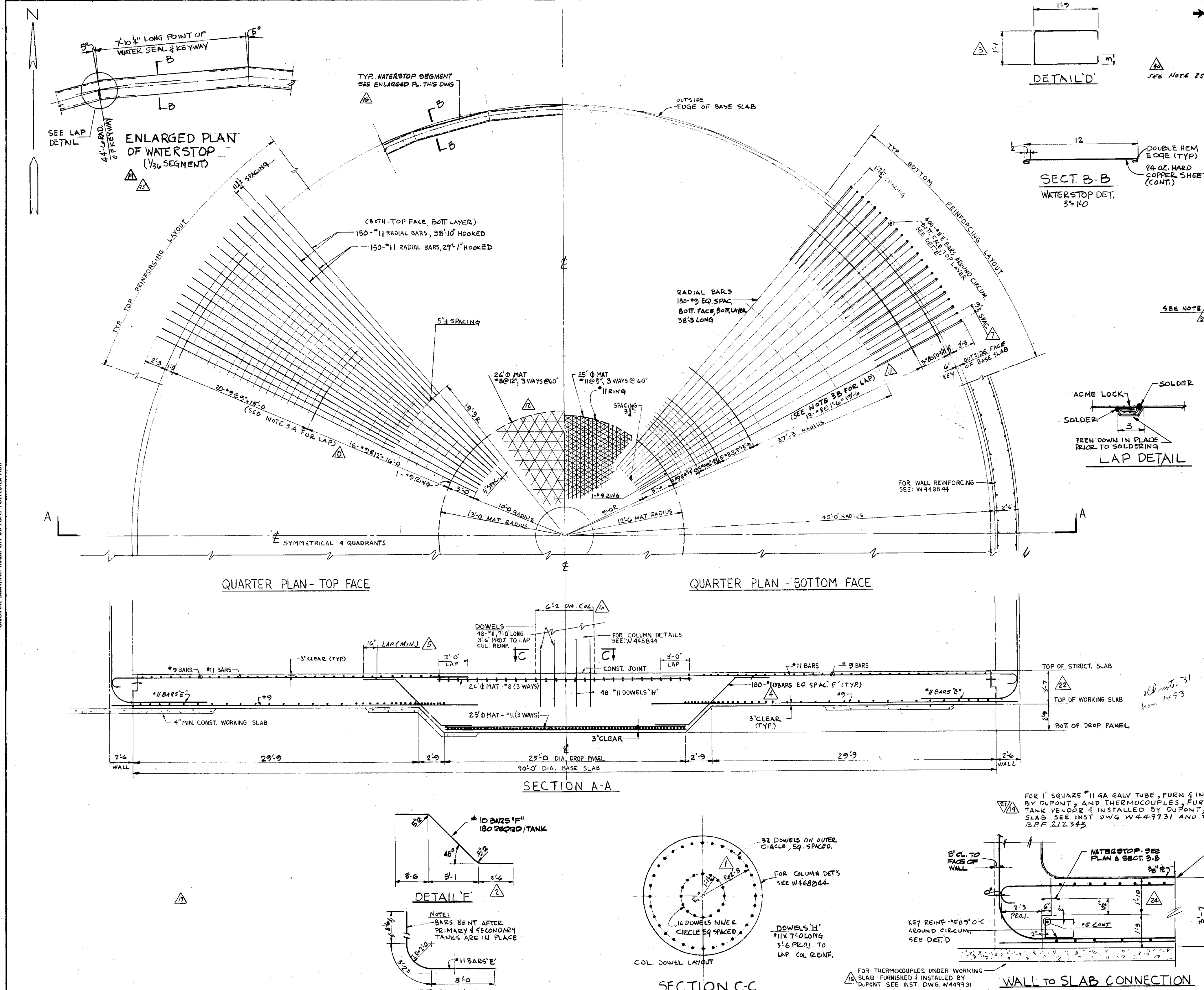
→ ANALYZE FOR **SAFETY, ECOLOGY AND MINIMUM ESSENTIAL DESIGN** ←



CONCRETE GENERAL NOTES

SEE NOTE 25 & 29

1. ALL CONCRETE TO DEVELOP 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS - USE CLASS 'C' CONCRETE PER STD SPEC SB6U.
2. REINFORCEMENT STEEL TO BE IN ACCORDANCE WITH STD SPEC SB4U.
3. STAGGER SPLICE OF CIRCULAR REINF BARS IN BASE & TOP SLABS
   A. TOP BARS - 5'-4 LAP
   B. BOTT. BARS - 3'-10 LAP
4. STAGGER SPLICE OF CIRCULAR REINF BARS IN WALL: 5'-10 LAP.
5. MINIMUM CURING PERIOD OF 14 DAYS IS REQUIRED BETWEEN FINAL POUR OF WALLS & INITIAL POUR OF ROOF SLAB.
6. THE SECONDARY LINER IS TO SERVE AS A FORM FOR THE CONC. TANK WALL & TOP SLAB.
7. THE 4" CONCRETE CONST WORKING SLAB IS TO BEAR ON UNDISTURBED SOIL. ANY VOIDS CAUSED BY OVER EXCAVATION ARE TO BE FILLED WITH LEAN CONCRETE. FOR LOCATION & ELEV. SEE DWG W 449843.
8. THE WATERSTOP AT BASE SLAB-WALL JOINT IS TO BE 24 OZ HARD COPPER SHEET CONTINUOUS WITH ALL SEAMS BRAZED WATERTIGHT.
9. THE OUTSIDE SURFACE OF THE CONCRETE WALLS FROM TOP OF WORKING SLAB TO TOP OF TANK IS TO BE DAMPPROOFED PER DUPONT ENG. SPEC SBIL.
10. THE TANK ROOF & ALL SURFACES OF PADS, SHIELDING BLOCK ETC SHALL BE COATED WITH "FORMULA #1287-TYPE B, 36% SOLID CONC. SEALANT, MANUFACTURED BY THE RAYLITE COMPANY" BOX 691 WILM, DEL., OR APPROVED EQUAL. (SEE NOTE NO 31)
11. BASE MAT DESIGNED FOR 5000 PSF SOIL BEARING.
12. DESIGN ACTIVE LATERAL SOIL PRESSURE = 60 PSF/FT OF DEPTH (SEE NOTE 26)
13. THE CONCRETE TOP SLAB IS TO HAVE A 4'-0 MIN. THICKNESS FOR SHIELDING.
14. TOP SLAB DESIGN LOADS: (SEE NOTE 23)

SLAB DEAD LOAD =	600 PSF
LIVE LOAD + PAD + EQUIP. =	300
TOTAL =	900 PSF

15. THE ASSUMED TEMPERATURE GRADIENTS THROUGH THE CONC. TANK USED FOR DESIGN ARE AS FOLLOWS:

BOTTOM SLAB	100°F
CYL. WALL - LOWER TWO FT.	108°F
CYL. WALL - REMAINDER	30°F
TOP SLAB	50°F

16. FOR LOCATION OF TANK ℄'S SEE W449654.
17. ALL WORKMANSHIP PROVIDED BY DUPONT CONSTRUCTION & MATERIAL FURNISHED BY DUPONT CONSTRUCTION TO BE IN ACCORDANCE WITH SPEC. 3557.
18. REINFORCING BARS IN BASE MAT, WALLS, COLUMN AND ROOF SHALL BE PLACED TO COVER DIMENSIONS SHOWN WITHIN A TOLERANCE OF ± ½"
19. PROVISIONS OF STD. SPEC SB9U SHALL BE STRICTLY ADHERED TO.
20. VIBRATORS ARE TO PENETRATE PREVIOUS LAYER OF POUR.
21. CONSTRUCTION TO CHECK, PROCESS, H&V, INSTRUMENTATION, ELECTRICAL DRAWINGS, ETC. FOR EMBEDMENTS IN ANY CONC DRAWINGS OF THESE TANKS.
22. CONSTRUCTION TO PROMINENTLY MARK ON TANKS:
    A. TANK TOP MAXIMUM LIVE LOAD LIMIT.
    B. RISER IDENTIFICATION NUMBERS.
    C. WEIGHT OF ALL RISER PLUGS.
23. THE PRIMARY TANK VENTILATION SYSTEM IMPOSES A MAXIMUM NEGATIVE PRESSURE WITHIN THE TANK OF 0.20 PSI. UNDER THIS OPERATING CONDITION, THE ALLOWABLE LIVE LOAD ON THE TANK TOP SHOULD NOT EXCEED 275 PSF.
24. TO OBTAIN THE TOTAL STRESSES IN THE CONCRETE TANK, DYNAMIC MOMENTS AND FORCES WERE TAKEN FROM BLUME REPORT PHASE II EARTHQUAKE ANALYSIS DATED JUNE 1973.
25. SEE ELECTRICAL DWG. W700428 FOR GROUNDING DETAILS.
26. FOR ACTIVE LATERAL SOIL PRESSURE VALUE SEE MUESER-RUTLEDGE LETTER DATED 4-2-75 ON PROJ. 951463.
27. USE TYPE I PORTLAND CEMENT WITHOUT ADDITIVES UNLESS OTHERWISE APPROVED BY DESIGN.
28. TOP SLAB OF TANK TO HAVE TYPE 3 FINISH PER SB10U
29. IF HIGHER STRENGTH CONCRETE IS USED IN TOP SLAB, APPLY MASTER BUILDERS "CONFILM" AFTER SCREEDING AND AGAIN AFTER FINISHING IN ORDER TO PREVENT EXCESSIVE SURFACE EVAPORATION CAUSED BY SUN & WIND IN ADDITION TO "CONFILM", WET CURE FOR A MINIMUM OF SEVEN (7) DAYS
30. **FOR SOIL INFORMATION SEE MUESER-RUTLEDGE REPORT DATED 1-17-75 UNDER PROJECT 951463**
31. (ADD TO NOTE NO. 10) APPLY 2 COATS, COLOR: HELLGATE GREEN. ALLOW A MINIMUM OF 72 HRS CURING TIME BEFORE APPLYING SECOND COAT.

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BLDG.	PROJ.	DA	DWG. TYPE		LATEST REVISION
241-12H	951463	2	43	W448847	49

SAVANNAH RIVER PLANT
BLDG. 241-12H TANKS 35, 36 & 37
ADDITIONAL WASTE STORAGE TANKS
BASE SLAB REINFORCING
CONCRETE

ENGINEERING DOC. CONTROL - SRS
00112094

REFERENCE DRAWINGS	
W448849	GENERAL ARRANGEMENT
W448844	WALL & COLUMN SEC. & DETAILS
W449654	CIVIL PLOT PLAN
W449843	CIVIL EXCAV. PLAN
W449931	INSTRUMENT
W700428	ELECTRICAL

REFERENCE STANDARDS
SB4U
SB6U
SPEC. 3557
BLUME REPORT

PROJECT	951463	
SCALE	¼"=1'-0 UNLESS NOTED	DATE
DRAWN	R. MATERNIAK	5-31-73
CHECKED	GALLAGHER	5-7-74
APPROVED-INITIAL CONSTR. RELEASE		5-8-74
APPROVED-FINAL		5-8-74

E. I. DU PONT DE NEMOURS & COMPANY
WILMINGTON, DELAWARE
ENGINEERING DEPARTMENT
W 448847

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PROJ. NO.	REVISIONS
951463	47 ADDED NOTE
951463	49 ADDED NOTE NO. 31
951463	30 ADD NOTE 21 & 22
	32 ADD NOTE 23; 33 ADD NOTE 24
	34/35 RELOCATED DETAIL
951463	36 NOTE REVISED - THE WORD DESIGN WAS ASSUMED - 60 PSF WAS 40 PSF
	37/39 NOTES ADDED
	40/41 NOTES ADDED
951463	43/44 DELETED NOTE 4, REVISED NOTE 12; ADDED NOTE 28
	45 ADDED NOTE 29; 46 ADDED REFER. TO NOTE 29
951463	16/17 REV. NOTE & WATERSTOP & SEAM DET; 18/19 REMOVED WATERSTOP & SEAM DET, ADDED HARD WAS 16 OZ SOFT
	21 ADDED NOTE #18; 23/24 REVISED NOTE; 3'-7 WAS 3'-6; 1'-10 WAS 1'-9
951463	25 REMOVED 1" GROUT
951463	26 SPEC. SBIL WAS SECT BL-SPEC 3557
	ADD EL. 782.33; ADD NOTES #19 & #20
951463	ALLOW SOIL BRG WAS 8000 PSF
951463	2'-8 WAS 2'-9; 3'-6 WAS 3'-0
	1'-1 WAS 1'-3; #10 bar WAS #11 bar
	ADD LAP; ADD COL. DIA; ADD SPAC
	ADD. GEN. NOTES; REM NOTES
	NOTE 3A & 3B WAS NOTE 1A & 1B
	REM #8 RING
951463	ADD. NOTE #17
951463	ADDED NOTE

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