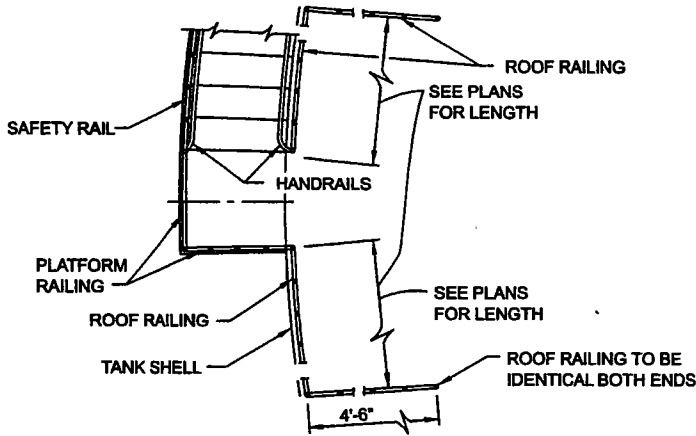
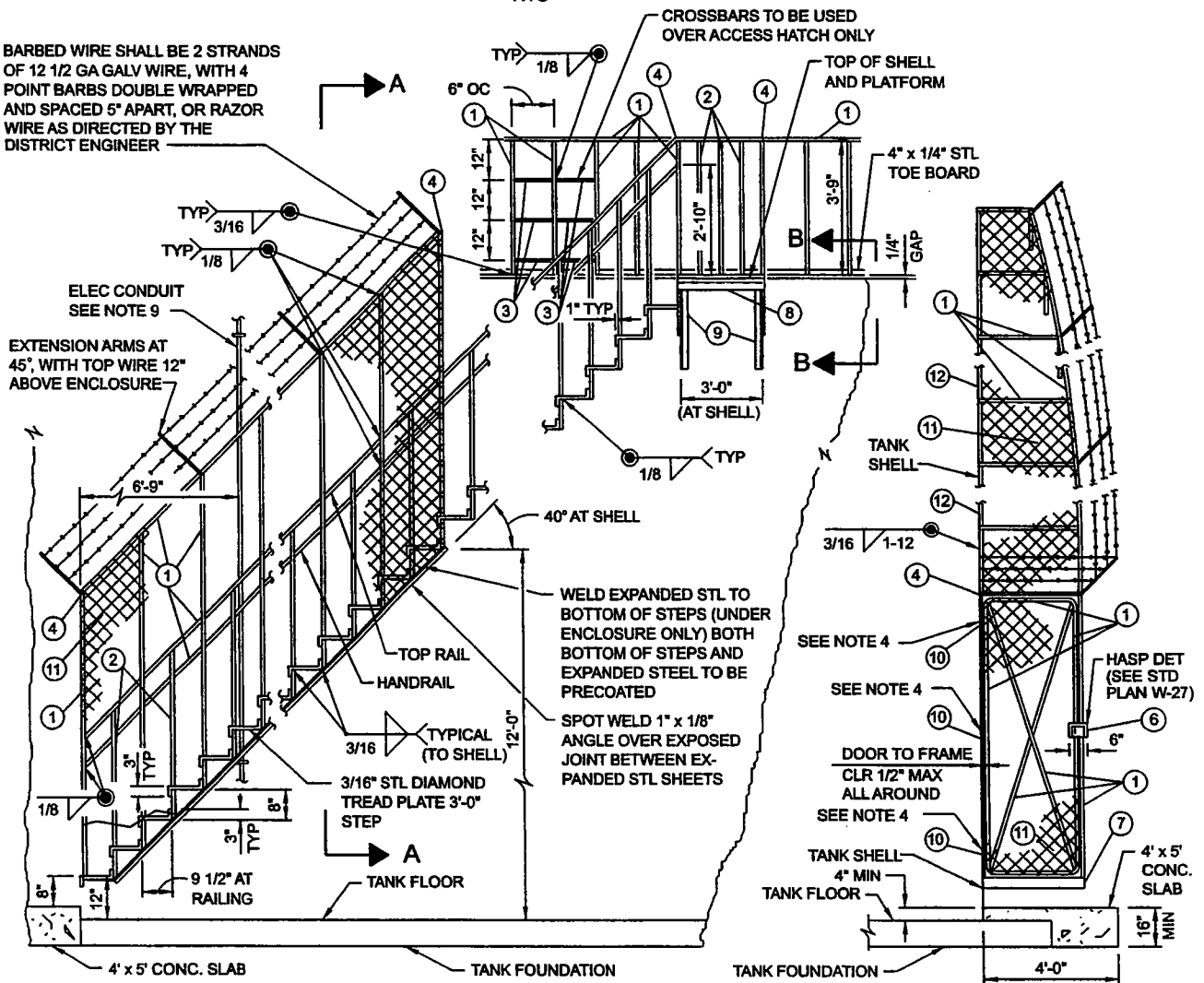


TANK - SPIRAL STAIRWAY



PLAN
PLATFORM AND RAILING
NTS

BARBED WIRE SHALL BE 2 STRANDS OF 12 1/2 GA GALV WIRE, WITH 4 POINT BARBS DOUBLE WRAPPED AND SPACED 5" APART, OR RAZOR WIRE AS DIRECTED BY THE DISTRICT ENGINEER



LOS ANGELES COUNTY WATERWORKS DISTRICTS

DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

W-24

APPROVED

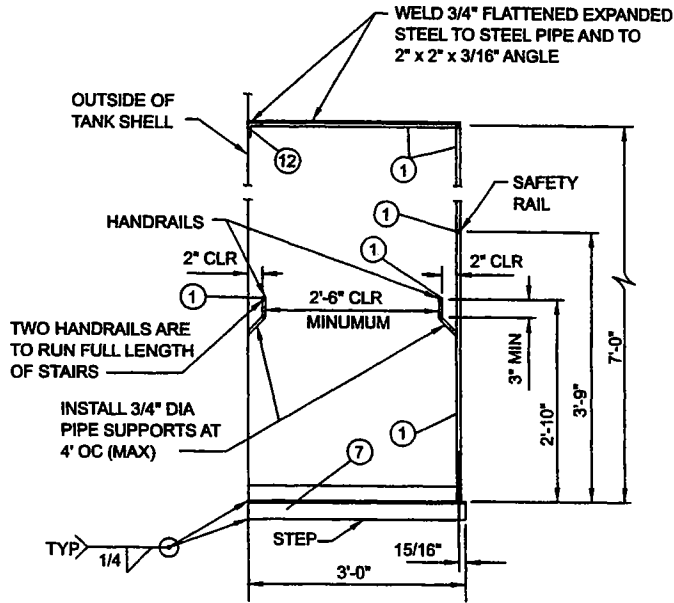
ASSISTANT DEPUTY DIRECTOR

APRIL 2004

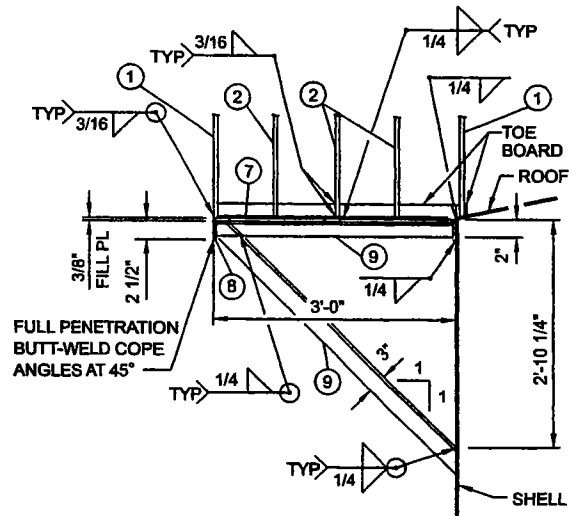
DATE

SHEET 1 OF 2

TANK - SPIRAL STAIRWAY (CONTINUED)



SECTION A - A



**SECTION B - B
PLATFORM**

MATERIAL LIST	
ITEM NO.	DESCRIPTION
1	1 1/2" STEEL PIPE, SCHEDULE 40, BLACK
2	1" STEEL PIPE, SCHEDULE 40, BLACK
3	3/4" STEEL RODS (FOR INTERIOR LADDER EXTENSION)
4	1 1/2" PIPE RAILING ELBOW, BLACK
5	1" 90° PIPE RAILING ELBOW, BLACK
6	3" HASP
7	3/16" STEEL DIAMOND TREAD PLATE
8	2 1/2" x 2" x 1/4" STEEL ANGLE
9	3" x 2" x 3/8" STEEL ANGLE
10	4" x 4" x 1/4" STEEL BUTT HINGE WITH NON-REMOVABLE BRASS PIN
11	3/4" FLATTENED, EXPANDED STEEL NO. 10 GA
12	2" x 2" x 3/16" STEEL ANGLE.

GENERAL NOTES:

1. USE SPIRAL STAIRWAY ONLY FOR TANKS 15 FEET IN HEIGHT OR GREATER.
2. ALL RAILINGS, INCLUDING PLATFORM RAILINGS AND EXCEPTING STAIR RAILINGS SHALL HAVE A 4" x 1/4" STEEL TOE BOARD WELDED AT BOTTOM OF RAILINGS WITH A 1/4" GAP BELOW TOE BOARD.
3. FITTINGS FOR RAILINGS MAY BE EITHER MALLEABLE IRON BALL PATTERN OR ADJUSTABLE RAILING FITTINGS OR WELDING STEEL FITTINGS.
4. WELD 1/2" STEEL SHIM BETWEEN HINGE AND TANK SHELL.
5. IN AREAS OF PEDESTRIAN CONTACT, GRIND SMOOTH ALL SHARP CORNERS AND EDGES.
6. THIS DESIGN IS FOR GUIDE ONLY. TANK CONTRACTOR MAY SUBMIT ALTERNATE DESIGN FOR APPROVAL.
7. WELD 2" x 1/6" STEEL STRIPS ON BOTH SIDES OF ALL EXPOSED JOINTS OF THE EXPANDED STEEL SHEETS.
8. OUTSIDE EDGE OF STEPS SHALL BE 1/2" LOWER THAN INSIDE EDGE OF STEPS TO FACILITATE DRAINAGE.
9. INSTALL ALL ELECTRICAL CONDUITS ON TANK INSIDE STAIRWAY, ATTACH WITH BRACKETS WELDED TO TANK ALONG THE STEP.

LOS ANGELES COUNTY WATERWORKS DISTRICTS

DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

W-24

APPROVED

Muel Real
ASSISTANT DEPUTY DIRECTOR

APRIL 2004

DATE

SHEET 2 OF 2