION				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

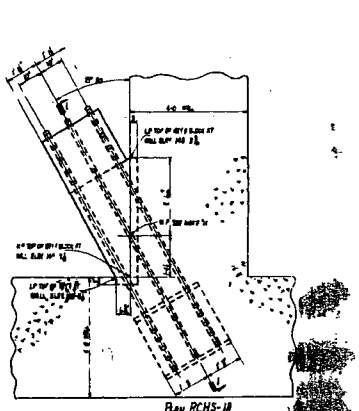
REACTOR BUILDING INTERIOR FALLS
ANCHOR BLOCKS FOR REACTOR COOLING PUMP "B"
HYDRAULIC SUPPRESSORS

GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

E-15-78	CONSTRUCTION	ELL
E 58-78	LIMITED CONSTRUCTION AS NOTED	GAS
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	CHECK

1"=1'-0"	4203	E-421-026	2	SC-421-026
SCALE	WORK ORDER NO.	DRAWING NO.		PPC DRAWING NUMBER



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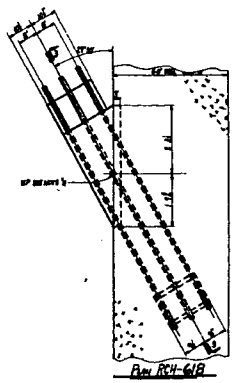

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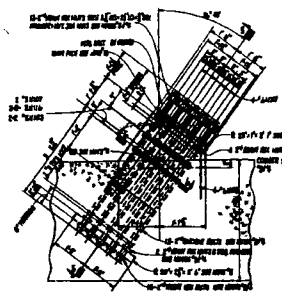

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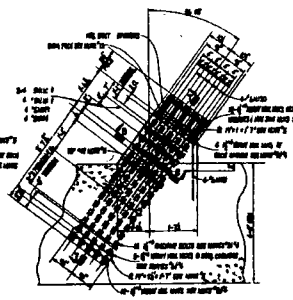

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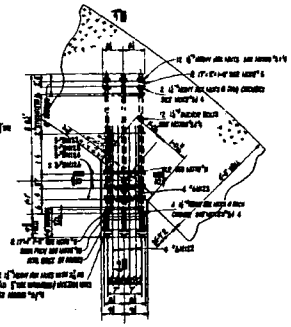

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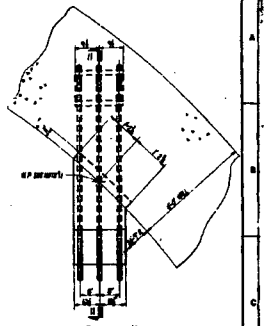

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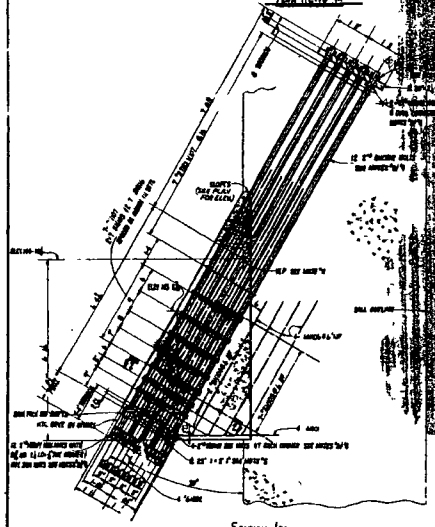
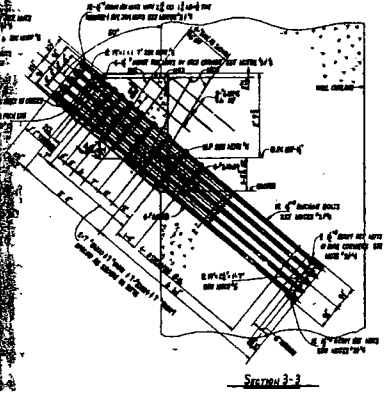


SECTION 1-1



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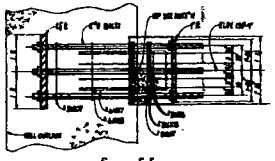

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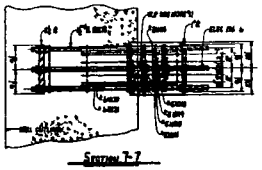

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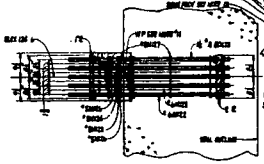
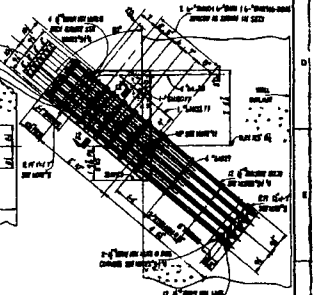


SECTION 9-9



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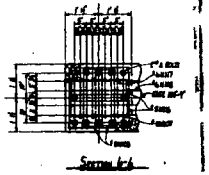
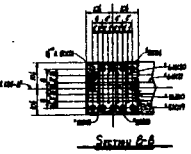


SECTION 4-4



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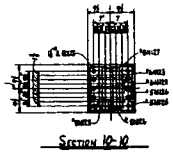

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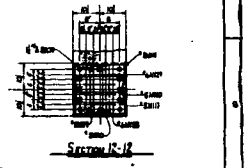

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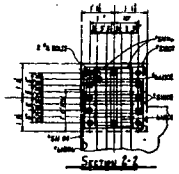
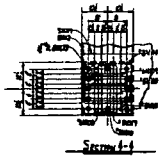
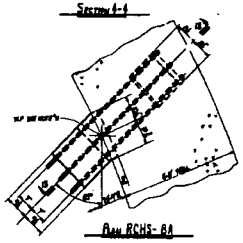


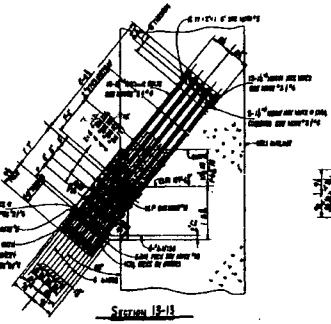
SECTION 2-2



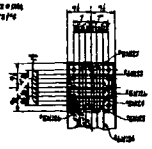
SECTION 8-8



PLAN RCHS-8A



SECTION 13-13



SECTION 14-14

NOTES -

1. GENERAL SPECIFICATIONS SP-0000 AND SP-0010 EDITIONS 1,000 P.S.I. MINIMUM AT 28 DAYS CLASS IV(-0000-1) CELL MINIMUM 3.5%

2. REINFORCING SPECIFICATIONS SP-0040 AND SP-0042 EDITIONS, GRADE AS NOTED ON

3. CONCRETE WORK FOR ENCASED CELLS, SUMPS AND CONCRETE SHELL BEARING TO 4.00 ABOVE GRADE SEAL, SLAB 2 PLACE SUPPLEMENTARY REINFORCEMENT AS SHOWN & UNLESS SPECIFIED ON DRAWINGS AND EACH SIDE OF STEEL PIPE SHALL BE MONOLITHIC WITH ADJACENT CONCRETE AND PROVIDED WITH VERTICAL CONSTRUCTION AND EXPANSION JOINTS AS SHOWN.

4. CONCRETE REINFORCING - ANCHOR BOLTS 3 NO. - 20
   SPIRAL SHEET REQ. 3 PER SHEET 3 NO. - 20
   TERMINATE IN 90 DEGREE HOOKS AT BOTTOM.

5. PLACING CONCRETE - CONCRETE SHALL HAVE MINIMUM STRENGTH OF 4,000 PSI AND CONFORMING TO ASTM C94. PLACING REQUIREMENTS REQUIRED AND FOLLOWED WHENEVER POSSIBLE. CONCRETE SHALL BE PLACED IN PLACEMENT.

6. CONCRETE CURING - CONCRETE SHALL NOT EXPOSED PRIOR TO COMPLETION OF PLACES AND ANCHOR BOLTS TO 28 DAYS STRENGTH. CONCRETE SHALL BE CURED BY TESTING AFTER 28 DAYS TEST. CONCRETE SHALL BE PROTECTED FROM EXPOSURE DURING CURING PERIOD. CONCRETE SHALL BE PROTECTED TO MINIMUM 7 DAYS.

7. CONCRETE SHALL BE CURED BEFORE AND AND PROTECTED AFTER INSTALLATION OF THE CONNECTION OR A MINIMUM TO PREVENT SHRINKAGE AND DAMAGE TO SEAL OR TENSION.

8. ANCHOR BOLTS SHALL NOT BE WELDED. USED AS A WELDING OR ELECTRODE GROUND USE OR TENSION OF A GROUNDED ELECTRODE AND AT ANY TIME.

9. CONCRETE SHALL BE SUBMITTED FOR APPROVAL.

10. FOR LIMITING AND DESCRIPTION OF CONCRETE PIPES SEE SHEETS S-000-001 S-000-004, S-000-005 AND S-000-006.

11. CONSTRUCTION JOINTS SHALL BE AT LOCATION OF ANCHOR BLOCKS AND ENCASED CONCRETE SHELL.

12. SUMP HEAD PIPE SHALL CONSIST OF 4 PLACES OF THE FOLLOWING QUANTITIES AND THICKNESS 3-0, TYPE 1-0, TYPE AND 2 1/2 DIA. PLACES OF BASE PLATE AS SHALL BE SHALL BASED FOR CORRESPONDING 1 TRADE CABLE PLATES BUILT 1 TO BE ADD STEEL.

FIELD NOTE 14 LUBRICATE NUTS AND ANCHOR BOLT THREADS WITH A HEAVY GREASE AND TIGHTEN ALL ANCHOR BOLTS TO A SNUG TIGHT CONDITION AS DEFINED BY SPECIFICATIONS FOR A325 BOLTS AND ASTM BOLTS S-000 NOTE 9(A) GENERAL OF STEEL CONSTRUCTION ALSO THE CENTERS SNUG TIGHTEN EACH ANCHOR BOLT BY AN ADDITIONAL 1/2 TURN NOT EXCEEDING INDIVIDUAL 180 NUTS TIGHTENING TO A SNUG TIGHT CONDITION

REFERENCES -

04-421-000	ANCHOR BLOCKS FOR REACTOR CORE RAD PUMP "A"
04-421-001	ANCHOR BLOCKS FOR REACTOR CORE RAD PUMP "B"
04-421-002	ANCHOR BLOCKS FOR REACTOR CORE RAD PUMP "C"
04-421-003	REACTOR MODEL PRIMARY SHIELD WALL
04-421-010	REACTOR MODEL PRIMARY SHIELD WALL
04-421-020	STRUCTURE KEY OF HOISTING PLATE EMERGENCY SHIELD WALL
04-424-020-0	REINFORCEMENT 1 OF 1
04-424-020-0	REINFORCEMENT 1 OF 1
04-424-020-0	REINFORCEMENT 1 OF 1
04-424-020-0	REINFORCEMENT 1 OF 1
04-424-020-0	REINFORCEMENT 1 OF 1

2	As Built Rev. MAR 04 1 01 01	
1	RELEASE FOR CONSTRUCTION	
NO.	REVISIONS	BY CHK APP DATE

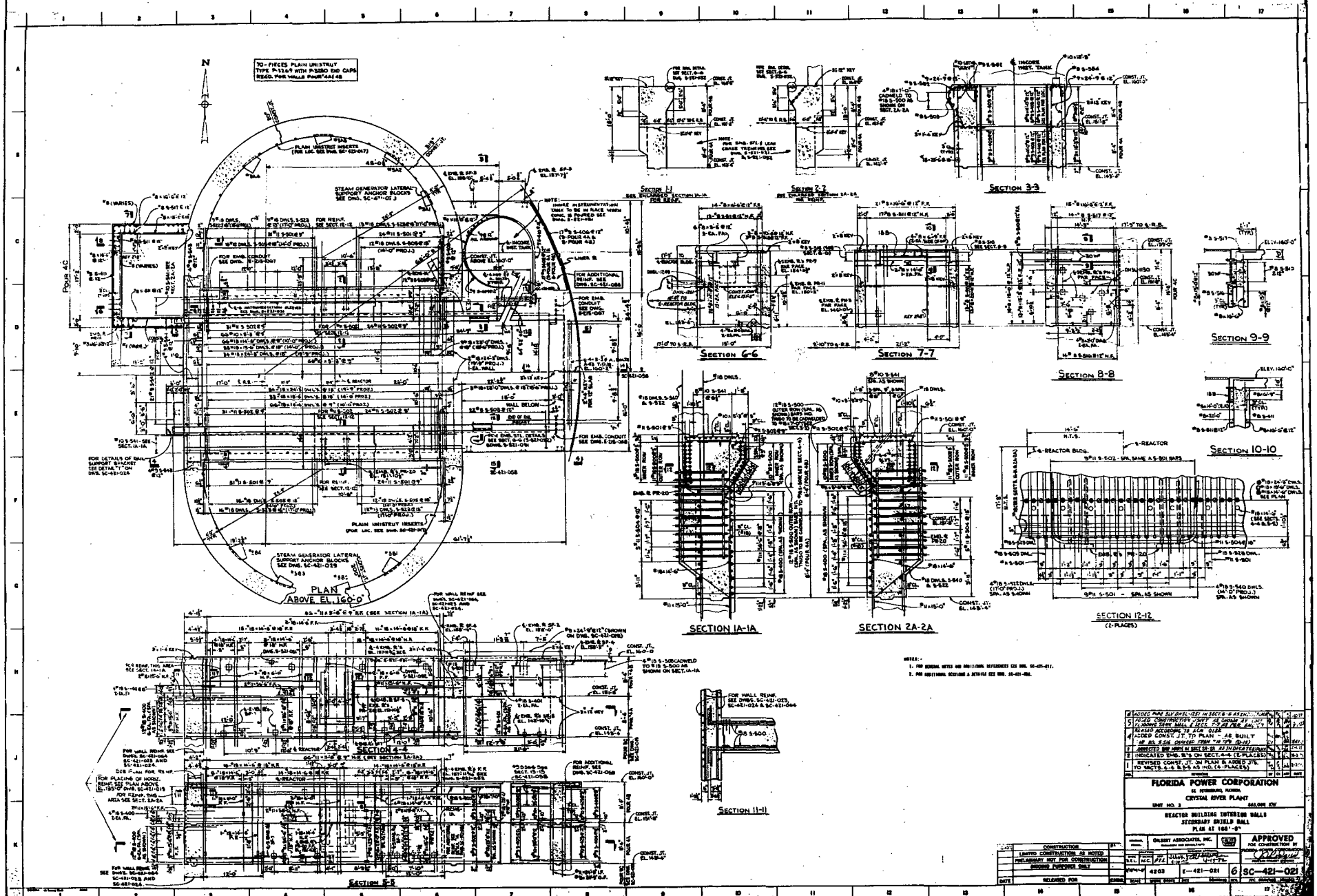
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 860,000 KW

REACTOR BUILDING INTERIOR WALLS
ANCHOR BLOCKS FOR REACTOR COOLING PUMP "A"
HYDRAULIC SUPPRESSORS

ORIENT ASSOCIATES, INC
APPROVED FOR CONSTRUCTION BY
GILBERT/COMMONWEALTH

CONSTRUCTION			
LIMITED CONSTRUCTION, AS NOTED			
PRELIMINARY NOT FOR CONSTRUCTION			
BIDDING PURPOSES ONLY			
DATE	RELEASED FOR	ENGR	

DRAWN	CHECKED	ENGR	APPROVED	
DATE	4-1-71	4-1-71	4-1-71	
JOB NO.	4203	E-421-025	2	SC-421-025
WORK ORDER				



PLAN ABOVE EL. 160'-0"
SECTION 1-1
SECTION 2-2
SECTION 3-3
SECTION 6-6
SECTION 7-7
SECTION 8-8
SECTION 9-9
SECTION 10-10
SECTION 1A-1A
SECTION 2A-2A
SECTION 12-12
(2-PLACES)
SECTION 4-4
SECTION 5-5
SECTION 11-11
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
PLAN AT 160'-0"
GILBERT ASSOCIATES, INC.
APPROVED
SC-421-021

NOTE: FOR LOCATIONS OF OPNGS & SLEEVES SEE DWG. SC-421-020
—— INDICATES CADWELD LAYER 1
—— INDICATES CADWELD LAYER 2

ELEVATION 1-1

KEY PLAN

TYPICAL SLEEVE DETAIL

SLV. DETAIL DHSL-1129

	"A"	"B"	"C"	"D"	"L"
DETAIL CGSL-1222	4'-0"	2[illegible]"	2[illegible]"	16"ø	4'-3"
DETAIL CGSL-1223	7"	[illegible]	[illegible]	16"ø	4'-0[illegible]"
DETAIL MSSL-1119	[illegible]	[illegible]	[illegible]	36"	[illegible]
DETAIL MSSL-1120	[illegible]	[illegible]	[illegible]	36"	[illegible]
DETAIL MSSL-1121	[illegible]	[illegible]	[illegible]	36"	5'-1[illegible]
DETAIL MSSL-1122	5'-0[illegible]	7[illegible]	6[illegible]	36"	[illegible]
DETAIL RCSL-1106	10'-8"	7[illegible]"	6[illegible]"	[illegible]	6'-10[illegible]"
DETAIL RCSL-1105	12'-6"	10[illegible]"	8[illegible]"	18"	5'-8[illegible]"
DETAIL RCSL-1104	16'-6"	1'-0[illegible]"	10[illegible]"	18"	5'-8[illegible]"
DETAIL CGSL-1224	7'-8"	2[illegible]"	2[illegible]"	8"	4'-4[illegible]"
DETAIL CGSL-1225	6'-0"	2"	1[illegible]"	8"	4'-8[illegible]"
DETAIL FWSL-1124	4'-7"	7[illegible]"	6[illegible]"	30"	6'-6[illegible]"
DETAIL FWSL-1100	9'-8"	6"	5"	16"	4'-9"
DETAIL FWSL-1123	7"	[illegible]	[illegible]	30"	4'-0[illegible]"
DETAIL FWSL-1101	1[illegible]"	[illegible]	[illegible]	16"	4'-0[illegible]"

	"A"	"B"	"D"	"L"
DETAIL SWSL-1209	5'-0	4[illegible]	8"ø	5'-8[illegible]
DETAIL SWSL-1210	5'-0	4[illegible]	8"ø	5'-8[illegible]
DETAIL SWSL-1211	5'-0	4[illegible]	8"ø	5'-8[illegible]
DETAIL SWSL-1212	5'-0	4[illegible]	8"ø	5'-8[illegible]
DETAIL SWSL-1218	5'-6	[illegible]	8"ø	5'-7[illegible]
DETAIL SWSL-1219	5'-6	[illegible]	8"ø	5'-7[illegible]
DETAIL SWSL-1220	5'-6	[illegible]	8"ø	5'-7[illegible]
DETAIL SWSL-1221	5'-6	[illegible]	8"ø	5'-7[illegible]

SLV. DETAIL DHSL-1131

SLEEVE SCHEDULE

QUAN.	MARK	"D"	"L"	LOCATION
1	CFSL-1128	24"ø	4'-0"	SC-421-020
1	MUSL-1112	12"ø	3'-6"	SC-421-017
1	MUSL-1113	12"ø	3'-0"	SC-421-017
1	MUSL-1114	12"ø	4'-0"	SC-421-020
1	MUSL-1115	12"ø	4'-0"	SC-421-020
1	MUSL-1116	12"ø	3'-6"	SC-421-017
1	SFSL-1132	14"ø	4'-0"	SC-421-020
1	SWSL-1194	10"ø	3'-0"	SC-421-017
1	SWSL-1195	10"ø	3'-0"	SC-421-017
1	SWSL-1196	10"ø	3'-0"	SC-421-017
1	SWSL-1197	10"ø	3'-0"	SC-421-017
1	CASL-1183	6"ø	4'-0"	SC-421-020
1	CASL-1184	6"ø	4'-0"	SC-421-020
1	CASL-1185	6"ø	4'-0"	SC-421-020
1	CASL-1186	6"ø	4'-0"	SC-421-020
1	CASL-1187	6"ø	4'-0"	SC-421-020
1	CASL-1188	6"ø	4'-0"	SC-421-020
1	CFSL-1125	24"ø	4'-0"	SC-421-020
1	CFSL-1204	8"ø	3'-0"	SC-421-017
1	CGSL-1222	SEE DETAIL		SC-421-020
1	CGSL-1223	SEE DETAIL		SC-421-020
1	DHSL-1129	SEE DETAIL		SC-421-020
1	MSSL-1167	10"ø	4'-0"	SC-421-020
1	MSSL-1168	10"ø	4'-0"	SC-421-020
1	MSSL-1169	10"ø	4'-0"	SC-421-020
1	MSSL-1170	10"ø	4'-0"	SC-421-020
1	MSSL-1171	10"ø	4'-0"	SC-421-020
1	MSSL-1172	10"ø	4'-0"	SC-421-020
1	MSSL-1173	10"ø	4'-0"	SC-421-020
1	MSSL-1174	10"ø	4'-0"	SC-421-020
1	MSSL-1175	10"ø	4'-0"	SC-421-020
1	MSSL-1176	10"ø	4'-0"	SC-421-020
1	MSSL-1177	10"ø	4'-0"	SC-421-020
1	MSSL-1178	10"ø	4'-0"	SC-421-020
1	MSSL-1179	10"ø	4'-0"	SC-421-020
1	MSSL-1180	10"ø	4'-0"	SC-421-020
1	MSSL-1181	10"ø	4'-0"	SC-421-020
1	MSSL-1182	10"ø	4'-0"	SC-421-020
1	MSSL-1213	12"ø	3'-0"	SC-421-017
1	MSSL-1214	8"ø	3'-0"	SC-421-017
1	MUSL-1110	12"ø	4'-0"	SC-421-020
1	MUSL-1111	12"ø	4'-0"	SC-421-020
1	MUSL-1117	12"ø	4'-0"	SC-421-020
1	RCSL-1107	16"ø	3'-0"	SC-421-018
1	RCSL-1108	16"ø	3'-0"	SC-421-018
1	RCSL-1109	14"ø	3'-0"	SC-421-018
1	SWSL-1241	10"ø	3'-0"	SC-421-017
1	SWSL-1242	10"ø	3'-0"	SC-421-017
1	DWSL-1208	6"ø	3'-0"	SC-421-017
1	WDSL-1215	6"ø	3'-0"	SC-421-017
1	WDSL-1216	8"ø	3'-0"	SC-421-017
1	WDSL-1217	6"ø	3'-0"	SC-421-017
1	SWSL-1209	SEE DETAIL		SC-421-018
1	SWSL-1210	SEE DETAIL		SC-421-018
1	SWSL-1211	SEE DETAIL		SC-421-018
1	SWSL-1212	SEE DETAIL		SC-421-018
1	MUSL-1118	12"ø	2'-0"	SC-421-018
1	MSSL-1133	6"ø	4'-0"	SC-421-020
1	MSSL-1134	6"ø	4'-0"	SC-421-020
1	SWSL-1138	8"ø	4'-0"	SC-421-020
1	SWSL-1142	8"ø	4'-0"	SC-421-020
1	SWSL-1146	8"ø	4'-0"	SC-421-020
1	SWSL-1150	8"ø	4'-0"	SC-421-020
1	SWSL-1154	8"ø	4'-0"	SC-421-020
1	SWSL-1158	8"ø	4'-0"	SC-421-020
1	SWSL-1159	8"ø	4'-0"	SC-421-020
1	SWSL-1160	8"ø	4'-0"	SC-421-020
1	SWSL-1161	6"ø	4'-0"	SC-421-020
1	SWSL-1162	8"ø	4'-0"	SC-421-020
1	SWSL-1163	8"ø	4'-0"	SC-421-020
1	SWSL-1164	8"ø	4'-0"	SC-421-020
1	SWSL-1165	6"ø	4'-0"	SC-421-020
1	SWSL-1166	8"ø	4'-0"	SC-421-020
1	SWSL-1192	8"ø	2'-0"	SC-421-018
1	SWSL-1193	8"ø	2'-0"	SC-421-018
1	CFSL-1198	6"ø	2'-0"	SC-421-018
1	CFSL-1199	12"ø	2'-0"	SC-421-019
1	CFSL-1205	6"ø	2'-0"	SC-421-018
1	MUSL-1229	6"ø	4'-0"	SC-421-020
1	MUSL-1230	6"ø	4'-0"	SC-421-020
1	MUSL-1231	6"ø	4'-0"	SC-421-020
1	MUSL-1232	6"ø	4'-0"	SC-421-020
1	MUSL-1233	6"ø	4'-0"	SC-421-020
1	MUSL-1234	6"ø	4'-0"	SC-421-020
1	MUSL-1235	6"ø	4'-0"	SC-421-020

SLEEVE SCHEDULE

QUAN.	MARK	"D"	"L"	LOCATION
1	MUSL-1236	6"ø	4'-0"	SC-421-020
1	MUSL-1237	6"ø	2'-0"	SC-421-018
1	MUSL-1238	6"ø	2'-0"	SC-421-018
1	MUSL-1239	8"ø	2'-0"	SC-421-019
1	MUSL-1240	8"ø	2'-0"	SC-421-019
52	RBSL-1	2"ø	4'-0"	SC-421-019
1	RBSL-2	56"ø	4'-0"	SC-421-020
1	SWSL-1135	8"ø	6'-0"	SC-421-020
1	SWSL-1136	8"ø	6'-0"	SC-421-020
1	SWSL-1137	6"ø	6'-0"	SC-421-020
1	SWSL-1139	8"ø	6'-0"	SC-421-020
1	SWSL-1140	8"ø	6'-0"	SC-421-020
1	SWSL-1141	6"ø	6'-0"	SC-421-020
1	SWSL-1143	8"ø	6'-0"	SC-421-020
1	SWSL-1144	8"ø	6'-0"	SC-421-020
1	SWSL-1145	6"ø	6'-0"	SC-421-020
1	SWSL-1147	8"ø	6'-0"	SC-421-020
1	SWSL-1148	8"ø	6'-0"	SC-421-020
1	SWSL-1149	6"ø	6'-0"	SC-421-020
1	SWSL-1151	8"ø	6'-0"	SC-421-020
1	SWSL-1152	8"ø	6'-0"	SC-421-020
1	SWSL-1153	6"ø	6'-0"	SC-421-020
1	SWSL-1155	8"ø	6'-0"	SC-421-020
1	SWSL-1156	8"ø	6'-0"	SC-421-020
1	SWSL-1157	6"ø	6'-0"	SC-421-020
1	MSSL-1119	SEE DETAIL		SC-421-020
1	MSSL-1120	SEE DETAIL		SC-421-020
1	MSSL-1121	SEE DETAIL		SC-421-020
1	MSSL-1122	SEE DETAIL		SC-421-020
1	CFSL-1250	6"ø	3'-0"	SC-421-017
1	DHSL-1131	SEE DETAIL		SC-421-020
1	RCSL-1106	SEE DETAIL		SC-421-020
1	RCSL-1105	SEE DETAIL		SC-421-020
1	RCSL-1104	SEE DETAIL		SC-421-020
1	CGSL-1224	SEE DETAIL		SC-421-020
1	CGSL-1225	SEE DETAIL		SC-421-020
1	FWSL-1124	SEE DETAIL		SC-421-020
1	FWSL-1100	SEE DETAIL		SC-421-020
1	FWSL-1123	SEE DETAIL		SC-421-020
1	FWSL-1101	SEE DETAIL		SC-421-020
1	CGSL-1226	8"ø	4'-0"	SC-421-020
1	CGSL-1227	8"ø	4'-0"	SC-421-020
1	DHSL-1189	8"ø	2'-0"	SC-421-021
1	DHSL-1190	8"ø	2'-0"	SC-421-021
1	DHSL-1191	8"ø	2'-0"	SC-421-021
1	SWSL-1218	SEE DETAIL		SC-421-017
1	SWSL-1219	SEE DETAIL		SC-421-017
1	SWSL-1220	SEE DETAIL		SC-421-017
1	SWSL-1221	SEE DETAIL		SC-421-017

FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-017.

NO.	REVISIONS
11	REMOVED 1 PR-1 EMB. PL. & REPLACED IT WITH 1 PR-2 EMB. PL. AS INDICATED AS PER DT-4-75 "AS BUILT"
10	REVISED ACCORDING TO ECN. 0122. ADDED CONST. JT. TO POUR 4B - AS BUILT
9	REVISED POUR 5-A. ADDED ...
8	REVISED LOCATION OF EMBEDDED PLATE AND ADDED PIPE SLEEVES SWSL-1218, 1219, 1220 & 1221
7	REVISED CONST. JTS. IN POUR 3A AND RELOCATED EMB. PL. PH-3 IN POUR 4A AS IND.
6	RELEASED FOR CONSTRUCTION TO EL. 160'-6" ADDED EMB. PL. IN POUR 3A
5	RELEASED FOR CONSTRUCTION TO EL. 143'-4" ADDED SLEEVES & ELEV. 1-1
4	RELEASED FOR CONSTRUCTION TO EL. 143'-4" ADDED SLEEVES & CORRECTED EL. ...
3	ADDED 2 EMB. PL.'s PH-4
2	ADDED REINF. POUR 1 & RELEASED FOR CONSTRUCTION TO EL. 122'-10"
1	ADDED 2 EMB. PL.'s PH-4

DATE	RELEASED FOR	ENGR.
6-21-71	CONSTRUCTION	JFJ
4-30-71	LIMITED CONSTRUCTION AS NOTED	JFJ
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
STRETCH-OUT OF OUTSIDE FACE NORTH HALF

GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

B.E.L. J.R. W.W.W.

SCALE: 1/4"=1'-0" WORK ORDER: 4203 DRAWING: E—421—023 REV. 11

FPC DRAWING NUMBER: SC—421—023

E-10-13

FOR GENERAL NOTES & REFERENCES SEE DWG. SC-421-017.

NO.	REVISIONS	BY	CK	APP	DATE
8	AS BUILT PER CGWR 96-18-89-01, REA 98-0462				
7	REVISED PLATE #SF-4 TO #SF-4A REF. BF-62-73				
6	CHANGES MADE IN ACCORDANCE WITH BT-26-73. CHANGED ¾" CONC. ANCHORS TO ½" FLAT ANCHORS (A-16, A-17, A-11, A-9) (ADDED DETAILS B, C, & D (H-5))				
5	CHANGED ANCHOR BOLT MARK FROM A-37 TO A-36 AS INDICATED (COORDINATES (G-3))				
4	RELOCATED EMB ℞s PR-21 ON ELS 7-7 & 8-8 & SECT. 1-1. ADJUSTED #18 BARS AS INDICATED ON SECT. H.				
3	NOTED NELSON STUDS OR EQUAL AS INDICATED (6 PLACES)				
2	ADDED DIMENSION ON PLAN AS INDICATED (1-PLACE)				
1	REV. ANGLE SIZE ON PLAN (5 PLACES) AND ON SECTS. 1-1, 2-2, 3-3, & 6-6 AND DET. "A"				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
PLAN AT ELEVATION 180'-6"

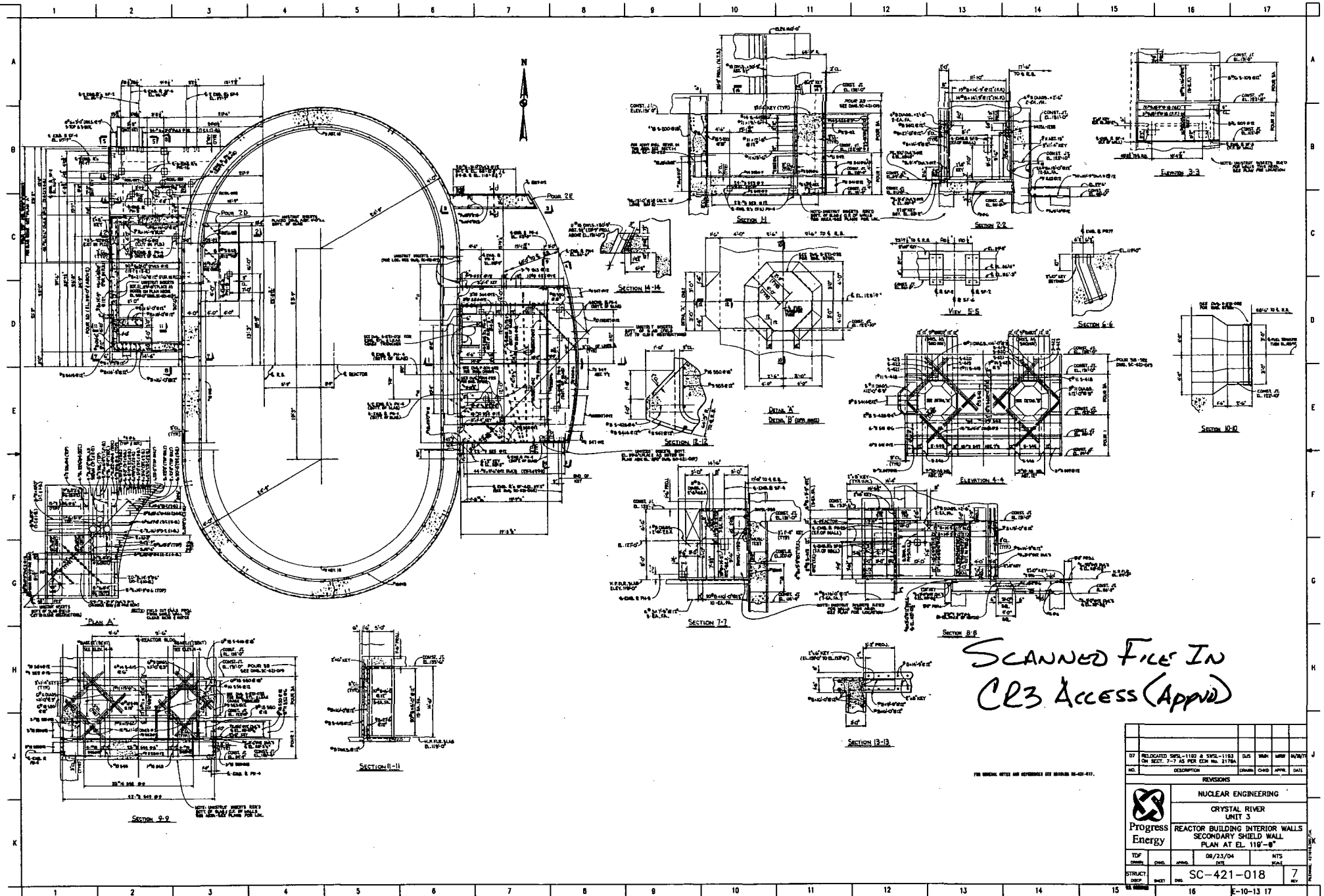
GILBERT ASSOCIATES, INC.

APPROVED FOR CONSTRUCTION BY FLORIDA POWER CORPORATION

CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
DATE	RELEASED FOR

SCALE: ⅜" = 1'-0" · WORK ORDER: 4203 · SIZE: E-421-022 · REV: 8 · DRAWING NUMBER: SC-421-022

E-10-13



SCANNED FILE IN CR3 ACCESS (APPVD)

NO.	DESCRIPTION	DRAWN	CHKD	APPR.	DATE
07	RELOCATED SWSL-1102 & SWSL-1103 ON SECT. 7-7 AS PER ECN No. 21784	DJS	WAH	MRW	04/28/77

REVISIONS

Progress Energy

NUCLEAR ENGINEERING

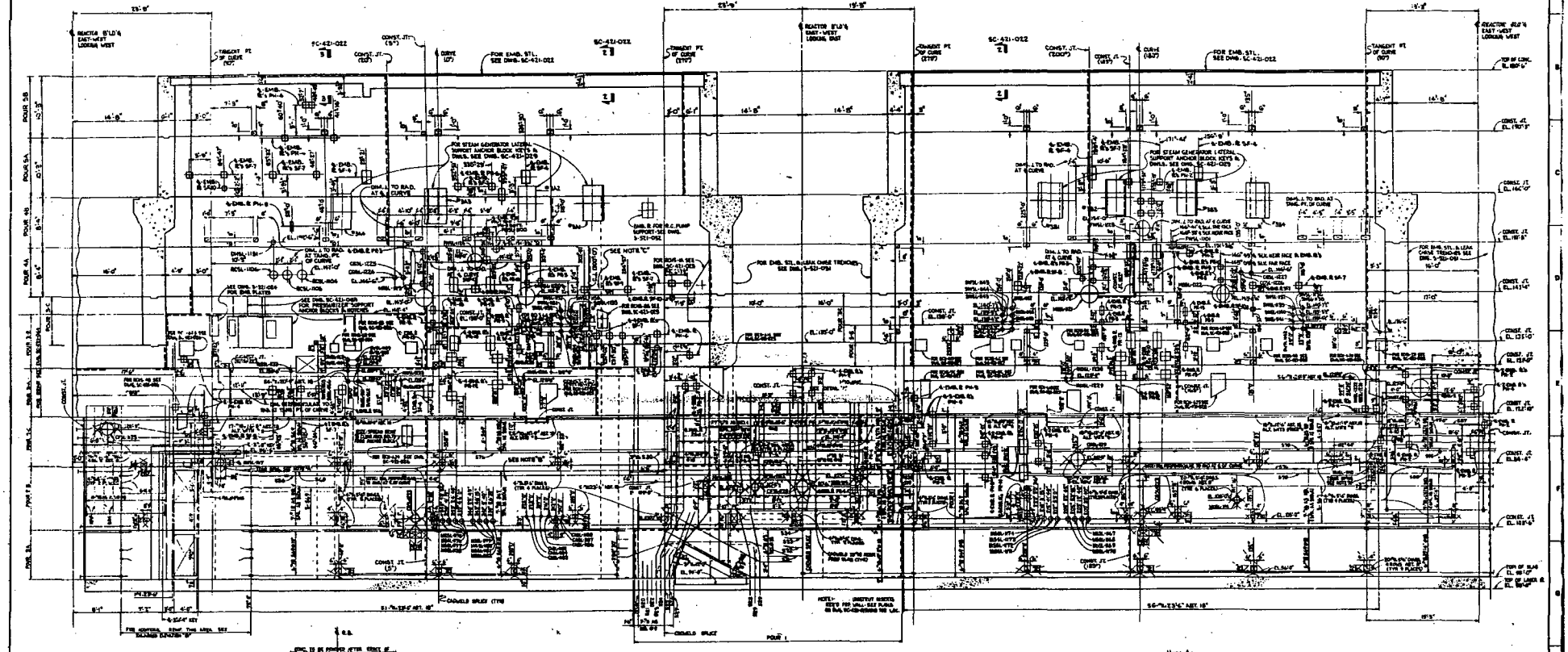
CRYSTAL RIVER UNIT 3

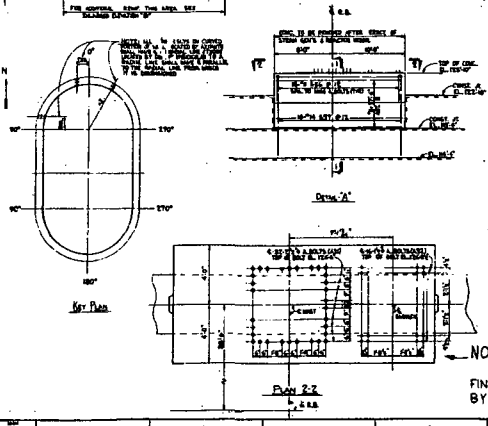
REACTOR BUILDING INTERIOR WALLS SECONDARY SHIELD WALL PLAN AT EL. 119'-0"

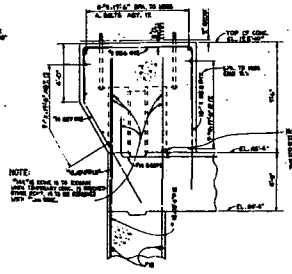
TDF DRAWN | CHKD | APPRD. | 09/23/04 DATE | NTS SCALE

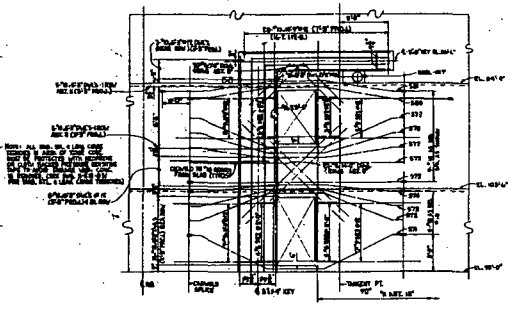
STRUCT DISCP | SHEET | DWG. SC-421-018 | REV 7

E-10-13 17









NOTE:
BEFORE PLACING BOLTS-
FINAL LOCATIONS MUST BE VERIFIED
BY BABCOCK & WILCOX CO. THRU F.P.C.

NOTE A:

NOTE "B"
THIS AREA OF THE SECONDARY SHIELD WALL MUST NOT BE POURED UNTIL ELECT. CANISTER FOR PENETRATIONS R406, R409 PASS & THRU EXTERIOR WALL HAS BEEN INSTALLED.

NOTE "C"
THIS AREA OF THE SECONDARY SHIELD WALL MUST NOT BE POURED UNTIL THE FIELD FORCES HAVE CONFIRMED SUFFICIENT CLEARANCE FOR CANISTER INSTALLATION.

15	AS BUILT REV. MAR 84-1-26-84		
14	AS BUILT PER 84-3-65-1		
13	REV. AS IND (1) PLACE PER AS BUILT ECN 8510		
12	REVISED PIPE IN ACCORDANCE WITH ECN-8137 CHANGED EMB. R PH-3 TO PH-1 IN POUR 5A IS IND.		
9	FIELD CHANGE PER 78-1319 - RELOCATED EMB. R SP-1 IN POUR 5A AS INDICATED		
8	ADDED TO NOTE "C" AS INDICATED		
7	REVISED CONST. JTS. IN POUR 3-A, AND ADDED EMB. R PH-8 TO POUR AS AS INDICATED		
6	COMPLETED DRAWING, RELEASED FOR CONSTRUCTION. REVISED SLAB AND ADDED OPNG. IN POUR 5C AS INDICATED		
5	RELEASED FOR CONSTRUCTION TO ELEV. 100'-0" (POURS 4A, 5, 4B) - ADDED A PEDWELD EMB. R'S #6, #10, AND ADDED NOTES "B" & "C" AND INDICATED AREAS CONCERNED.		
4	RELEASED FOR CONSTRUCTION TO ELEV. 143'-6"		
3	CHANGED 1A TO CONST. JT. AT MAIN PLACE R398-4C		
2	ADDED REINF. TO POUR 1 - RELEASED FOR CONSTRUCTION TO EL. 113'-10"		
1	ADDED 2 EMB. R'S PH-6		
NO.	REVISIONS	BY	DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

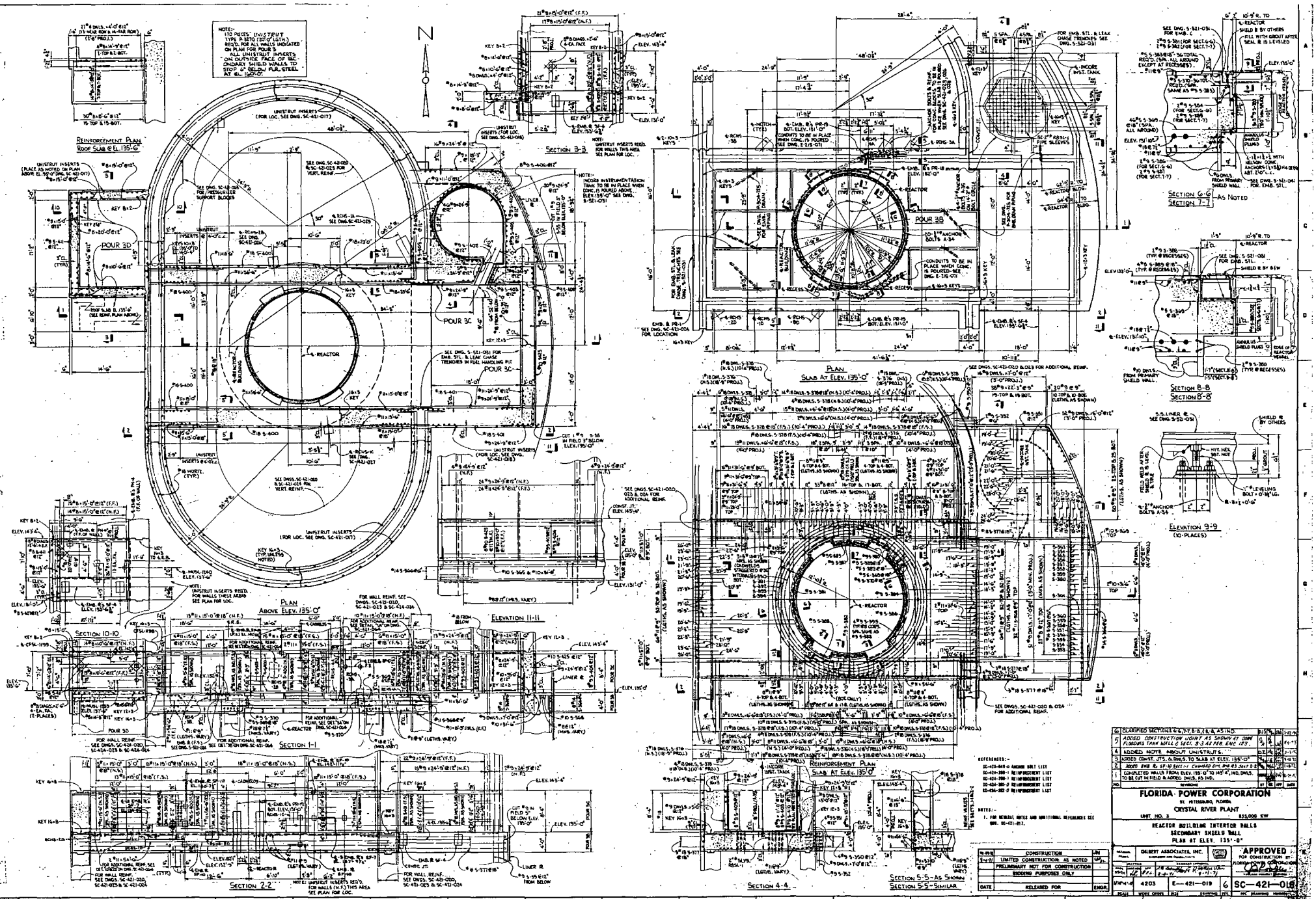
REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
STRETCHOUT OF INSIDE FACE

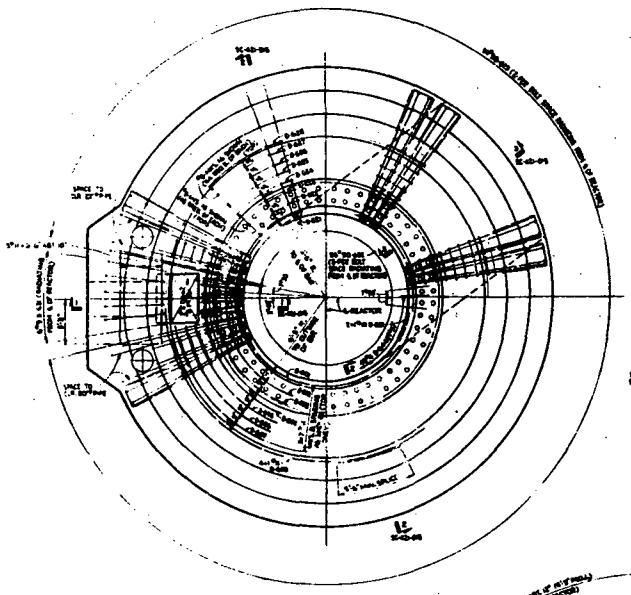
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

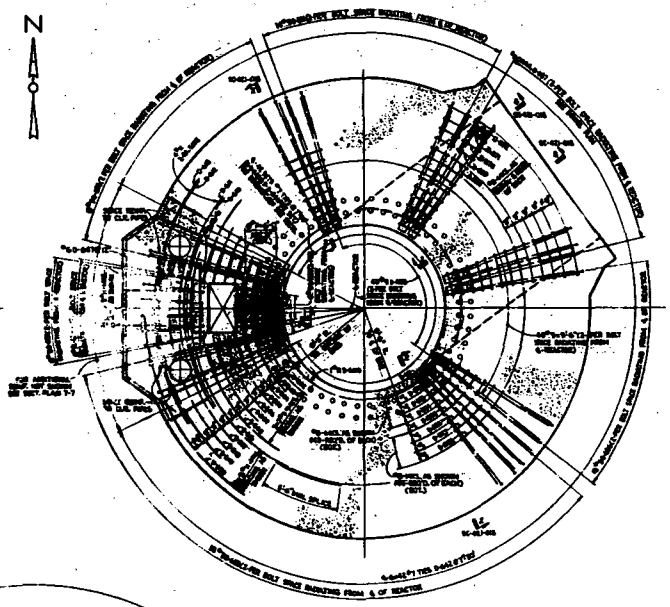
DRAWN	CHECKED	APPROVED	SCALE	DRAWING NO.	REV.
3/16/84			1"=10"	4203	E-481-020	13	SC-421-020

3-2-84	CONSTRUCTION	JPJ
	LIMITED CONSTRUCTION AS NOTED	JPJ
	PRELIMINARY NOT FOR CONSTRUCTION	
	RECORD PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

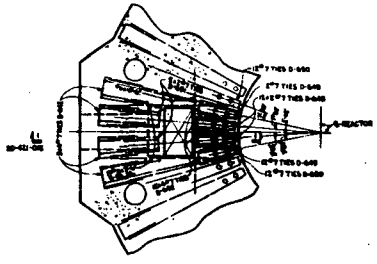

NOTE:- 170 PIECES UNISTRUT TYPE P 5270 (10'-0" LGTH.) REQ'D. FOR ALL WALLS INDICATED ON PLAN FOR POUR 3. ALL UNISTRUT INSERTS ON OUTSIDE FACE OF SECONDARY SHIELD WALL TO STOP 6" BELOW PLB., STEEL AT EL. 160'-0"
REINFORCEMENT PLAN ROOF SLAB @ EL. 135'-6"
SECTION 3-3
PLAN SLAB AT ELEV. 135'-0"
SECTION 6-6
SECTION 7-7
AS NOTED
SECTION 8-8
SECTION 8'-8
ELEVATION 9-9
(10 PLACES)
PLAN ABOVE ELEV. 135'-0"
SECTION 10-10
ELEVATION 11-11
SECTION 1-1
SECTION 2-2
SECTION 4-4
REINFORCEMENT PLAN SLAB AT ELEV. 135'-0"
SECTION 5-5 AS SHOWN
SECTION 5-5 SIMILAR
POUR 3D
POUR 3C
REACTOR BUILDING
REACTOR
REFERENCES:-
SC-421-045 ANCHOR BOLT LIST
SC-424-398-1 REINFORCEMENT LIST
SC-424-398-2 REINFORCEMENT LIST
SC-424-399-0 REINFORCEMENT LIST
SC-424-382-0 REINFORCEMENT LIST
NOTES:- 1. FOR GENERAL NOTES AND ADDITIONAL REFERENCES SEE GEN. SC-421-017.
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
DATE RELEASED FOR ENGR.
NO. REVISIONS BY CK APP DATE
6 CLARIFIED SECTIONS 4-6, 7-7, 8-8, & 8-8 AS IND
5 ADDED CONSTRUCTION JOINT AS SHOWN AT CORE FLOORS THAN WALLS & SECT. 3-3 AS REV. ENG. (RF).
4 ADDED NOTE ABOUT UNISTRUTS.
3 ADDED CONST. JTS. & DWLS. TO SLAB AT ELEV. 135'-0"
2 ADDED ENG. & SP.-10 SECTION CHANGED DWL SPA. #3 SHT 2-2
1 COMPLETED WALLS FROM ELEV. 161'-0" TO 169'-4", IND. DWLS. TO BE CUT IN FIELD & ADDED DWLS. AS IND.
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW
REACTOR BUILDING INTERIOR WALLS SECONDARY SHIELD WALL PLAN AT ELEV. 135'-0"
GILBERT ASSOCIATES, INC.
APPROVED FOR CONSTRUCTION BY: FLORIDA POWER CORPORATION
DRAWING NO. 4203 E-421-019 6 SC-421-018
SCALE 1/4" WORK ORDER SIZE D DRAWING LIST NEC DRAWING NUMBER



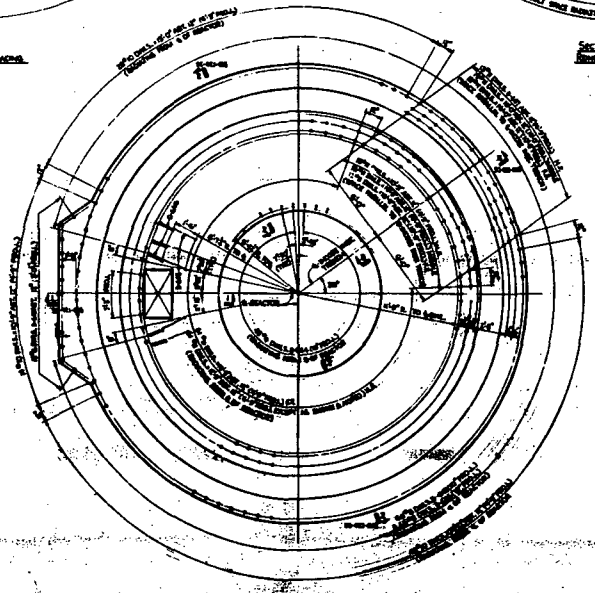
Top Plan
Reinforcement Placing



Sectional Plan G-G
Reinforcement Placing

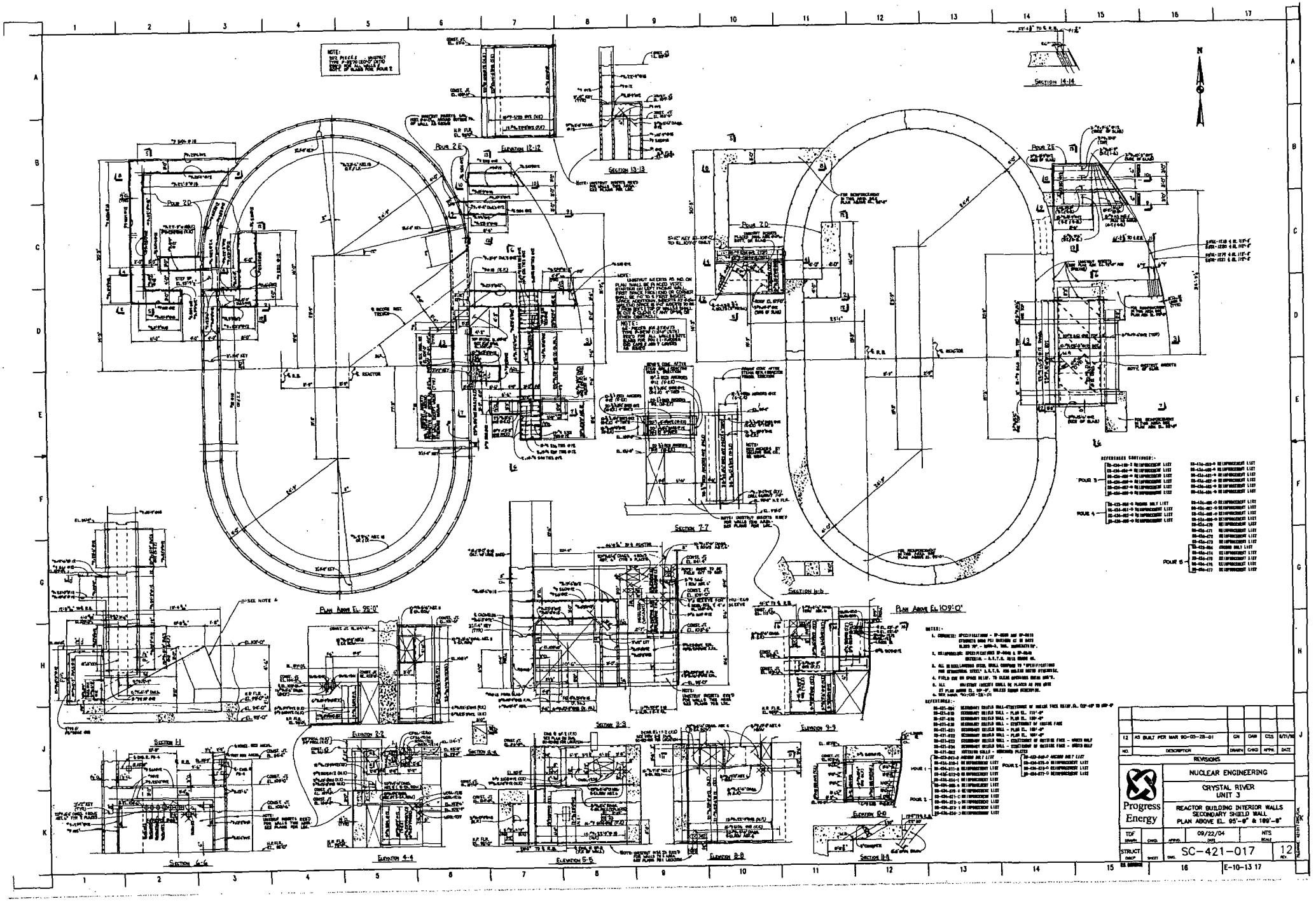


Sectional Plan 7-7
Reinforcement Placing

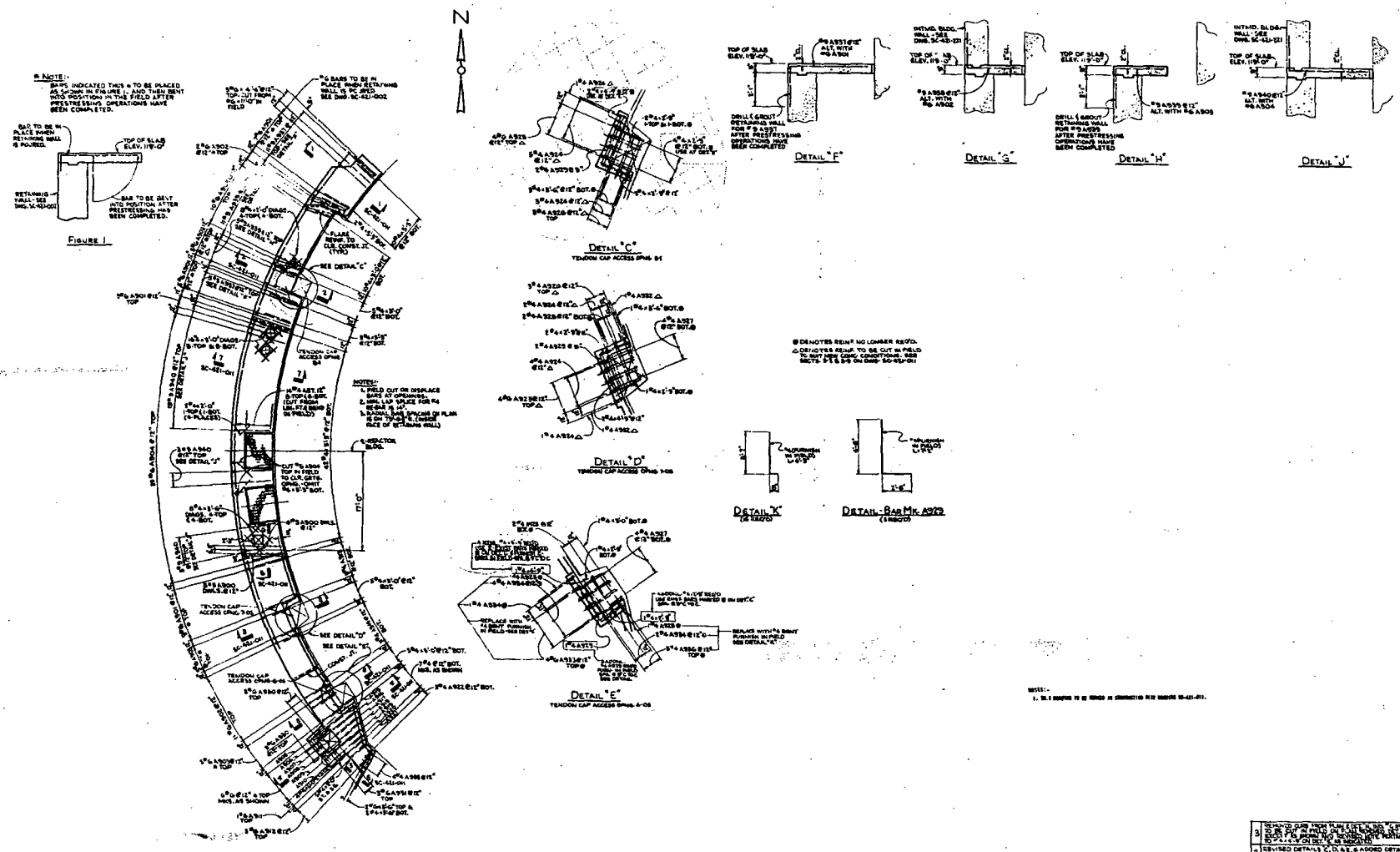


NOTES:
1. [illegible]
2. [illegible]

FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW
REACTOR BUILDING
REACTOR VESSEL FOUNDATION
REINFORCEMENT PLACING
GILBERT ASSOCIATES, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203 C-421-016 0 SC-421-016



Section 14-14
Section 13-13
Elevation 12-12
Pour 2E
Pour 2D
Section 7-7
Section 6-6
Section 1-1
Elevation 2-2
Elevation 4-4
Section 3-3
Elevation 5-5
Elevation 8-8
Section 9-9
Elevation 10-10
Section 11-11
Plan Above El. 95'-0"
Plan Above El. 109'-0"
Pour 3
Pour 4
Pour 5
12 AS BUILT PER MAR 90-05-28-01 GN DAW CSS 8/21/90
NO. DESCRIPTION DRAWN CHKD APPR. DATE
REVISIONS
NUCLEAR ENGINEERING
CRYSTAL RIVER
UNIT 3
REACTOR BUILDING INTERIOR WALLS
SECONDARY SHIELD WALL
PLAN ABOVE EL. 95'-0" & 109'-0"
Progress Energy
TDF
09/22/04
NTS
SC-421-017
12
E-10-13 17



3	REVISED CURB FROM PLAN & ELEVATION "A" TO BE CUT IN FIELD AT THE MASONRY WALL & ELEV. 119'-6" WERE TO BE DOWELED INTO MASONRY WALL ON DET. "B" AS INDICATED	D.T.S.	5-1-73
2	ADDED DETAIL "J" & REVISED DETAIL "A" & "B" ON SHT. 3 & ADDED DETAIL "A" & "B" ON SHT. 4 FOR TENDON ACCESS END CAP	D.T.S.	3-1-73
1	ALL WORK ON REV. 1 DUE TO PIPE RUPTURE OUTSIDE CONTAINMENT VESSEL, REVISED MISC. ON PLAN & LAND RELATED DETAILS "J" & "K"	M.J.	10-1-72

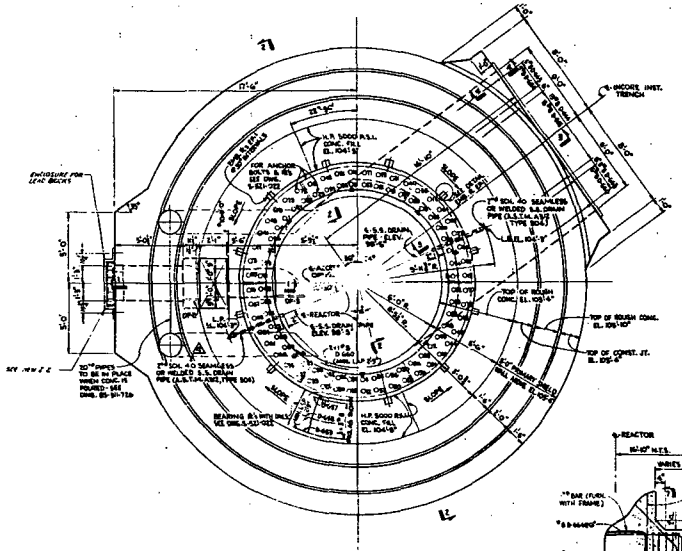
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
RETAINING WALL CANTILEVER SLAB AT ELEV. 119'-6"
REINFORCEMENT PLACING

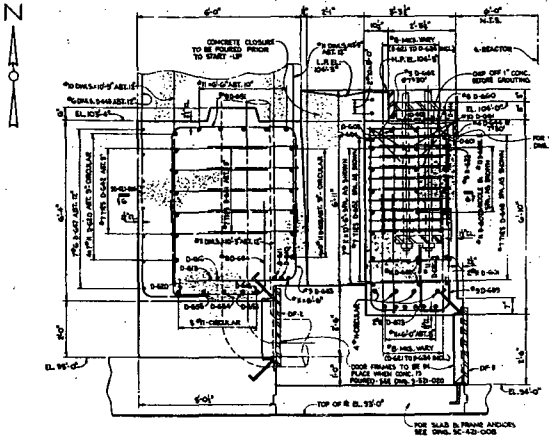
GILBERT ASSOCIATES, INC. — APPROVED FOR CONSTRUCTION BY Florida Power Corporation

DES'D	DRAWN	CHKD	SCALE	3	SC-421-014
	4203	E-421-014			

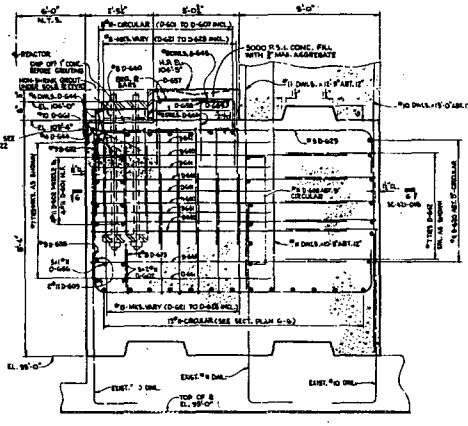
CONSTRUCTION AND
LIMITED OR RESTRICTED AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
BIDDING PURPOSES ONLY
RELEASED FOR
DATE



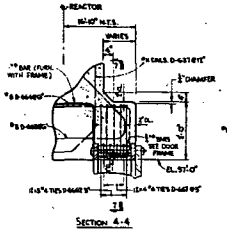
PLAN
REACTOR VESSEL FOUND.



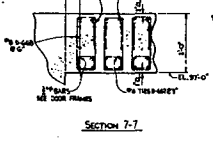
SECTION 1-1



SECTION 2-2

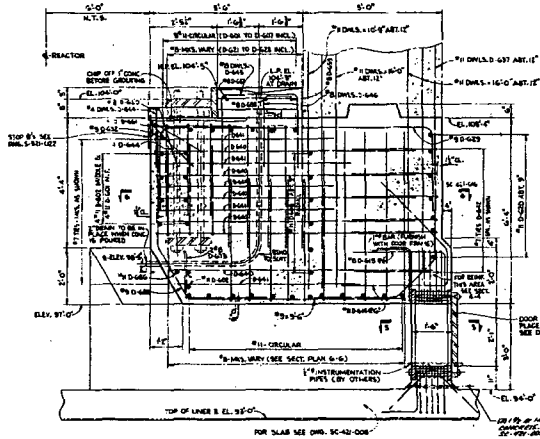


SECTION 4-4

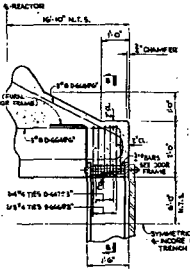


SECTION 7-7

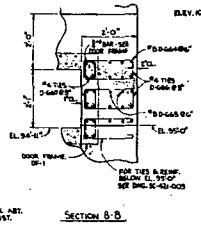
DETAIL-EMBEDDED PLATE EP-1
FOR INSERVICE INSPECTION GEAR
(12-REQUIRED)



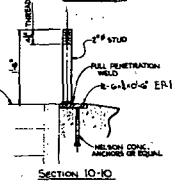
SECTION 3-3



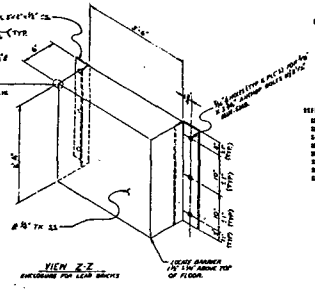
SECTIONAL PLAN 5-5



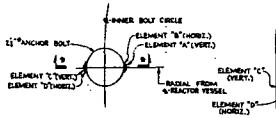
SECTION 8-8



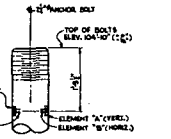
SECTION 10-10



VIEW Z-Z
ENCLOSURE FOR LEAD BRICKS



PLAN
SR-4 STRAIN GAUGES ON BOLTS
(9-REQUIRED)



SECTION 9-9

NOTES:-

1. CONCRETE: SPECIFICATIONS SP-6000 AND SP-6010.
STRENGTH 5,000 P.S.I. MINIMUM AT 28 DAYS.
SLUMP 3½"-4000-3 MAX. AGGREGATE ¾".
2. REINFORCING: SPECIFICATIONS SP-6040 & SP-6060.
SEE ITEM 8, NOTE AS TO GRADE OF.
3. EMBEDDED GUIDE SHALL BE HOT-ROLLED MC, STRUCTURALLY STABLE, FROM DIE AND ASSEMBLED "SHADOW" BOX LOAD-FILL SHEET AS SPECIFIED BY MANUFACTURER'S INSTRUCTIONS. PROPER ALL WORK IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE EMBEDDING GUIDE SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI IN 28 DAYS. GUIDE SHALL BE ACCORDANCE WITH CONCRETE SPECIFICATIONS LISTED ON DRAWING.
4. SIXTEEN (16) EMBEDDED STRAIN GAUGES SHALL BE CONNECTED TO THE EIGHT (8) BOLTS LOCATED ON THE INNER BOLT CIRCLE AS SHOWN ON "PLAN-REACTOR VESSEL FOUNDATION". THE STRAIN GAUGES SHALL BE INSTALLED PRIOR BEFORE AND DURING CONCRETE PLACEMENT, AS NECESSARY AND ARE TO PROTECTED PROPERLY FOR DUE TIME AFTER THE CASTING. DETAILS STRADDLED TO THE 20" DIAMETER ANCHOR BOLTS. THE STRAIN GAUGES SHALL BE "SR-4 TYPE FWT-2500-350W" AS MANUFACTURED BY BALDWIN-LIMA-HAMILTON. THE STRAIN GAUGES AND ASSOCIATED INSTRUMENTATION SHALL HAVE A SENSITIVITY OF TEN (10) MICRO INCHES PER INCH AND AN ACCURACY OF TWENTY-FIVE (25) MICRO INCHES PER INCH. STRAIN GAUGES SHALL BE PRE-CHECKED, CALIBRATED AND ADJUSTED BY AN ENGINEERING TESTING LABORATORY QUALIFIED TO ENGAGE IN WORK TYPE OF WORK. THE TESTING LABORATORY SHALL SUBMIT INSTRUMENTATION DETAILS AND DRAWINGS TO THE ENGINEER PRIOR TO INSTALLATION OF THE STRAIN GAUGES. THE WIRING CONNECTION OF THE STRAIN GAUGES TO THE UNITS SHALL ACCOMMODATE A DIFFERENTIAL VERTICAL DISPLACEMENT OF 1.500 INCHES. STRAIN GAUGES SHALL BE WIRED TO A FOUR (4) ACTIVE ARM STRAIN GAUGE RESISTANCE BRIDGE. INSTRUMENTATION EQUIPMENT SHALL BE CAPABLE OF CONTINUOUS APPROXIMATELY ZERO DISTURBANCE PER INCH. THE STRAIN GAUGES SHALL BE USED TOTAL OF TEN TYPE OF POST-TENSIONING OPERATIONS AND ONE EIGHTH PRIOR TO START-UP, AND ONE YEAR AFTER POST-TENSIONING. BALANCING TIME PERIODS FIXED. ALL CALIBRATION AND STRAIN DATA SHALL BE SUBMITTED TO THE ENGINEER.
5. FOR POST-TENSIONING NOTES TO "EMBEDDED ANCHOR BOLT POST-TENSIONING PROCEDURE". BONDED REINFORCING SHOWN ON "PLAN-REACTOR VESSEL FOUNDATION" IS THE SUBJECT OF TENSIONING OF THE ANCHOR BOLTS.

REFERENCES:-

SC-421-015-6 REACTOR VESSEL FOUND.-MISCELLANEOUS DETAILS
SC-421-009-1 CONCRETE BATCHING ASSY. PLT. ELEV. 91'-0"
S-421-028-1 C. CURB PLATE & CONCRETE POURED
SC-421-729 BLDG. SECTION PLAN AT ELEV. 105'-0"
SC-424-122-6 SEISMIC INSTRUMENT LIST
SC-424-169-0 SEISMIC INSTRUMENT LIST
SC-424-169-1 SEISMIC INSTRUMENT LIST
SC-424-176-0 SEISMIC INSTRUMENT LIST

NO.	REVISION	BY	CHK'D	APP'D
5	AS BUILT REV. DRWG. 421-E-27-01			
4	CHANGED 7" DRAIN PIPE TO SCH-40 (SPLICES TO "SUMP AS BUILT" CONDITION PER SCH-1-21, NOTED UNITED NOTE #3 TO INDICATED.			
3	ROTATED LOC. OF (8) S.R.I. 18° (SEE PLAN) REVISED GROUT AS INDICATED (13) PLACES	JK		
2	ADDED DRAIN PIPE INFORMATION AS IND. (8) PLACES			
1	ADDED EMBEDDED PLATE EP-1 AS INDICATED			

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
REACTOR VESSEL FOUNDATION
PLAN & SECTIONS

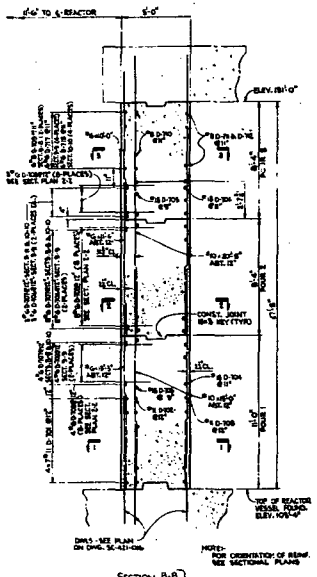
GILBERT ASSOCIATES, INC.
APPROVED FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

SCALE	4803
DRAWING NO.	E-421-015
	SC-421-015

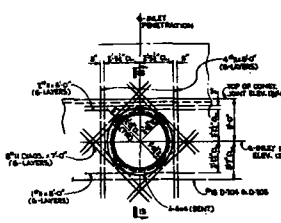
1-8-74	CONSTRUCTION
	LIMITED CONSTRUCTION AS NOTED
	PRELIMINARY NOT FOR CONSTRUCTION
	BIDDING PURPOSES ONLY
DATE	RELEASED FOR

NOTES:
1. FOR LOCATION OF STRAIN GAUGES SEE SO "S" MARKED THEM A ON "PLAN-REACTOR VESSEL FOUND."
2. INSTALL STR. 4 GAUGES AFTER TOP OF CONCRETE HAS BEEN CHIPPED AND PRIOR TO GROUTING SOLE PLATE.

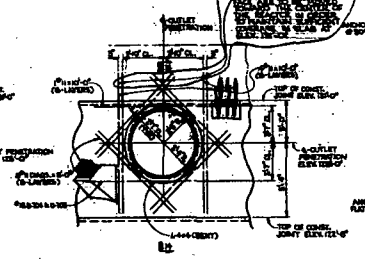
10 E-15-13



SECTION 8-8
SECTION 9-9
SECTION 10-10
AS NOTED

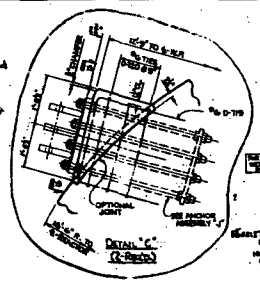


ELEVATION 11-11
(4-PLACES)

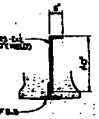


ELEVATION 12-12
(2-PLACES)

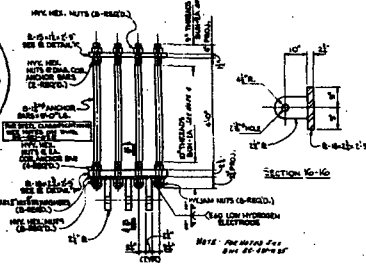
DETAIL "A"



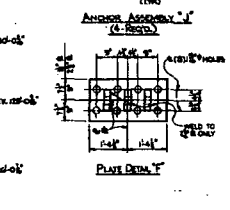
DETAIL "C"
(2-REQD.)



DETAIL "B"

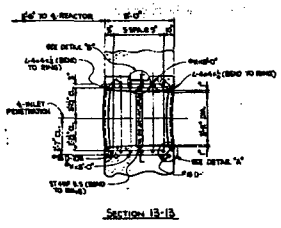


ANCHOR ASSEMBLY "J"
(4-REQD.)

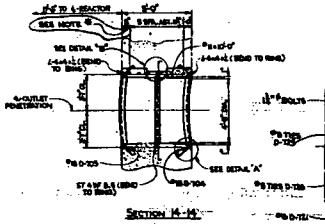


ELEVATION 15-15

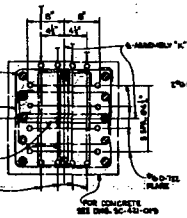
PLATE DETAIL "F"



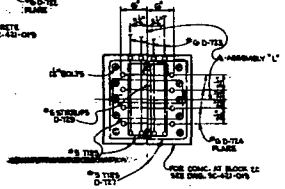
SECTION 13-13



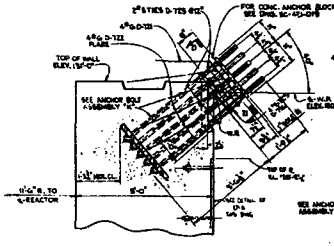
SECTION 14-14



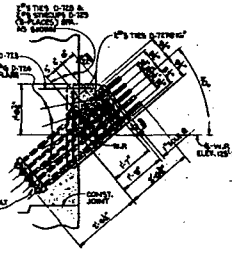
ELEVATION 21-21



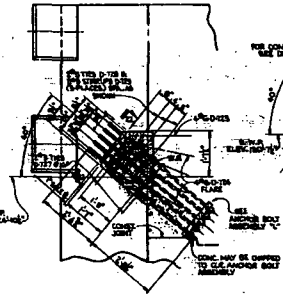
ELEVATION 22-22



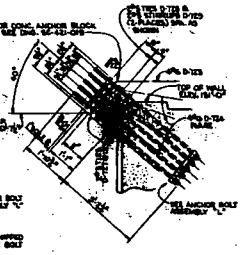
SECTION 17-17
ANCHOR BLOCK 1B



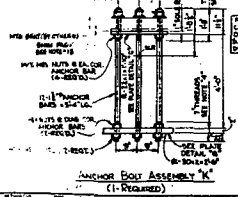
SECTION 18-18
ANCHOR BLOCK 2A



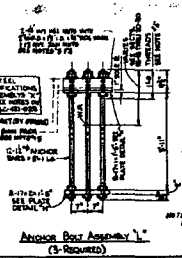
SECTION 19-19
ANCHOR BLOCK 7D



SECTION 20-20
ANCHOR BLOCK 2C



ANCHOR BOLT ASSEMBLY "K"
(1-REQUIRED)



ANCHOR BOLT ASSEMBLY "L"
(5-REQUIRED)

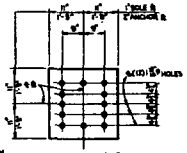


PLATE DETAIL "G"

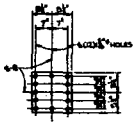
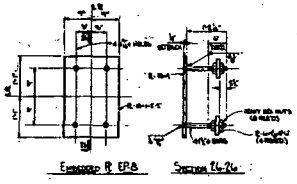


PLATE DETAIL "H"



EMBEDDED PLATE DETAIL 7A-7A
SECTION 24-24

NOTES:
1. FOR BOLT & NUTS REQUIRED FOR ANCHOR BLOCKS 1B, 1A, 2A, 2B & 2C ASSEMBLY SEE DWG. SC-421-005.
2. FOR ADDITIONAL ANCHOR & REINFORCING SEE DWG. SC-421-007.

NO.	DESCRIPTION	DATE	BY	CHK	APP
5	ADDED NOTE 9 TO ELEV. 12-12 & SECT. 14-14				
4	ADDED ...LOADS TO DETAIL "C" AS SHOWN				
3	SPEC. NO. 5 & 302 REVISED TO CHG TYP & GRADE				
2	REVISED ANCHOR BOLTS 2"-8 UNC				
1	REVISED NOTES				

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 825,000 KW

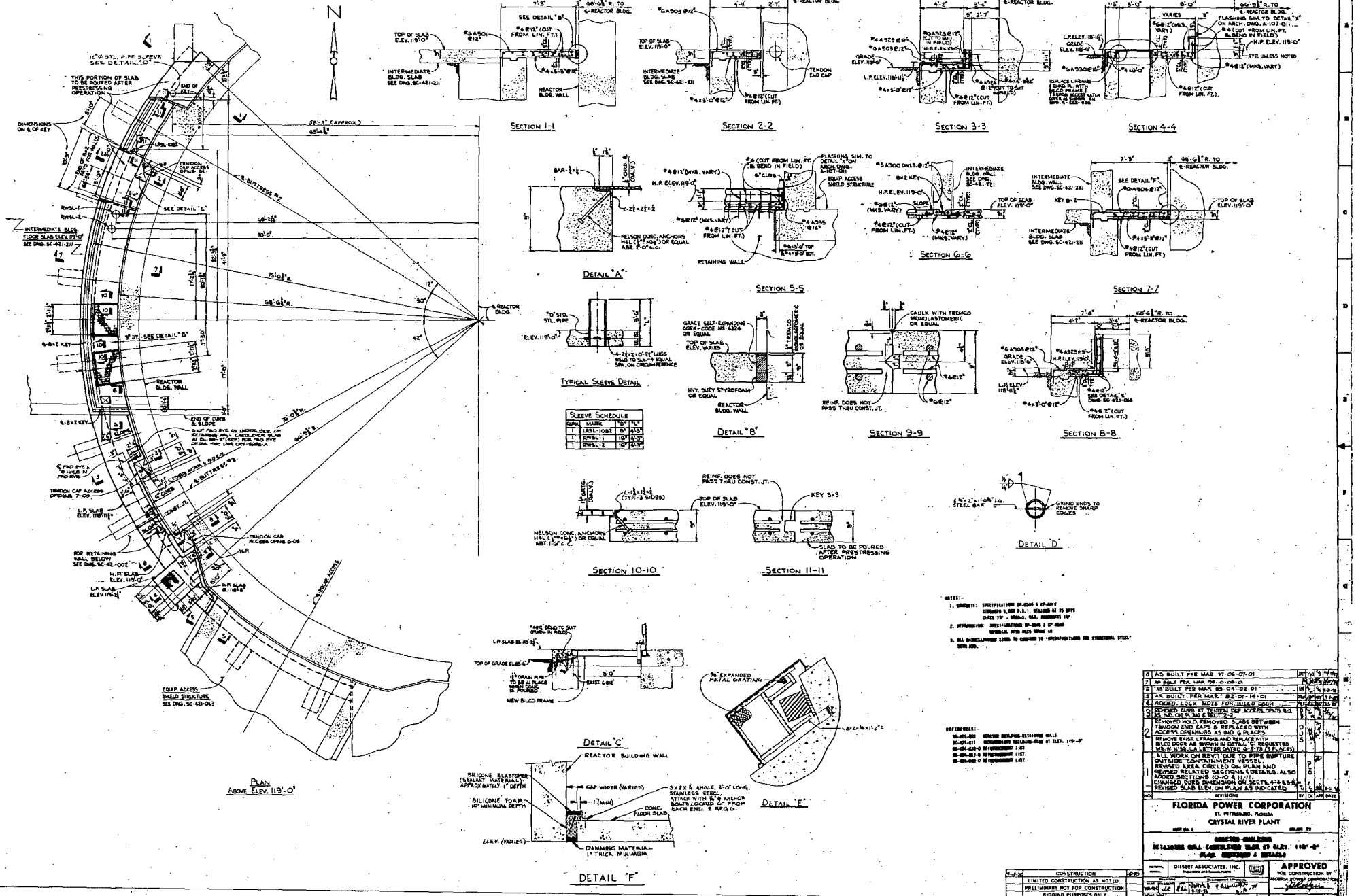
REACTOR BUILDING
REACTOR VESSEL PRIMARY SHIELD WALL
SECTIONS & DETAILS

GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

CONSTRUCTION	
LIMITED CONSTRUCTION AS NOTED	
PRELIMINARY NOT FOR CONSTRUCTION	
BIDDING PURPOSES ONLY	
RELEASED FOR	

JOB NO.	SERIAL	SHEET NO.	DRAWING NO.	REV.
1810	4205	E-421-003	SC-421-013	5



8	AS BUILT PER MAR 87-06-07-01		
7	AS BUILT PER MAR 79-10-08-01		
6	AS BUILT PER MAR 83-09-02-01		
5	AS BUILT PER MAR 82-01-14-01		
4	ADDED LOCK NOTE FOR BILCO DOOR		
3	REVISED CURB AT TENDON CAP ACCESS OPNG. & AS BUILT PER MAR 81-06-01 & SECT. 2-2		
2	REMOVED HOLD REMOVED SLABS BETWEEN TENDON END CAPS & REPLACED WITH ACCESS OPENINGS AS IND. & PLACES		
	REMOVE EXIST. I-FRAME AND REPLACE WITH BILCO DOOR AS SHOWN IN DETAIL "C" REQUESTED MR. W. USAUSLA LETTER DATED 5-23-73 (3 PLACES)		
1	ALL WORK ON REV.1 DUE TO PIPE RUPTURE OUTSIDE CONTAINMENT VESSEL. REVISED AREA CIRCLED ON PLAN AND REVISED RELATED SECTIONS & DETAILS. ALSO ADDED SECTIONS 10-10 & 11-11. CHANGED CURB DIMENSION ON SECTS. 4-4 & 5-5. REVISED SLAB ELEV. ON PLAN AS INDICATED		
NO.	REVISIONS	BY	CK APP. DATE

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT

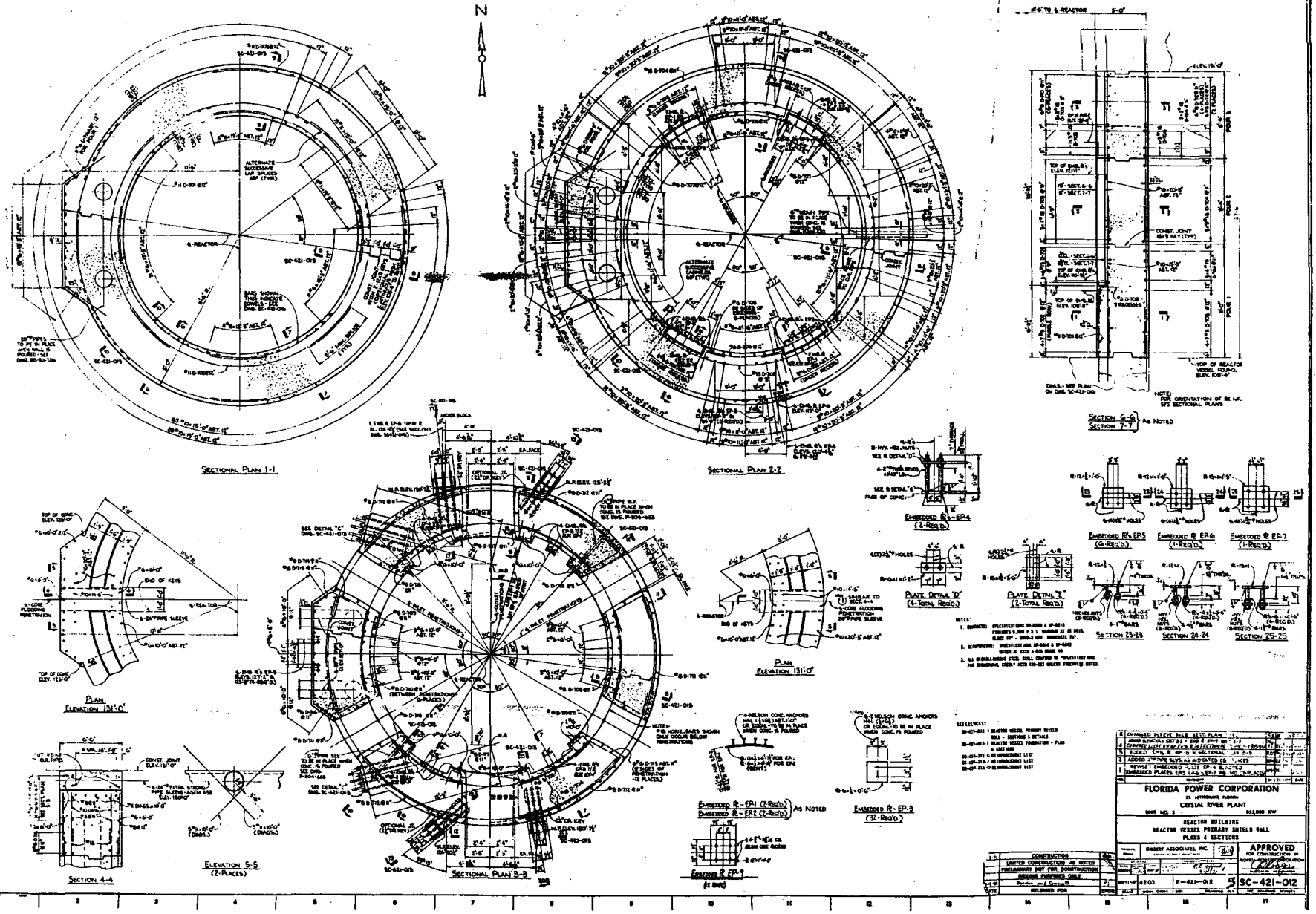
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

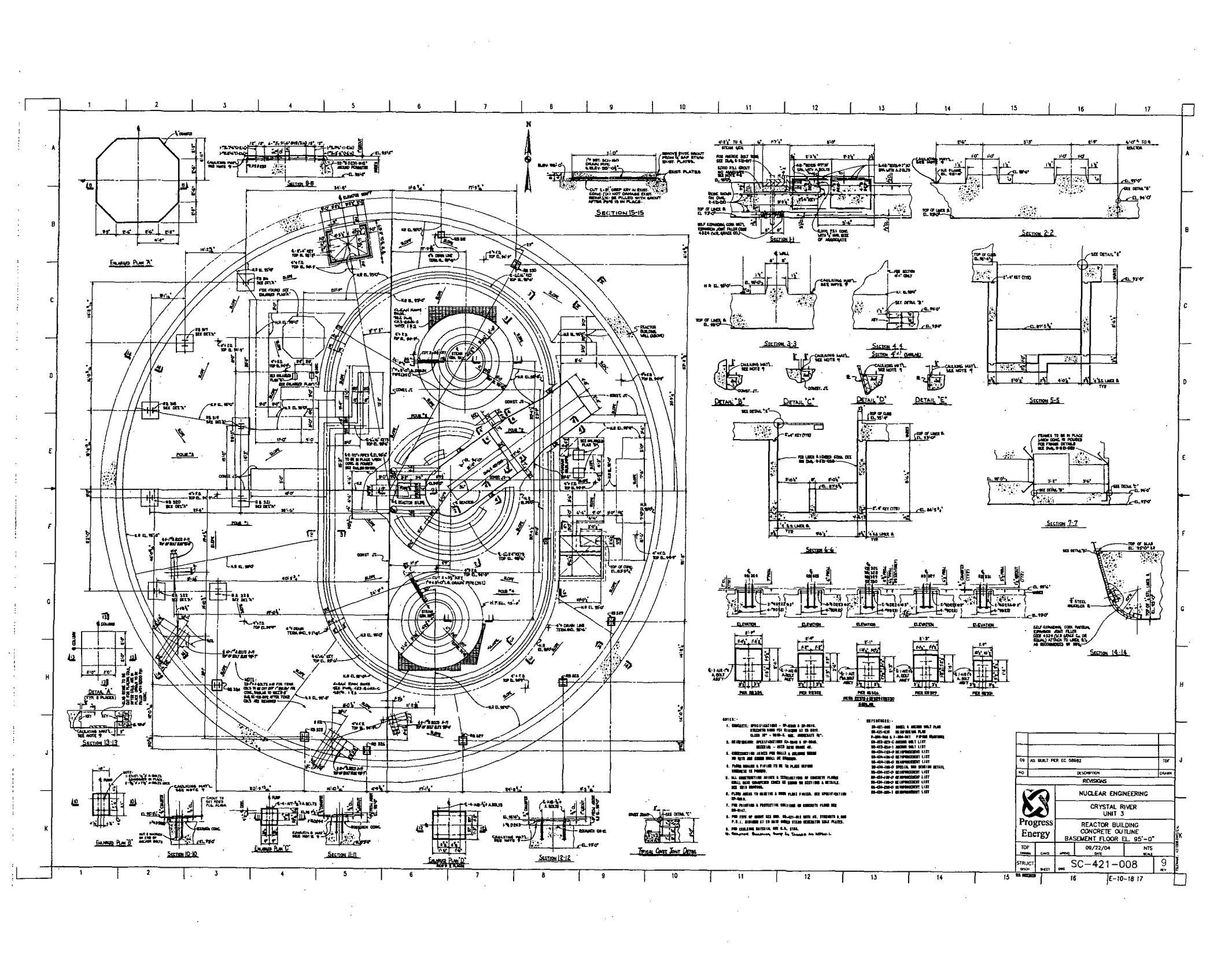
	CONSTRUCTION	
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	
DATE	RELEASED FOR	ENGR.

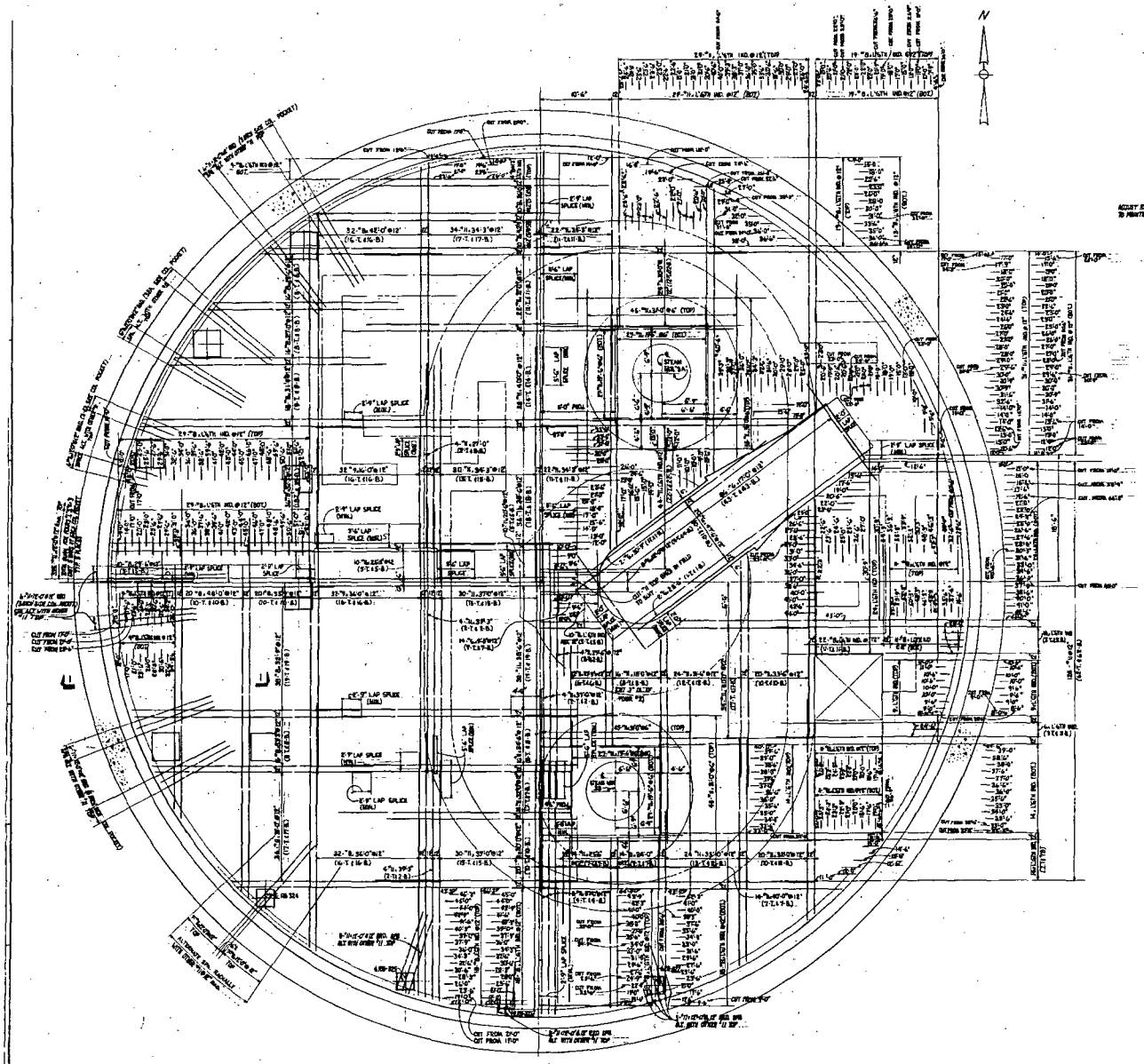
DRAWING NO. SC-421-011 8

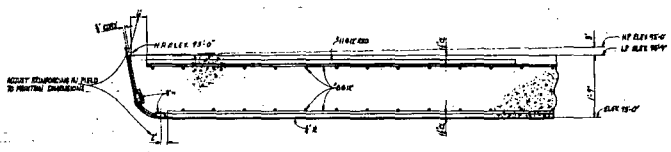
E-10-13



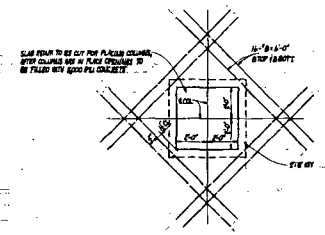
SECTIONAL PLAN 1-1
SECTIONAL PLAN 2-2
SECTIONAL PLAN 3-3
SECTION 4-4
ELEVATION 5-5
(2-PLACES)
PLAN
ELEVATION 131'-0"
SECTION 6-6
SECTION 7-7
AS NOTED
EMBEDDED R's-EP4
(2-REQ'D.)
PLATE DETAIL "D"
(4-TOTAL REQ'D.)
PLATE DETAIL "E"
(2-TOTAL REQ'D.)
EMBEDDED R's EP5
(6-REQ'D.)
EMBEDDED R EP6
(1-REQ'D.)
EMBEDDED R EP7
(1-REQ'D.)
SECTION 23-23
SECTION 24-24
SECTION 25-25
EMBEDDED R-EP1 (2-REQ'D.)
EMBEDDED R-EP2 (2-REQ'D.)
AS NOTED
EMBEDDED R-EP3
(32-REQ'D.)
EMBEDDED R EP-9
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING
REACTOR VESSEL PRIMARY SHIELD WALL
PLANS & SECTIONS
APPROVED
SC-421-012


ENLARGED PLAN 'A'
SECTION 9-8
SECTION 15-15
SECTION 1-1
SECTION 2-2
SECTION 3-3
SECTION 4-4
SECTION 4'-4' (ENLARGED)
SECTION 5-5
DETAIL 'B'
DETAIL 'C'
DETAIL 'D'
DETAIL 'E'
SECTION 6-6
SECTION 7-7
ELEVATION
SECTION 14-14
DETAIL 'A'
SECTION 13-13
ENLARGED PLAN 'B'
SECTION 10-10
ENLARGED PLAN 'C'
SECTION 11-11
ENLARGED PLAN 'D'
SECTION 12-12
TYPICAL CONST. JOINT DETAIL
NOTES:-
REFERENCES:-
09 AS BUILT PER EC 58982 TDF
NO DESCRIPTION DRAWN
REVISIONS
Progress Energy
NUCLEAR ENGINEERING
CRYSTAL RIVER UNIT 3
REACTOR BUILDING CONCRETE OUTLINE BASEMENT FLOOR EL. 95'-0"
TDF DRAWN CHKD APPVD 09/22/04 DATE NTS SCALE
STRUCT DESIGN SHEET DRG SC-421-008 9 REV
E-10-18





SECTION 1-1



DIAGONAL REINF. AT COLUMN POCKETS
(TYP. 8 PLACES)

NOTES:-
1. THIS DRAWING IS TO BE ORDERED IN CONJUNCTION WITH DRAFT BUILDING BASEMENT CONCRETE DWG. NO. SC-421-008.

NO.	REVISIONS	BY	CK	APP	DATE
1	GENERAL REVISION				1-4-71

FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 — 855,000 KW

REACTOR BUILDING
REINFORCEMENT PLAN
BASEMENT FLOOR EL. 95'-0"

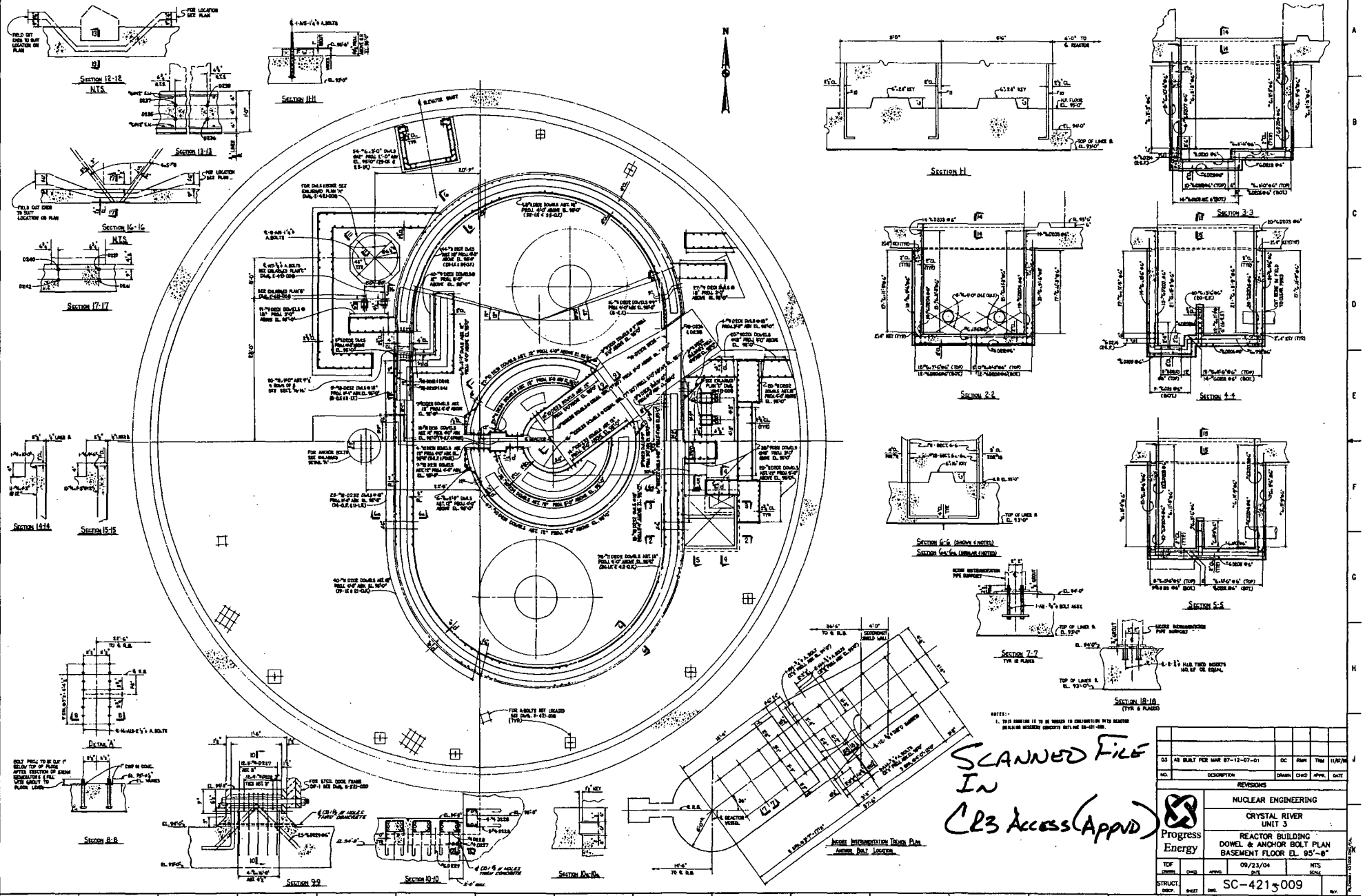
GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

DATE	RELEASED FOR	ENGR.
9-25-70	CONSTRUCTION	JEJ
	LIMITED CONSTRUCTION AS NOTED	
	PRELIMINARY NOT FOR CONSTRUCTION	
	BIDDING PURPOSES ONLY	

SCALE	WORK ORDER	SIZE	DRAWING	REV.	PFC DRAWING NUMBER
	4203	E-421-010		1	SC-421-010

16E-10-13



SCANNED FILE IN CR3 Access (Appvd)

NO.	DESCRIPTION	DRAWN	CHKD	APPR.	DATE
03	AS BUILT PER MAR 07-12-07-01	DC	RWH	TRM	11/8/07

REVISIONS

Progress Energy

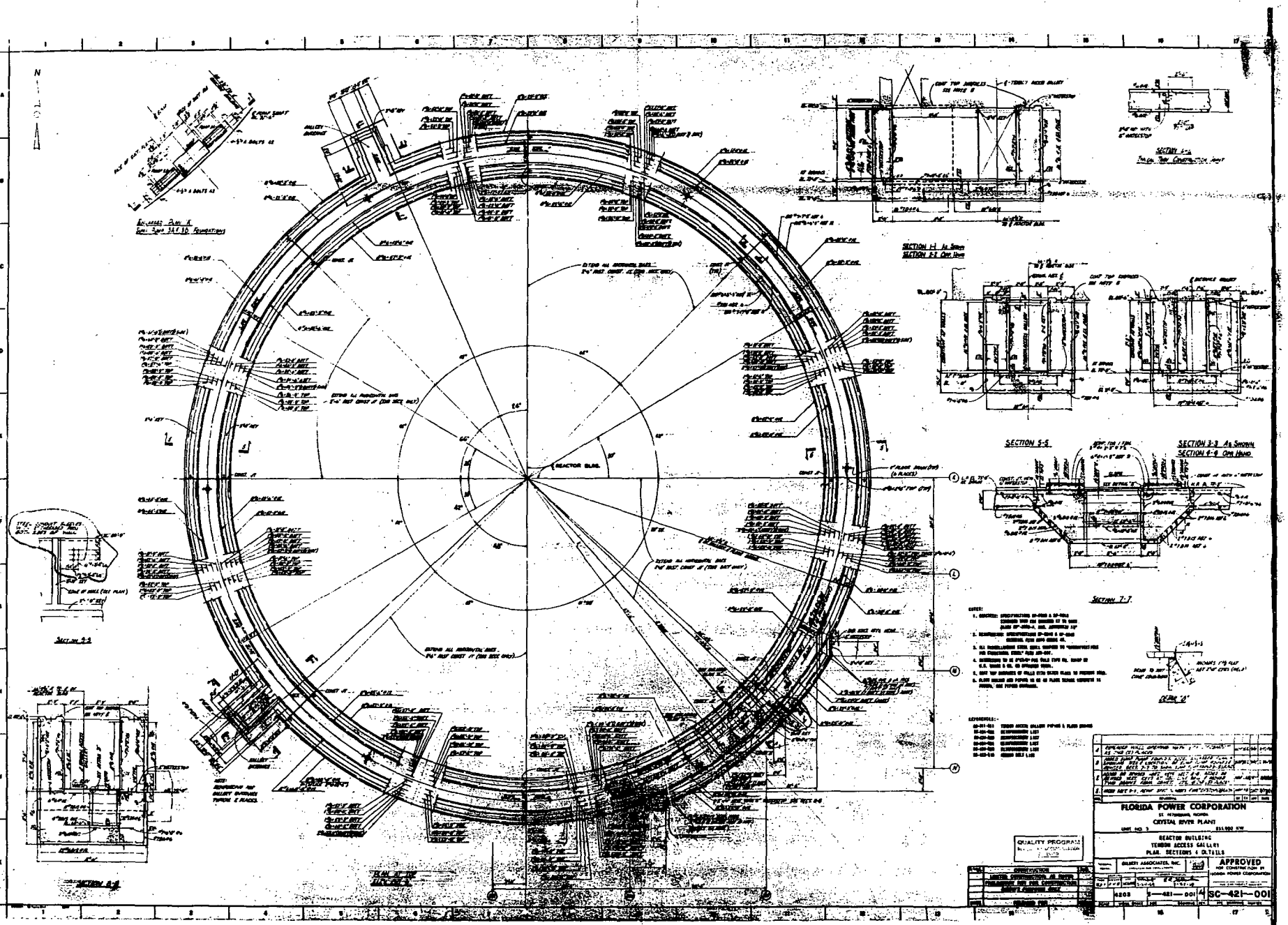
NUCLEAR ENGINEERING

CRYSTAL RIVER UNIT 3

REACTOR BUILDING DOWEL & ANCHOR BOLT PLAN BASEMENT FLOOR EL. 95'-6"

TDF		09/23/04	NTS
DRAWN	CHKD	APPVD. DATE	SCALE
STRUCT. DISCP.	SHEET	SC-421 009	REV.

E-10-13



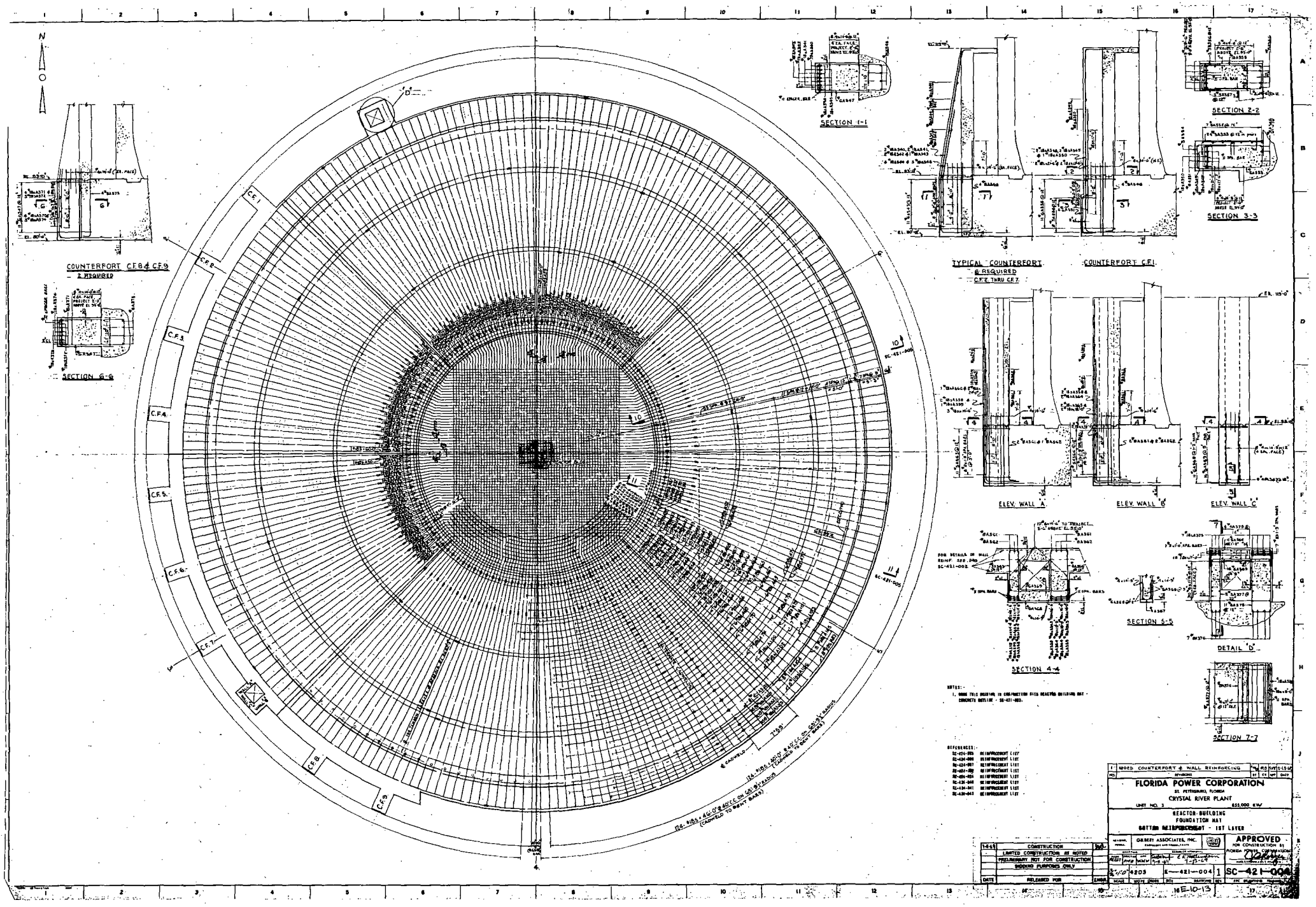
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3 825,000 KW

REACTOR BUILDING
TENDON ACCESS GALLERY
PLAN, SECTIONS & DETAILS

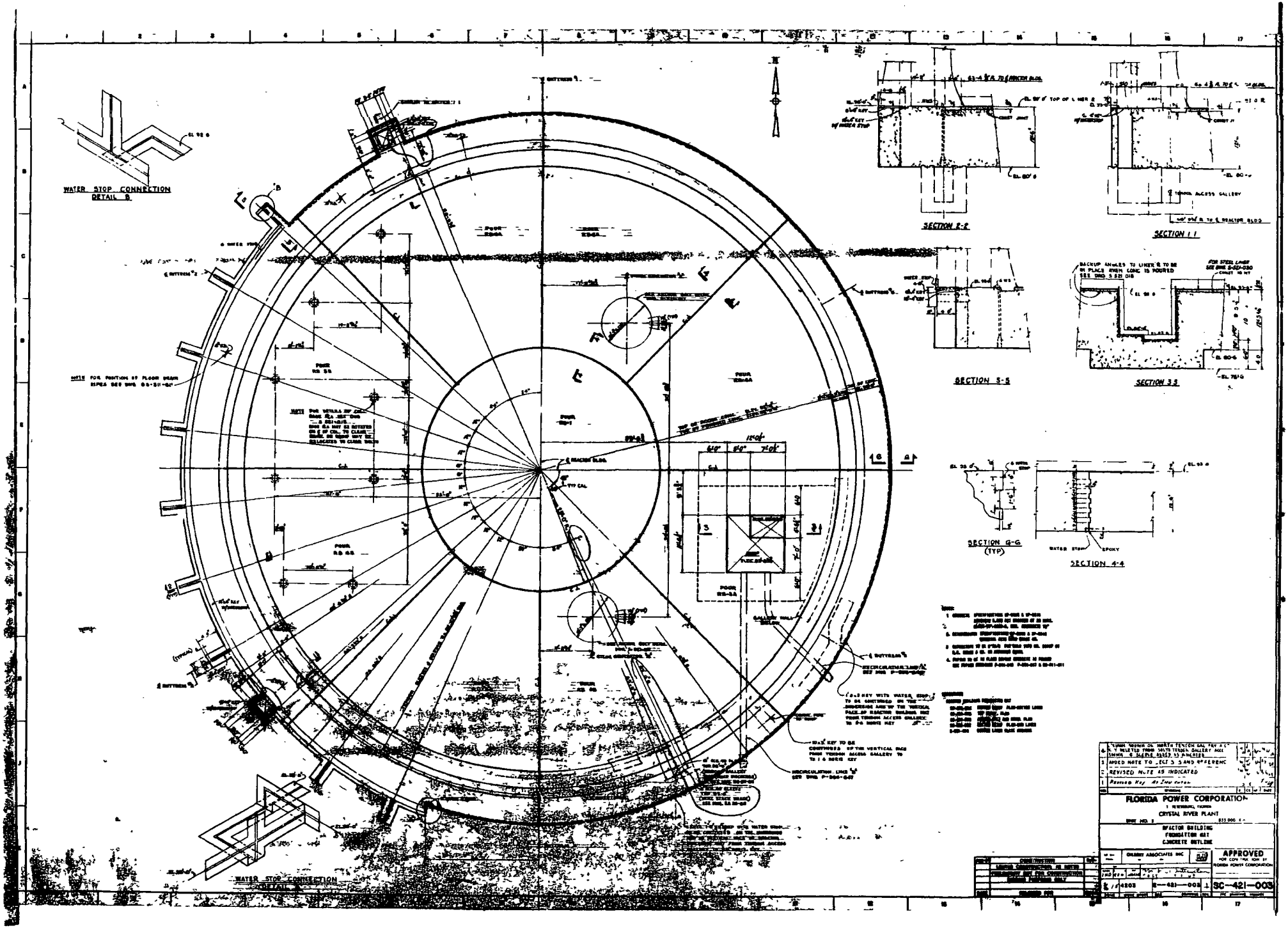
GILBERT ASSOCIATES, INC.

APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION

4503 5—421—001 4 SC-421—001



COUNTERFORT C.F.8 & C.F.9
2 REQUIRED
SECTION 6-6
SECTION 1-1
SECTION 2-2
SECTION 3-3
TYPICAL COUNTERFORT
6 REQUIRED
C.F.2 THRU C.F.7
COUNTERFORT C.F.1
ELEV. WALL 'A'
ELEV. WALL 'B'
ELEV. WALL 'C'
SECTION 4-4
SECTION 5-5
DETAIL 'D'
SECTION 7-7
C.F.1
C.F.2
C.F.3
C.F.4
C.F.5
C.F.6
C.F.7
C.F.8
C.F.9
NOTES:
1. ADDED THIS DRAWING IN CONJUNCTION WITH REACTOR BUILDING MAT CONCRETE OUTLINE - SC-421-002.
REFERENCES:
SC-421-005 REINFORCEMENT LIST
SC-421-006 REINFORCEMENT LIST
SC-421-007 REINFORCEMENT LIST
SC-421-009 REINFORCEMENT LIST
SC-421-004 REINFORCEMENT LIST
SC-421-040 REINFORCEMENT LIST
SC-421-041 REINFORCEMENT LIST
SC-421-043 REINFORCEMENT LIST
124-#18S x 46'-0" @ 40°CC ON 651'-8½" RADIUS (CADWELD TO BENT BARS)
124-#18S x 46'-0" @ 40°CC ON 651'-3½" RADIUS (CADWELD TO BENT BARS)
CONSTRUCTION
LIMITED CONSTRUCTION AS NOTED
PRELIMINARY NOT FOR CONSTRUCTION
DESIGN PURPOSES ONLY
RELEASED FOR
ADDED COUNTERFORT & WALL REINFORCING
REVISIONS
FLORIDA POWER CORPORATION
ST. PETERSBURG, FLORIDA
CRYSTAL RIVER PLANT
UNIT NO. 3
655,000 KW
REACTOR BUILDING
FOUNDATION MAT
BOTTOM REINFORCEMENT - 1ST LAYER
GIBBS & HILL, INC.
APPROVED
FOR CONSTRUCTION BY
FLORIDA POWER CORPORATION
4203
E-421-004
1
SC-421-004
16 E-10-13


WATER STOP CONNECTION DETAIL B
SECTION E-E
SECTION L-L
SECTION S-S
SECTION 3-3
SECTION G-G (TYP)
SECTION 4-4
WATER STOP CONNECTION DETAIL A
FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
REACTOR BUILDING FOUNDATION MAT CONCRETE OUTLINE
APPROVED
SC-421-003