



- NOTES:**
1. VERIFY SIZES TO PREVENT EXCESSIVE PRESSURE DROPS.
 2. THE DWP REPRESENTATION IS NOT INTENDED TO ILLUSTRATE A STRAIN LINE DESIGN.
 3. SEE 3.0 HES S/S STANDARD DESIGN CRITERIA FOR LAYOUT CONSIDERATIONS.
 4. PROVIDE 1/2" MIN. FLARE RESTRICTION FOR TRANSITION FROM SAFETY CLASS 1 TO SAFETY CLASS 2.
 5. LOCATE CONNECTION ABOVE WATER LEVEL.
 6. LOCATE TAPS AT SAME ELEVATION UNLESS OTHERWISE NOTED ABOVE. SETTING CONNECTION BETWEEN EACH TAP LOCATION.
 7. LOCATE CONTAINMENT SUMP ISOLATION VALVE ABOVE ELEVATION OF SUMP ISOLATION VALVE.
 8. ISOLATE SUMP STORAGE TANK SUMP ONCE STARTED.
 9. SEE 3.0 HES S/S STANDARD DESIGN CRITERIA FOR CONTAINMENT ISOLATION.
 10. LOCATE TEST CONNECTION AS CLOSE AS POSSIBLE TO ISOLATION VALVE TEST CONNECTION TO BOTTOM OF PIPING TO FACILITATE DRAINING OF LINES.
 11. TEMPORARY BLEED PLUMBING WITH OR WITHOUT TEST CONNECTIONS SHALL BE INSTALLED ON INSTRUMENT FLANGES UNLESS NOTED.
 12. ALL INSTRUMENTS ON THIS PID HAVE STREAM DESIGNATOR SI UNLESS OTHERWISE NOTED.
 13. ALL INSTRUMENTS ON THIS PID HAVE IDENTIFICATION NUMBER DETAILS FOR IDENTIFICATION NUMBER DETAILS UNLESS OTHERWISE NOTED.
 14. REFER TO GDS DRAWINGS AND GDS/PROCESS FOR IDENTIFICATION NUMBER DETAILS.
 15. WELD EXISTING BETWEEN AREAS COMPARTMENTS FOR IDENTIFICATION NUMBER DETAILS SHALL BE COVERED BY THE PIPING CLASS.

- REFERENCES:**
1. FOR PIPING AND INSTRUMENT SYMBOLS SEE DRAWINGS 05000 & 07000.
 2. INSTRUMENT DRAWING FOR IDENTIFICATION NUMBER DETAILS SEE DRAWING 05000-01.

ANSTEC APERTURE CARD

NO.	DATE	REVISION	BY	CHK	REV	DV	NA	SE	PE	NO.	DATE	REVISION	BY	CHK	REV	DV	NA	SE	PE	
14	5-7-93	INCORP. DCH M002658								28	9-17	INCORP. DCH 578319								
13	12-18-92	INCORP. MDCN 89199-29 & MDCN 88911-87								10	11-6-90	INCORP. DCH 9683226								
12	1-8-91	INCORP. DCH M0-160								18	8-19-90	INCORP. DCH 9683454								
11	5-31-90	INCORP. DCH 8948-895A								17	3-24-90	INCORP. PCH 946071								
10	8-27-88	H&P ASSUMES DESIGN CHANGE CONTROL & INCORP. NCR'S 8881478 & 8881772								15	12-15-93	INCORP. PCH 183486-A								
9-2	2-24-83	ISSUED FOR CONSTRUCTION								13	8-25-93	INCORP. DCH M0-2774								

HOUSTON LIGHTING & POWER COMPANY

PIPING AND INSTRUMENTATION DIAGRAM
SAFETY INJECTION SYSTEM

09/22/1997

SCALE: 1" = 20'

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PDR RIDS

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