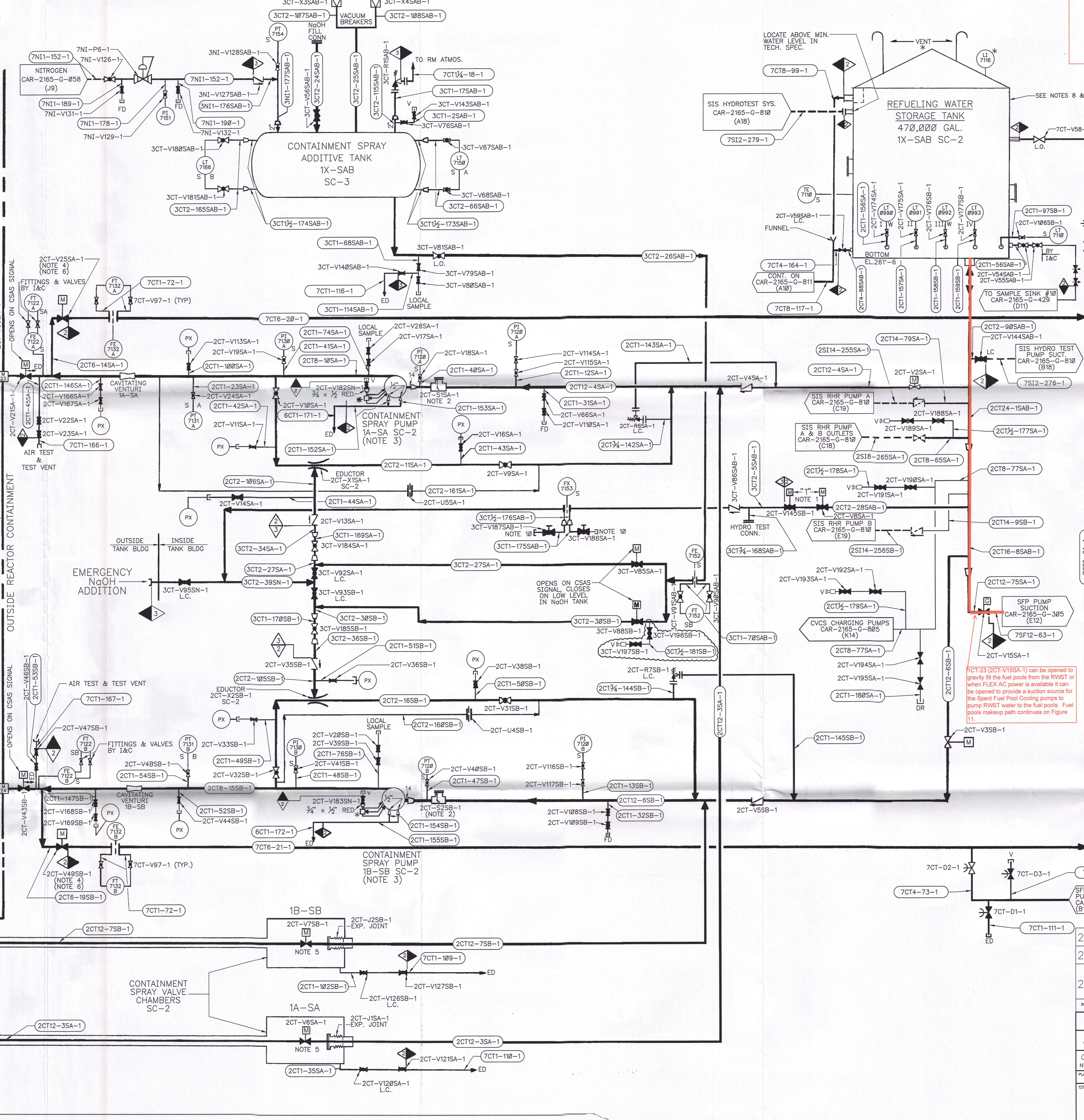
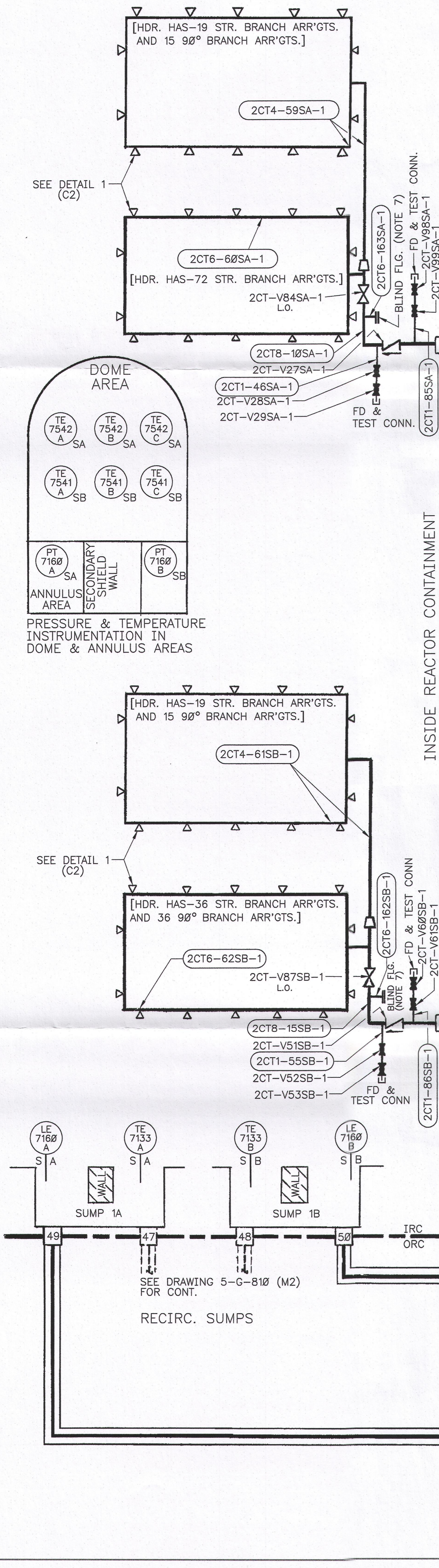


ARR'GT.	(A) SOURCE LINE NO'S	NO. OF NOZZLES	(B) BRANCH LINE NO'S
STRAIGHT BRANCH	2CT4-59SA-1	19	2CT1-148SA-1
	2CT6-68SA-1	72	2CT1-150SB-1
	2CT4-61SB-1	19	2CT1-149SA-1
90° BRANCH	2CT4-59SA-1	15	2CT1-151SB-1
	2CT6-62SB-1	36	

DETAIL 1



- NOTES
1. OVERRIDE TO CLOSE ON "I" SIGNAL DURING TESTING.
  2. TEMPORARY STRAINER FOR INITIAL FLUSHING. REMOVE BEFORE STARTUP.
  3. PUMP STARTS ON CSAS (CONTAINMENT SPRAY ACTUATION SIGNAL) IN CASE OF COINCIDENT LOSS OF OFFSITE POWER PUMP WILL START IN THE SECOND LOAD BLOCK OF THE EMERGENCY GENERATOR.
  4. VALVE NORMALLY CLOSED WITH THE CIRCUIT BREAKER LOCKED OPEN TO ENSURE NO POWER TO ACTUATE THE MOTOR OPERATOR ON THE VALVE.
  5. DURING TESTING, LOCK CIRCUIT BREAKER OPEN TO KEEP THE VALVE IN CLOSED POSITION.
  6. WITH A GIVEN TRAIN IN THE TEST MODE CLOSE THE RESPECTIVE TRAIN VALVES ON "T" SIGNAL.
  7. DRAIN CONNECTION TO REFUELING CAVITY DURING CHECK VALVE TESTING.
  8. HEAT TRACING ON THE TANK IS PROVIDED BY MEANS OF HOPPER HEATERS FOR FREEZE PROTECTION AND TEMPERATURE MAINTENANCE.
  9. THE TANK IS PROVIDED WITH THERMAL INSULATION AND PROTECTIVE ALUMINUM JACKETING AROUND THE WHOLE CIRCUMFERENCE AND UP TO A HEIGHT OF TWENTY-THREE (23) FEET FROM BOTTOM OF THE TANK.
  10. THREADED NIPPLE & CAP TO BE PROVIDED FOR OPERATIONS TO INSTALL TEMPORARY GAUGE AT TIME OF TESTING.

- REFERENCE DRAWINGS
- |                        |                |
|------------------------|----------------|
| LIST OF DRAWINGS       | CAR-1364-B-125 |
| PIPING LINE LIST       | CAR-1364-B-070 |
| VALVE & SPECIALTY LIST | CAR-1364-B-069 |
| INSTRUMENT LIST        | CAR-2166-B-432 |
| FLOW DIAGRAM LEGEND    | CAR-2165-G-041 |

27	INCORPORATED: EC# 74207 (H10,H11,H12)	ELECTRONICALLY SIGNED			
26	INCORPORATED: EC# 50619 (H11)	ELECTRONICALLY SIGNED			
25	5/4/03 INCORPORATED EC# 50961 (G14, G15, H13, H14, H15, I14, I15, J15); AND EC# 51598 (F15, F16)	JAP WKD CHG			
REV	DATE	DESCRIPTION	DRN	CHK	APPROV
THIS DRAWING HAS BEEN PRODUCED AND IS CONTROLLED ON THE CAD/E SYSTEM. ANY REVISIONS TO THIS DOCUMENT SHOULD BE DONE USING THE CAD/E SYSTEM TO ASSURE PROPER CONTROL OF THE ELECTRONIC DRAWING CHANGE.					
NUCLEAR SAFETY RELATED (0-LIST) YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/> F.P.-0 <input type="checkbox"/> R.W.-0 <input type="checkbox"/>					
CAROLINA POWER & LIGHT COMPANY NUCLEAR ENGINEERING DEPARTMENT - RALEIGH, N.C.					<b>CP&amp;L</b>
PLANT: HARRIS NUCLEAR PROJECT - UNIT 1					SCALE: NONE
TITLE: FLOW DIAGRAM CONTAINMENT SPRAY SYSTEM UNIT 1					DWG NO. CAR-2165 G-0050