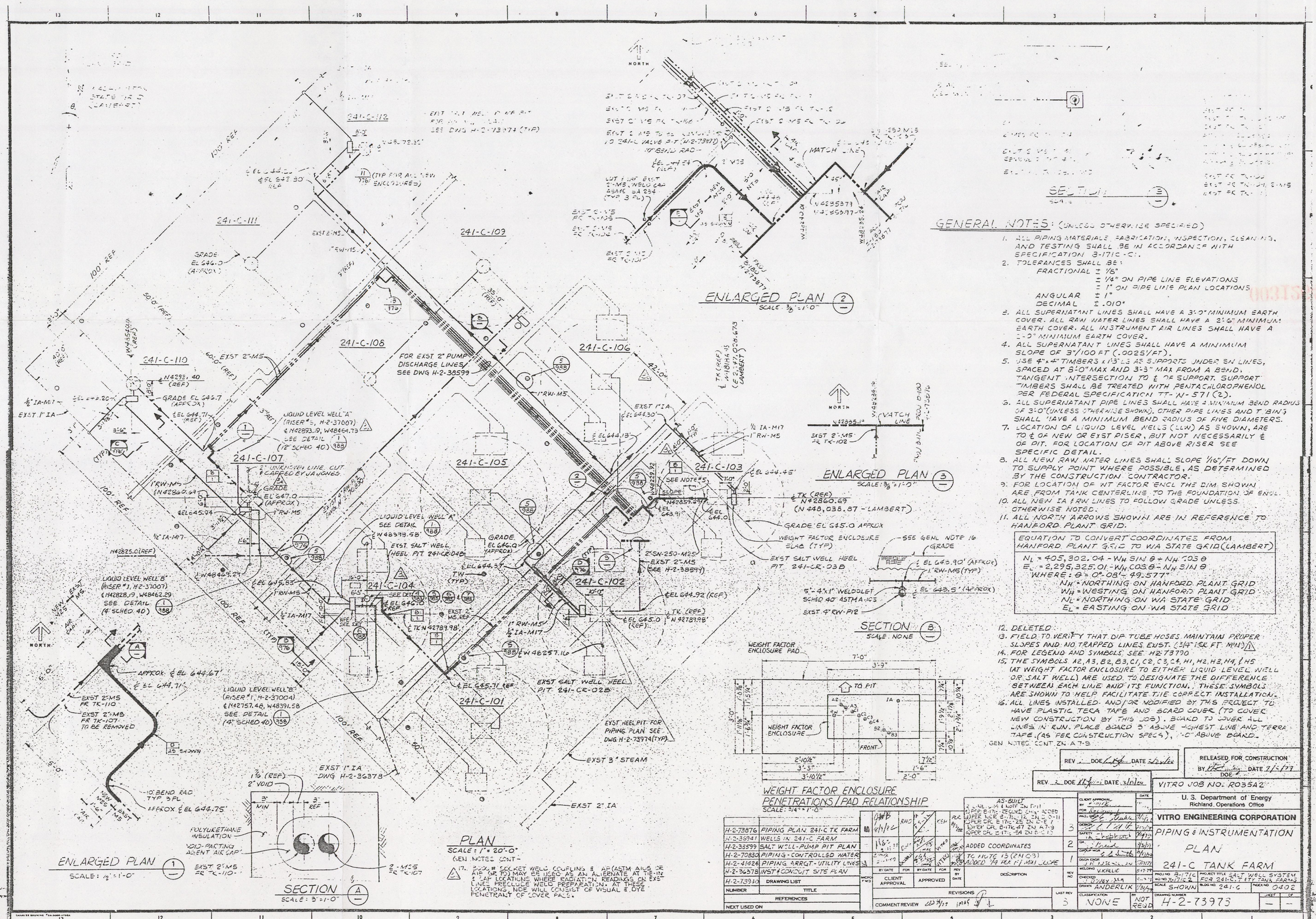

GENERAL NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ALL PIPING MATERIALS, FABRICATION, INSPECTION, CLEANING, AND TESTING SHALL BE IN ACCORDANCE WITH SPECIFICATION B-171C-C1.
2. TOLERANCES SHALL BE:
   FRACTIONAL ± 1/8"
   ± 1/4" ON PIPE LINE ELEVATIONS
   ± 1" ON PIPE LINE PLAN LOCATIONS
   ANGULAR ± 1°
   DECIMAL ± .010"
3. ALL SUPERNATANT LINES SHALL HAVE A 3'-0" MINIMUM EARTH COVER. ALL RAW WATER LINES SHALL HAVE A 3'-6" MINIMUM EARTH COVER. ALL INSTRUMENT AIR LINES SHALL HAVE A 1'-0" MINIMUM EARTH COVER.
4. ALL SUPERNATANT LINES SHALL HAVE A MINIMUM SLOPE OF 3"/100 FT (.0025'/FT).
5. USE 4"x4" TIMBERS x 13'-6" AS SUPPORTS UNDER SN LINES, SPACED AT 8'-0" MAX AND 3'-3" MAX FROM A BEND, TANGENT INTERSECTION TO ℄ OF SUPPORT. SUPPORT TIMBERS SHALL BE TREATED WITH PENTACHLOROPHENOL PER FEDERAL SPECIFICATION TT-W-571 (2).
6. ALL SUPERNATANT PIPE LINES SHALL HAVE A MINIMUM BEND RADIUS OF 3'-0" (UNLESS OTHERWISE SHOWN). OTHER PIPE LINES AND TANKS SHALL HAVE A MINIMUM BEND RADIUS OF FIVE DIAMETERS.
7. LOCATION OF LIQUID LEVEL WELLS (LLW) AS SHOWN, ARE TO ℄ OF NEW OR EXST RISER, BUT NOT NECESSARILY ℄ OF PIT. FOR LOCATION OF PIT ABOVE RISER SEE SPECIFIC DETAIL.
8. ALL NEW RAW WATER LINES SHALL SLOPE 1/16"/FT DOWN TO SUPPLY POINT WHERE POSSIBLE, AS DETERMINED BY THE CONSTRUCTION CONTRACTOR.
9. FOR LOCATION OF WT FACTOR ENCL THE DIM. SHOWN ARE FROM TANK CENTERLINE TO THE FOUNDATION OF ENCL.
10. ALL NEW IA & RW LINES TO FOLLOW GRADE UNLESS OTHERWISE NOTED.
11. ALL NORTH ARROWS SHOWN ARE IN REFERENCE TO HANFORD PLANT GRID.

EQUATION TO CONVERT COORDINATES FROM HANFORD PLANT G.C.C TO WA STATE GRID (LAMBERT)

$N_L = 405,302.04 - W_H \sin\theta + N_H \cos\theta$

$E_L = 2,295,325.01 - W_H \cos\theta - N_H \sin\theta$

WHERE: $\theta = 0°08'-49.577"$

N_H = NORTHING ON HANFORD PLANT GRID
W_H = WESTING ON HANFORD PLANT GRID
N_L = NORTHING ON WA STATE GRID
E_L = EASTING ON WA STATE GRID

12. DELETED
13. FIELD TO VERIFY THAT DIP TUBE HOSES MAINTAIN PROPER SLOPES AND NO TRAPPED LINES EXIST. (3/4" PER FT. MIN)
14. FOR LEGEND AND SYMBOLS SEE H2-73790
15. THE SYMBOLS A2, A3, B2, B3, C1, C2, C3, C4, H1, H2, H3, H4, & H5 (AT WEIGHT FACTOR ENCLOSURE TO EITHER LIQUID LEVEL WELL OR SALT WELL) ARE USED TO DESIGNATE THE DIFFERENCE BETWEEN EACH LINE AND ITS FUNCTION. THESE SYMBOLS ARE SHOWN TO HELP FACILITATE THE CORRECT INSTALLATION.
16. ALL LINES INSTALLED AND/OR MODIFIED BY THIS PROJECT TO HAVE PLASTIC TERA TAPE AND BOARD COVER (TO COVER NEW CONSTRUCTION BY THIS JOB). BOARD TO COVER ALL LINES IN RUN. PLACE BOARD 3" ABOVE HIGHEST LINE AND TERRA TAPE (AS PER CONSTRUCTION SPECS), 1'-0" ABOVE BOARD.

GEN NOTES CONT. ZN. A7-9

17. EXCEPT WELD COUPLING & AR (ASTM A105 OR AIR OR TO) MAY BE USED AS AN ALTERNATE AT TIE-IN & TAP LOCATIONS WHERE RADIATION READINGS ON EXS LINES PRECLUDE WELD PREPARATION. AT THESE LOCATIONS NDE WILL CONSIST OF VISUAL & DYE PENETRANT OF COVER PASS.

NUMBER	TITLE
H-2-73876	PIPING PLAN 241-C TK FARM
H-2-38941	WELLS IN 241-C FARM
H-2-38599	SALT WELL-PUMP PIT PLAN
H-2-70830	PIPING - CONTROLLED WATER
H-2-41424	PIPING ARRGT - UTILITY LINES
H-2-36378	INST & CONDUIT SITE PLAN
H-2-73970	DRAWING LIST

REFERENCES

NEXT USED ON

REV NO	DESCRIPTION	BY	DATE	FOR	APPROVED
3	AS-BUILT X-REF B-171C SECTION 4 ADDED UPER NDE B-171C ZN. C-11 UPER DR. B-171C-22 ZN. D-7 LOWER DR. B-176-47 ZN A7-9 UPER DR. B-171C-54 ZN B-7				
2	ADDED COORDINATES				
1	TC 11 & TC 13 (ZN C-3) ADDED TO REF F-1 MAI LOOP				

REVISIONS — LAST REV 3

COMMENT REVIEW

CLIENT APPROVAL

CLASSIFICATION: NONE

REV ___ DOE ___ DATE ___

REV 2 DOE ___ DATE 3/10/00

RELEASED FOR CONSTRUCTION BY ___ DATE 7/5/77 DOE ___

VITRO JOB NO: R035A2

U.S. Department of Energy
Richland Operations Office

VITRO ENGINEERING CORPORATION

PIPING & INSTRUMENTATION PLAN

241-C TANK FARM

DESIGN V. KRILLIC
CHECKED
DRAWN ANDERLIK
SCALE SHOWN
PROJ NO B-171C
PROJECT TITLE SALT WELL SYSTEM FOR 241-C-T ETY TANK FARMS
SCALE SHOWN
BLDG NO 241-C
INDEX NO 0402
DRAWING NUMBER H-2-73973

OCT 1993 RECEIVED EDMC