

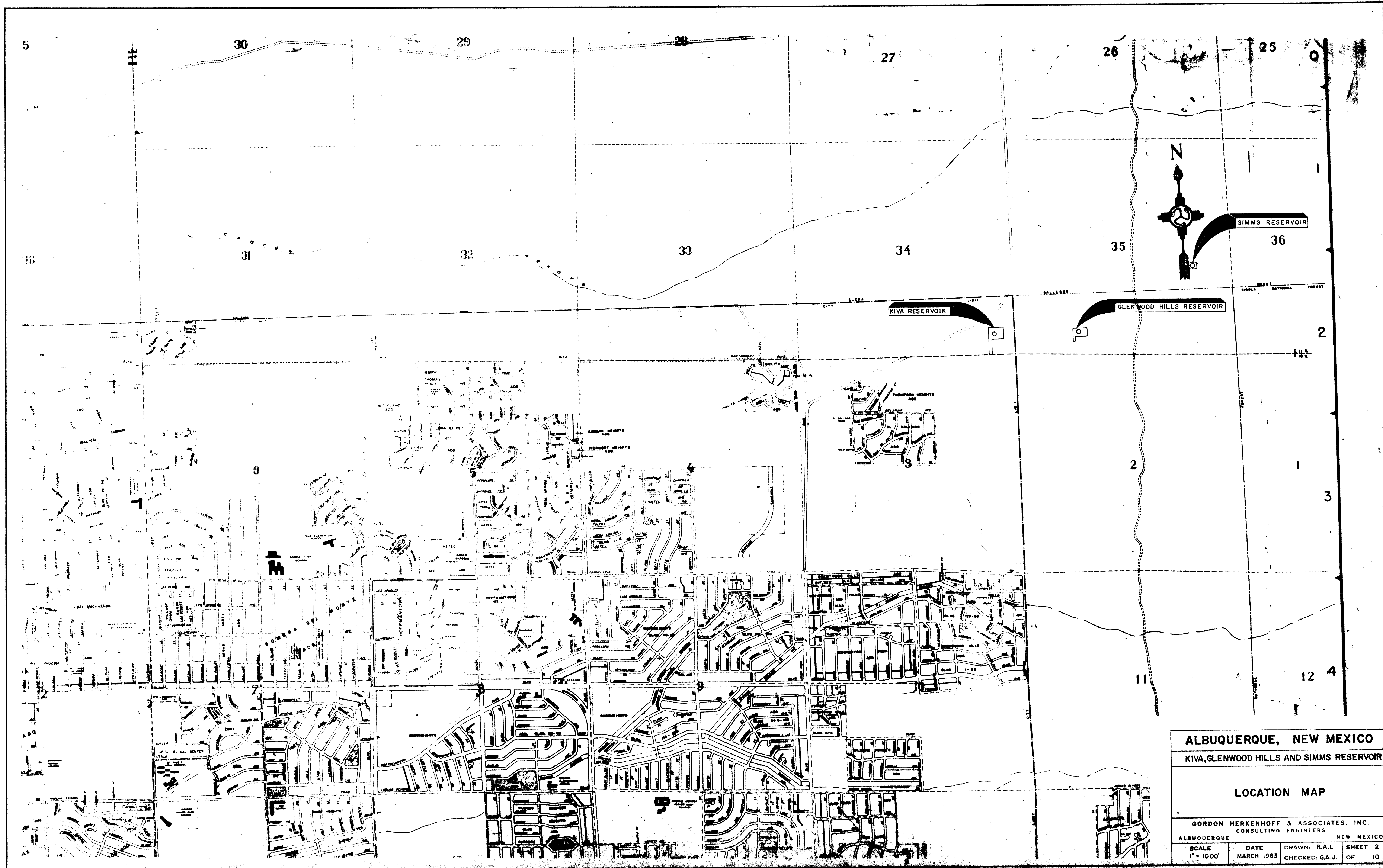
CITY OF
ALBUQUERQUE—NEW MEXICO
PLANS
FOR CONSTRUCTION
OF
KIVA, GLENWOOD HILLS AND
SIMMS RESERVOIRS

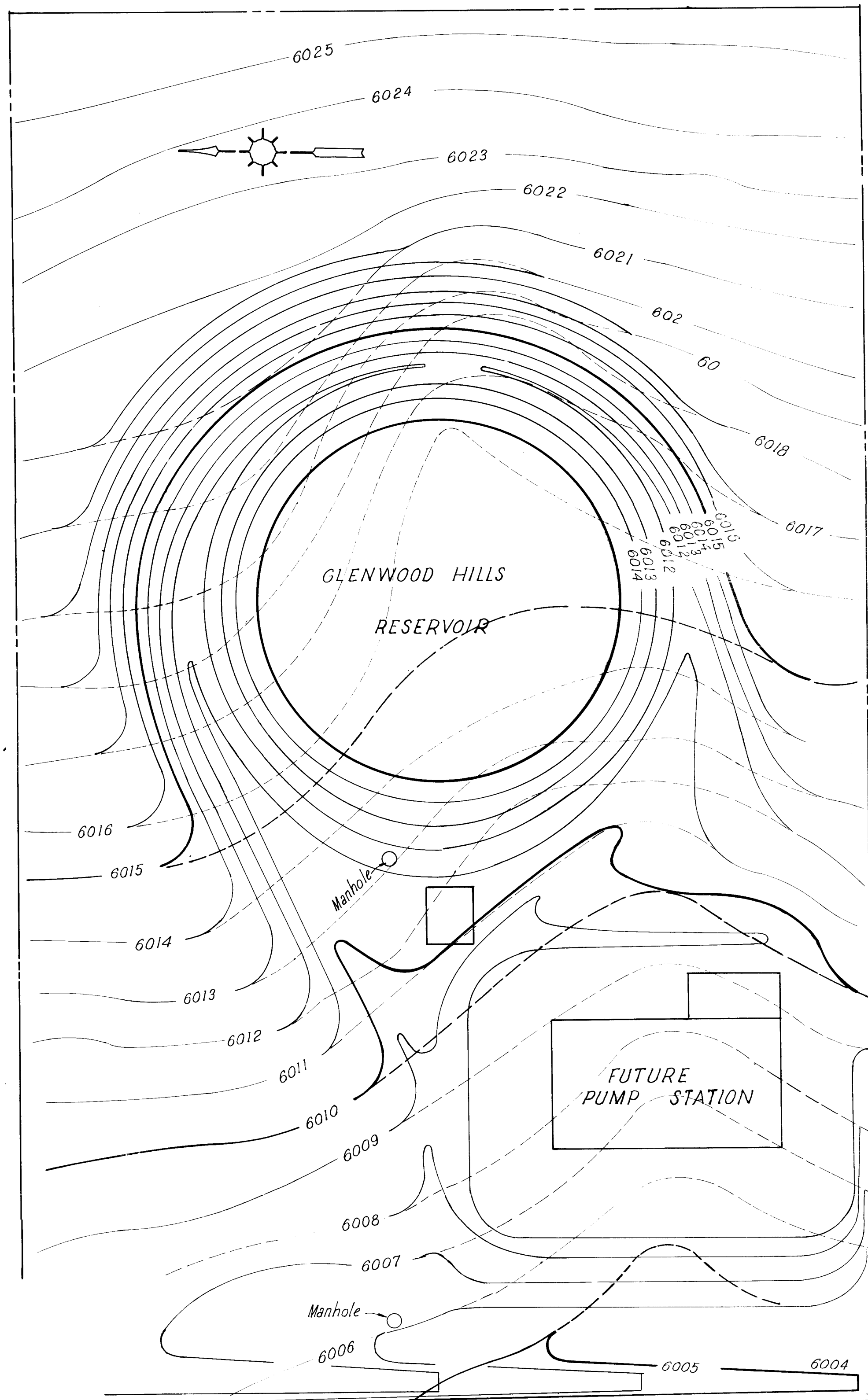
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SCANNED BY
BY LASON

GORDON HERKENHOFF AND ASSOCIATES INC.

CONSULTING
ENGINEERS

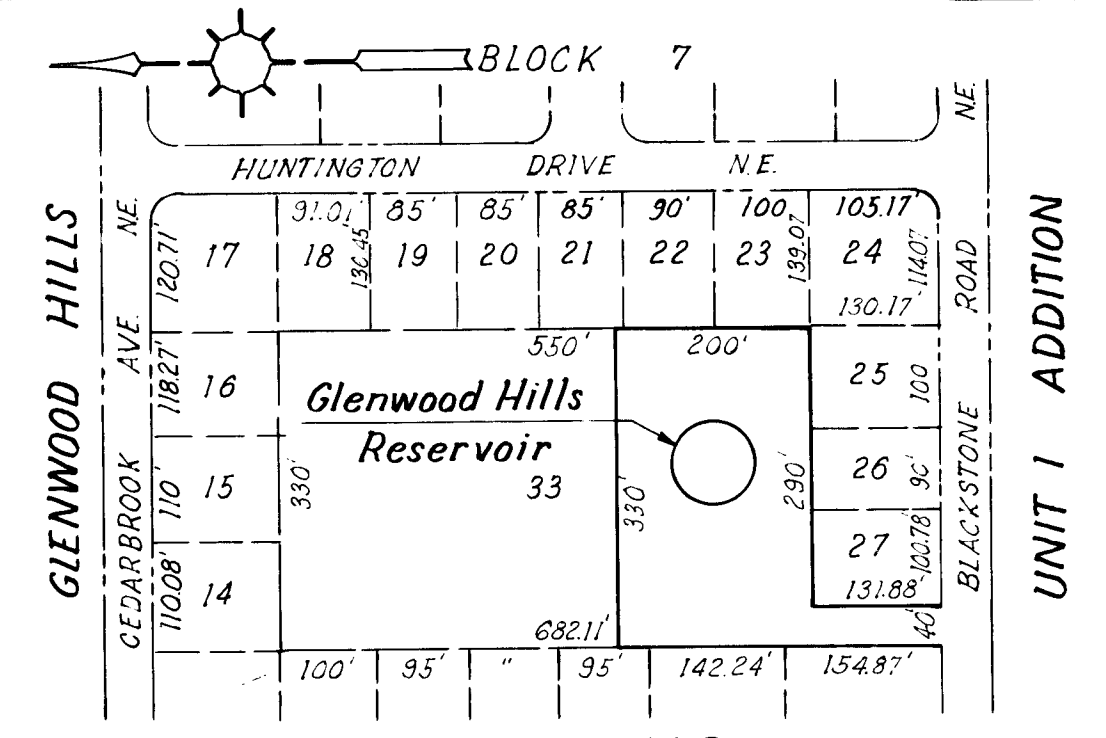




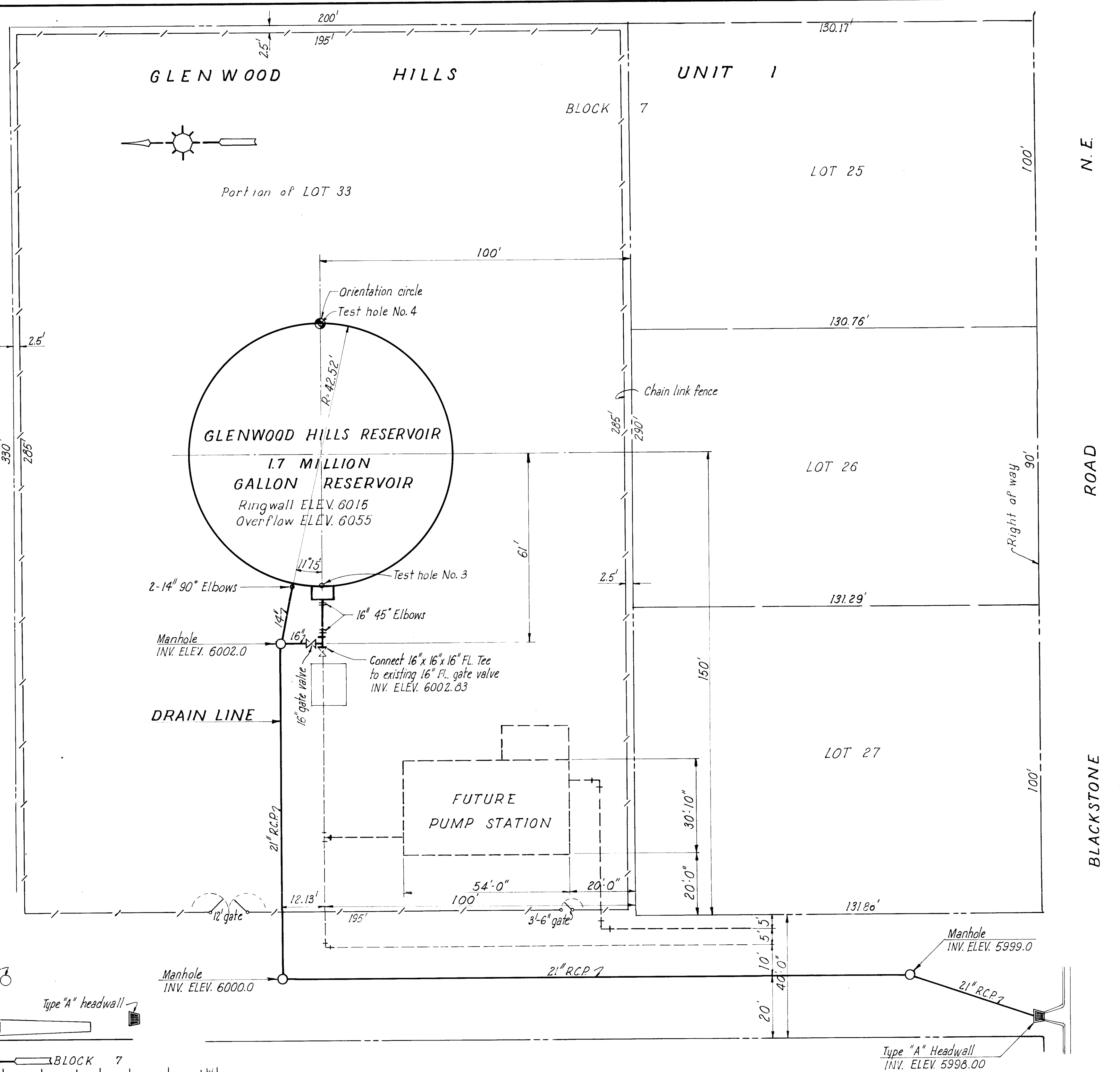
GRADING PLAN
Scale: 1"=20'

TEST HOLE DATA		Scale: 1"=3'	
TEST HOLE No. 3		TEST HOLE No. 4	
Very Loose to Medium Dense	N	Very Loose to Medium Dense	N
7 3/4	37	8 4	30
9 4/5	23	9 3/5	29
12 5/7	23	17 3/4	42
15 7/8	22	18 3/8	26
18 9/23		41 16/25	0

1. Water table not encountered in any test hole.
2. "N" is equal to the number of blows to drive a 2" outside diameter by 1.375" inside diameter standard split spoon sampler thru a vertical distance of one foot using a 140 lb. hammer with a free fall of 30". Penetration count at 6 inch vertical intervals listed in margin to right of penetration test results.
3. Natural or existing moisture contents of recovered penetration samples also listed in margin to right of penetration test results and circled.
4. Grain size classification tests available at Gordon Herkenhoff and Associates.



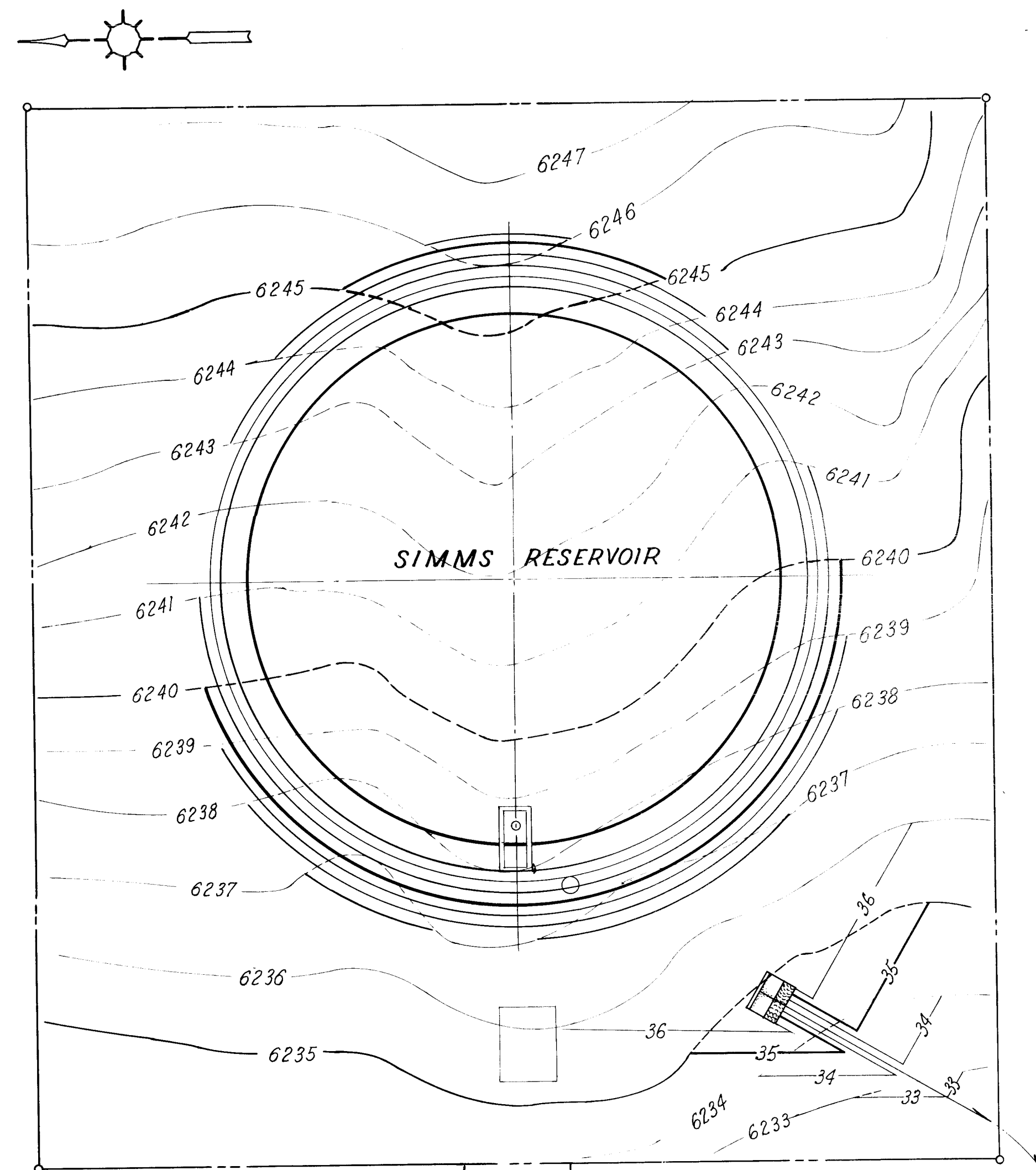
KEY MAP



LAYOUT PLAN
Scale: 1"=20'

B.M. * Top boulder 35' E, NE of NW corner Lot 27 Block 7 (S.W. Cor Res site ELEV= 6010.04)

ALBUQUERQUE, NEW MEXICO			
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS			
GRADING AND LAYOUT PLAN			
GORDON HERKENHOFF & ASSOCIATES, INC.			
CONSULTING ENGINEERS			
ALBUQUERQUE	DATE	DRAWN: R.A.L.	SHEET 4
AS SHOWN	MARCH 1963	CHECKED: G.A.J.	OF 10

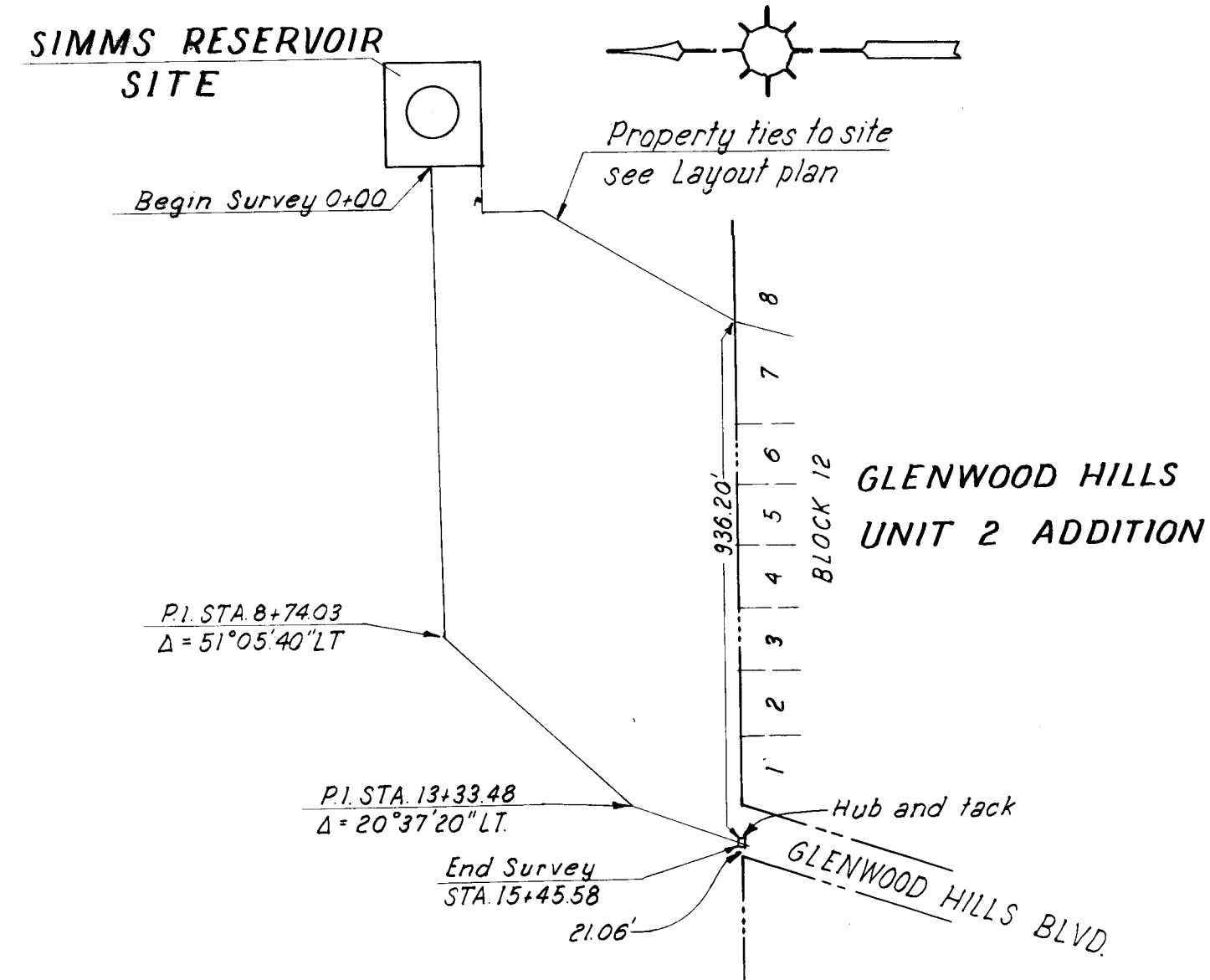


GRADING PLAN
Scale: 1"=20'

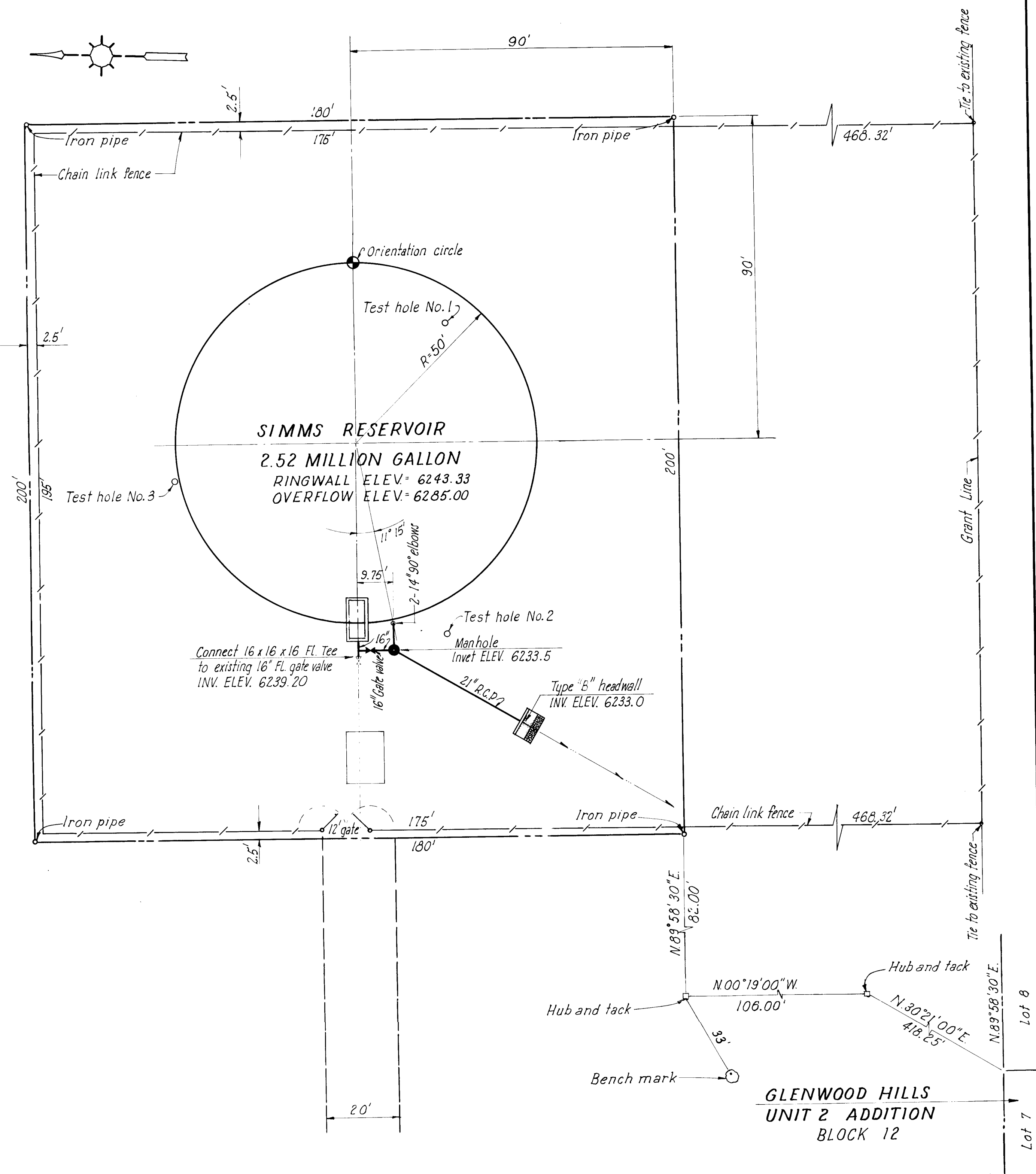
TEST HOLE DATA
Scale: 1"=5'

TEST HOLE N°1	TEST HOLE N°2	TEST HOLE N°3																																																																																																																																																									
<table> <tr><td>Loose</td><td>4</td><td>1.6</td></tr> <tr><td>To</td><td>8</td><td>1.3</td></tr> <tr><td>Medium</td><td>8</td><td>1.3</td></tr> <tr><td>dense</td><td>13</td><td>1.0</td></tr> <tr><td>Well-Graded</td><td>14</td><td>0.9</td></tr> <tr><td>Decomposed</td><td>14</td><td>0.9</td></tr> <tr><td>Granite</td><td>14</td><td>0.9</td></tr> <tr><td>Small sized</td><td>14</td><td>0.9</td></tr> <tr><td>Gravel or</td><td>14</td><td>0.9</td></tr> <tr><td>Rock</td><td>14</td><td>0.9</td></tr> <tr><td>and</td><td>14</td><td>0.9</td></tr> <tr><td>Sand</td><td>14</td><td>0.9</td></tr> <tr><td>with</td><td>14</td><td>0.9</td></tr> <tr><td>traces</td><td>14</td><td>0.9</td></tr> <tr><td>to</td><td>14</td><td>0.9</td></tr> <tr><td>little</td><td>14</td><td>0.9</td></tr> <tr><td>silt</td><td>14</td><td>0.9</td></tr> </table>	Loose	4	1.6	To	8	1.3	Medium	8	1.3	dense	13	1.0	Well-Graded	14	0.9	Decomposed	14	0.9	Granite	14	0.9	Small sized	14	0.9	Gravel or	14	0.9	Rock	14	0.9	and	14	0.9	Sand	14	0.9	with	14	0.9	traces	14	0.9	to	14	0.9	little	14	0.9	silt	14	0.9	<table> <tr><td>Loose</td><td>7</td><td>0.8</td></tr> <tr><td>To</td><td>14</td><td>0.6</td></tr> <tr><td>Medium</td><td>14</td><td>0.6</td></tr> <tr><td>dense</td><td>19</td><td>0.7</td></tr> <tr><td>Well-Graded</td><td>15</td><td>0.7</td></tr> <tr><td>Decomposed</td><td>15</td><td>0.7</td></tr> <tr><td>Granite</td><td>15</td><td>0.7</td></tr> <tr><td>Small sized</td><td>13</td><td>0.9</td></tr> <tr><td>Gravel or</td><td>13</td><td>0.9</td></tr> <tr><td>Rock</td><td>12</td><td>0.9</td></tr> <tr><td>and</td><td>12</td><td>0.9</td></tr> <tr><td>Sand</td><td>13</td><td>0.7</td></tr> <tr><td>with</td><td>13</td><td>0.7</td></tr> <tr><td>traces</td><td>13</td><td>0.7</td></tr> <tr><td>to</td><td>13</td><td>0.7</td></tr> <tr><td>little</td><td>13</td><td>0.7</td></tr> <tr><td>silt</td><td>13</td><td>0.7</td></tr> </table>	Loose	7	0.8	To	14	0.6	Medium	14	0.6	dense	19	0.7	Well-Graded	15	0.7	Decomposed	15	0.7	Granite	15	0.7	Small sized	13	0.9	Gravel or	13	0.9	Rock	12	0.9	and	12	0.9	Sand	13	0.7	with	13	0.7	traces	13	0.7	to	13	0.7	little	13	0.7	silt	13	0.7	<table> <tr><td>Loose</td><td>9</td><td>1.6</td></tr> <tr><td>To</td><td>16</td><td>0.7</td></tr> <tr><td>Medium</td><td>16</td><td>0.7</td></tr> <tr><td>dense</td><td>14</td><td>0.7</td></tr> <tr><td>Well-Graded</td><td>17</td><td>0.2</td></tr> <tr><td>Decomposed</td><td>17</td><td>0.2</td></tr> <tr><td>Granite</td><td>17</td><td>0.2</td></tr> <tr><td>Small sized</td><td>8</td><td>0.4</td></tr> <tr><td>Gravel or</td><td>8</td><td>0.4</td></tr> <tr><td>Rock</td><td>8</td><td>0.4</td></tr> <tr><td>and</td><td>8</td><td>0.4</td></tr> <tr><td>Sand</td><td>15</td><td>0.9</td></tr> <tr><td>with</td><td>15</td><td>0.9</td></tr> <tr><td>traces</td><td>15</td><td>0.9</td></tr> <tr><td>to</td><td>15</td><td>0.9</td></tr> <tr><td>little</td><td>15</td><td>0.9</td></tr> <tr><td>silt</td><td>15</td><td>0.9</td></tr> </table>	Loose	9	1.6	To	16	0.7	Medium	16	0.7	dense	14	0.7	Well-Graded	17	0.2	Decomposed	17	0.2	Granite	17	0.2	Small sized	8	0.4	Gravel or	8	0.4	Rock	8	0.4	and	8	0.4	Sand	15	0.9	with	15	0.9	traces	15	0.9	to	15	0.9	little	15	0.9	silt	15	0.9
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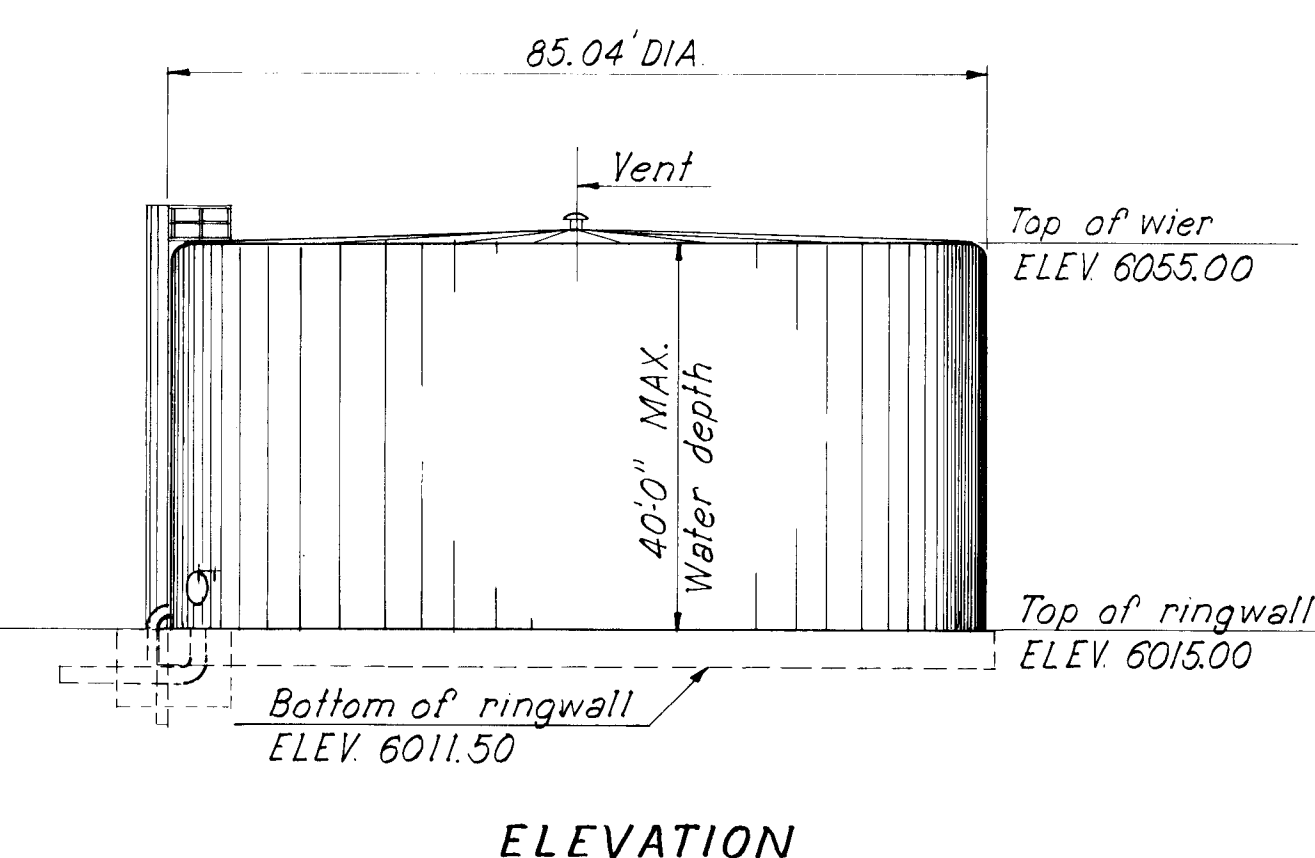
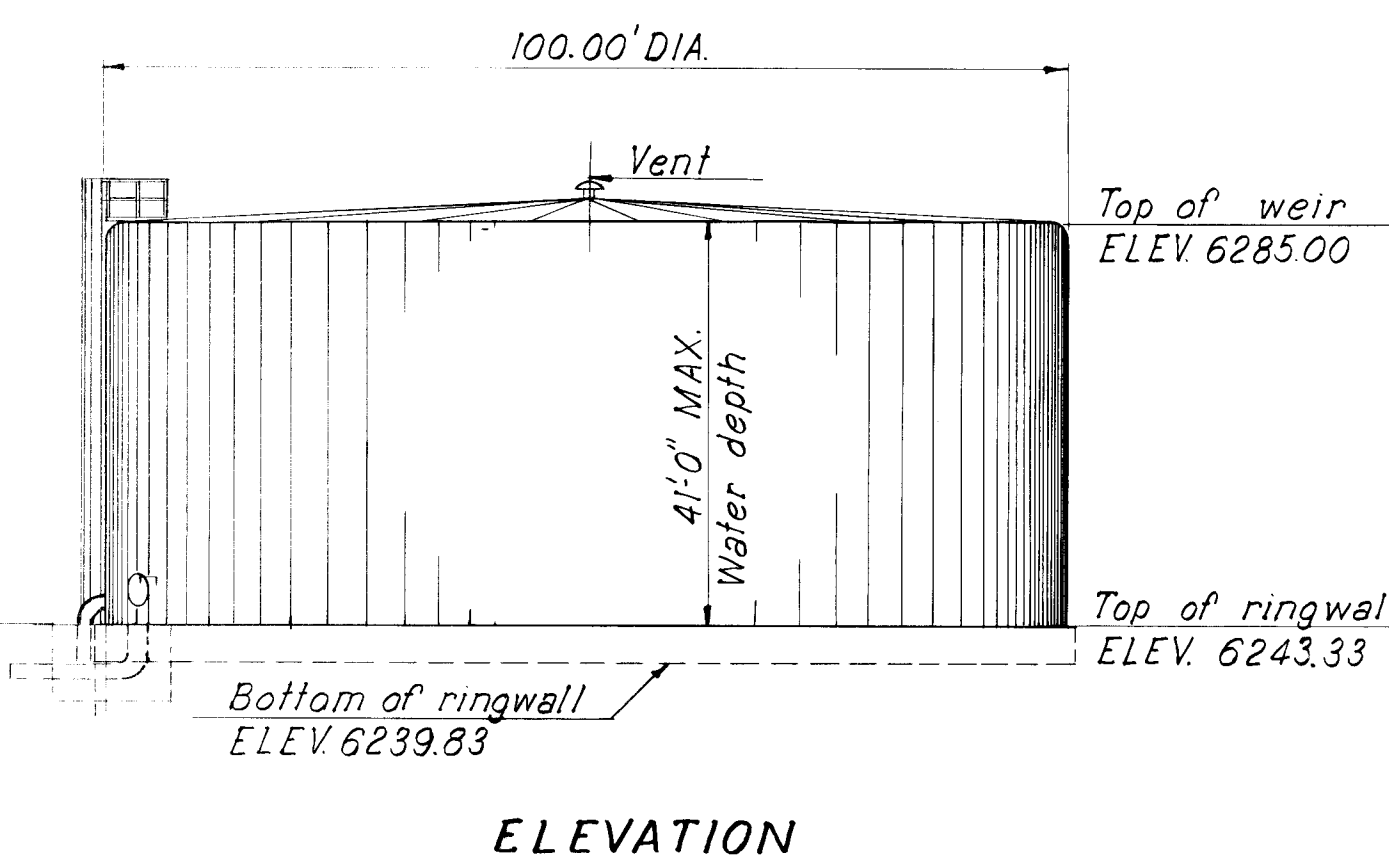
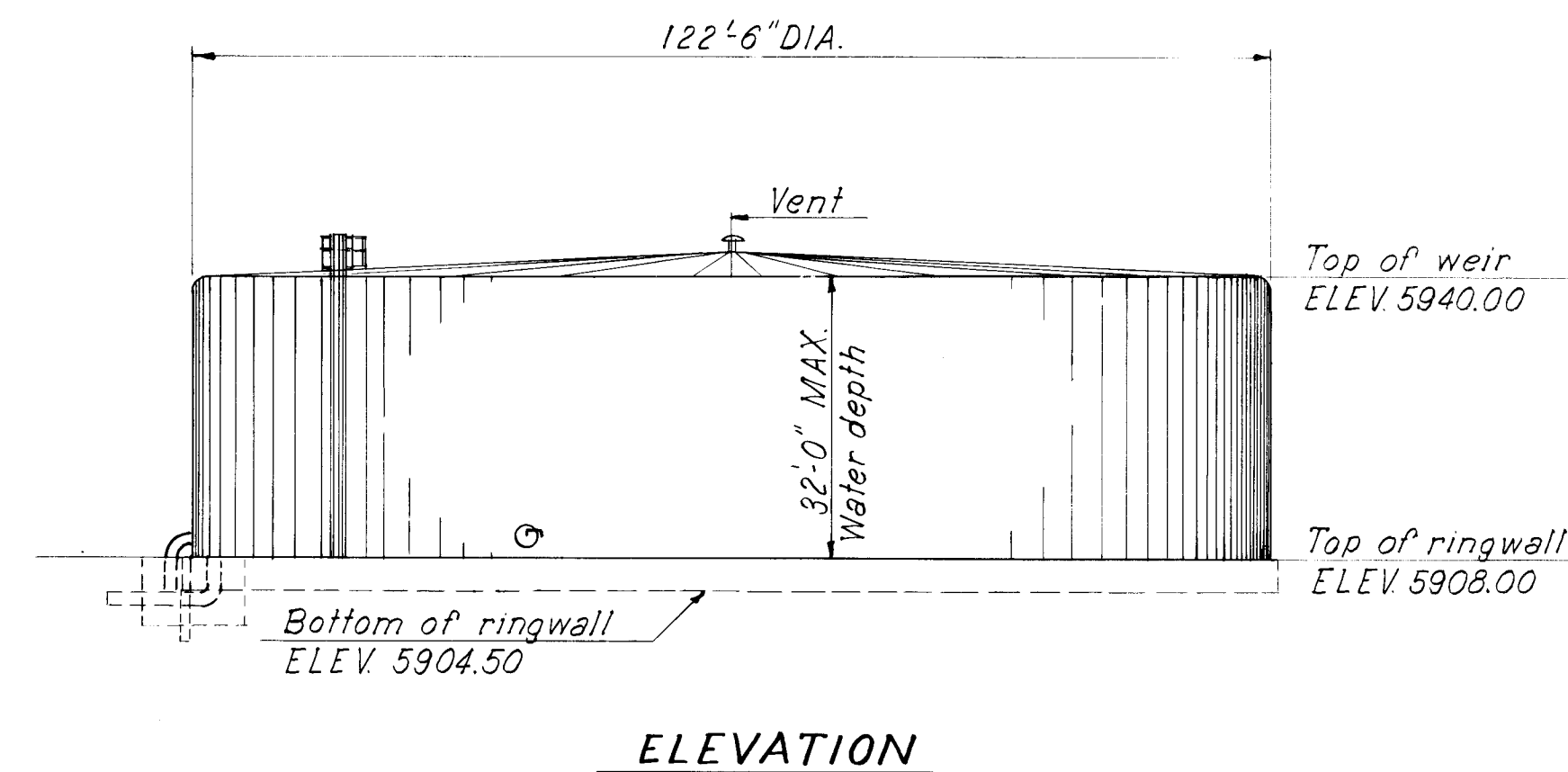
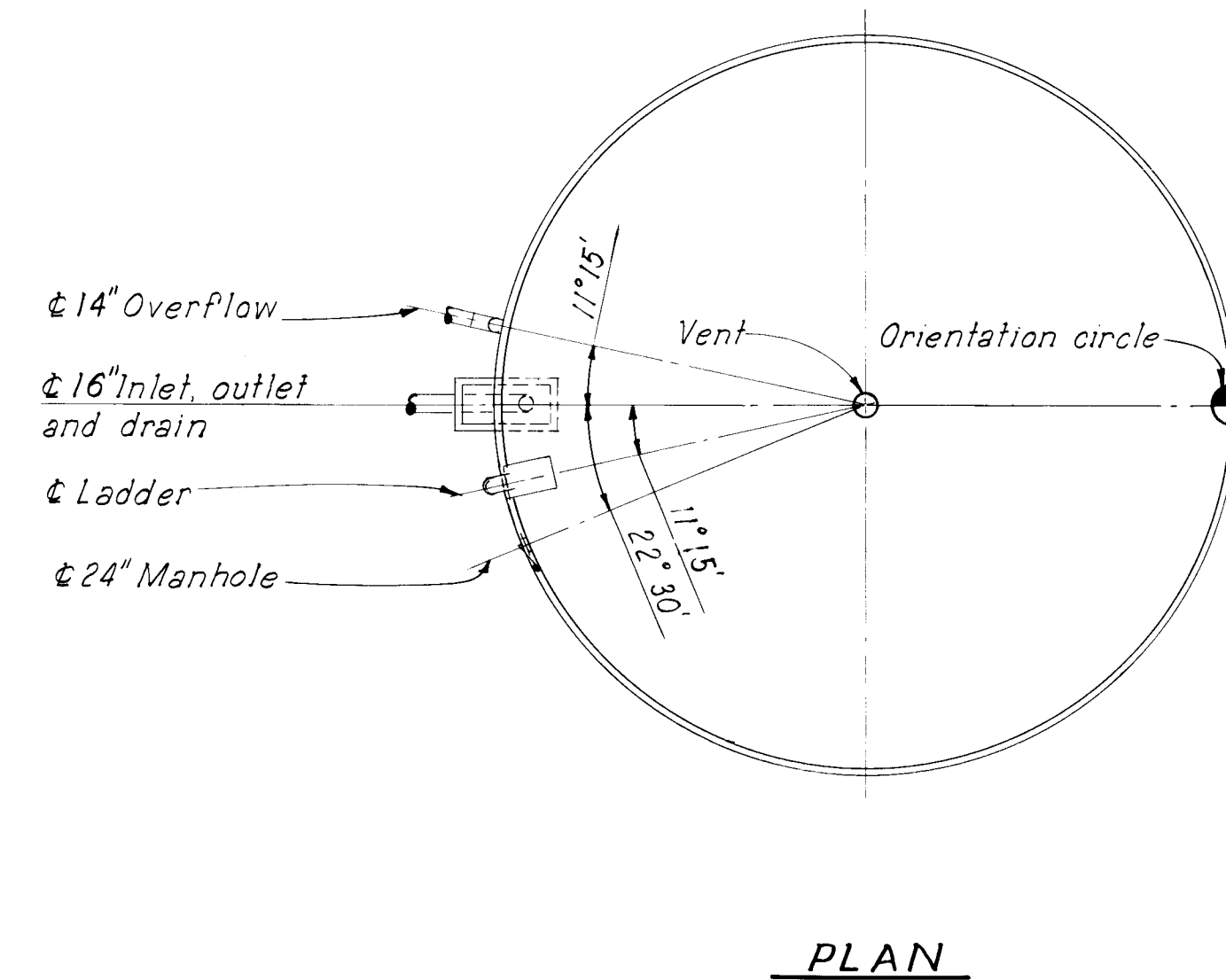
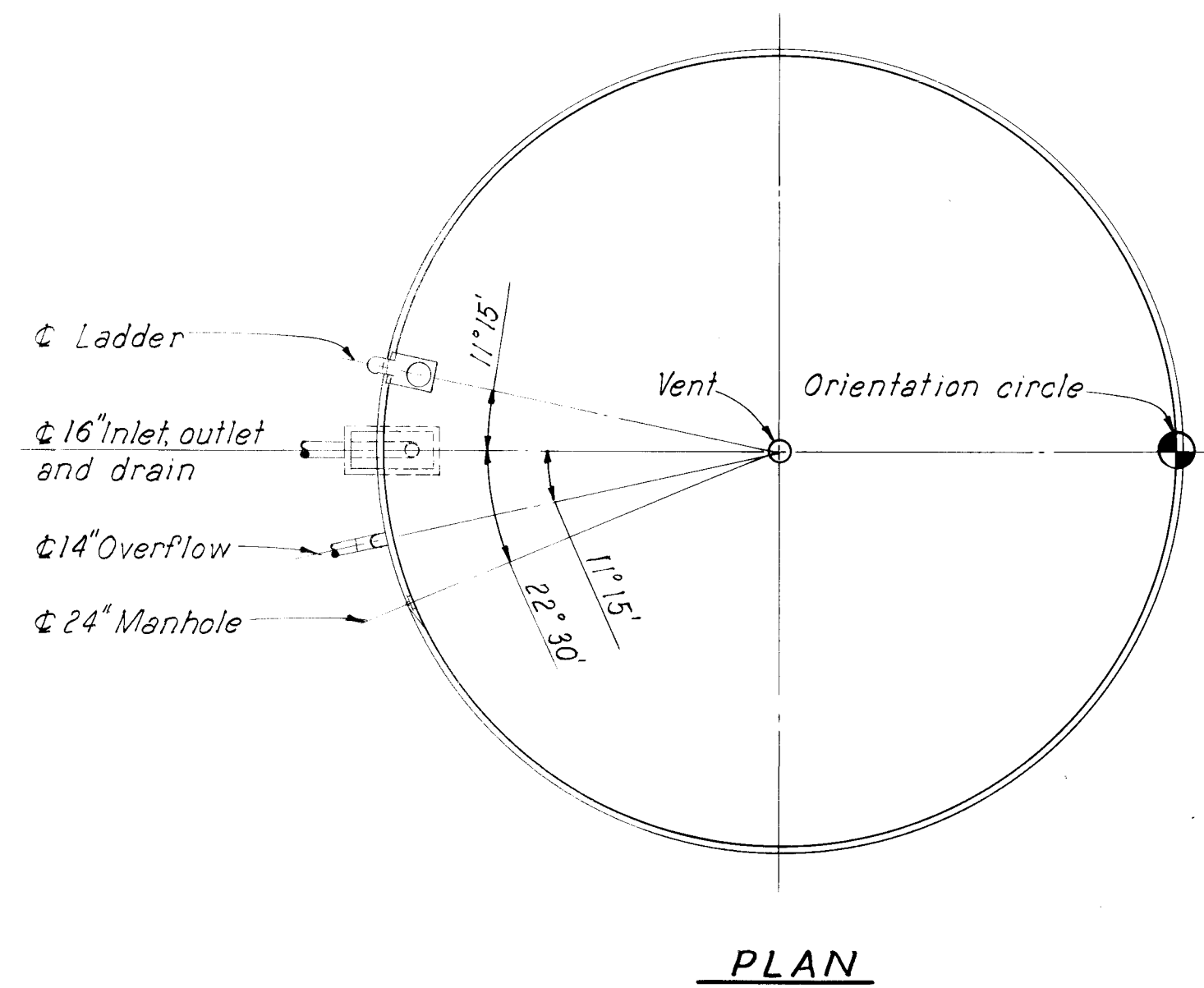
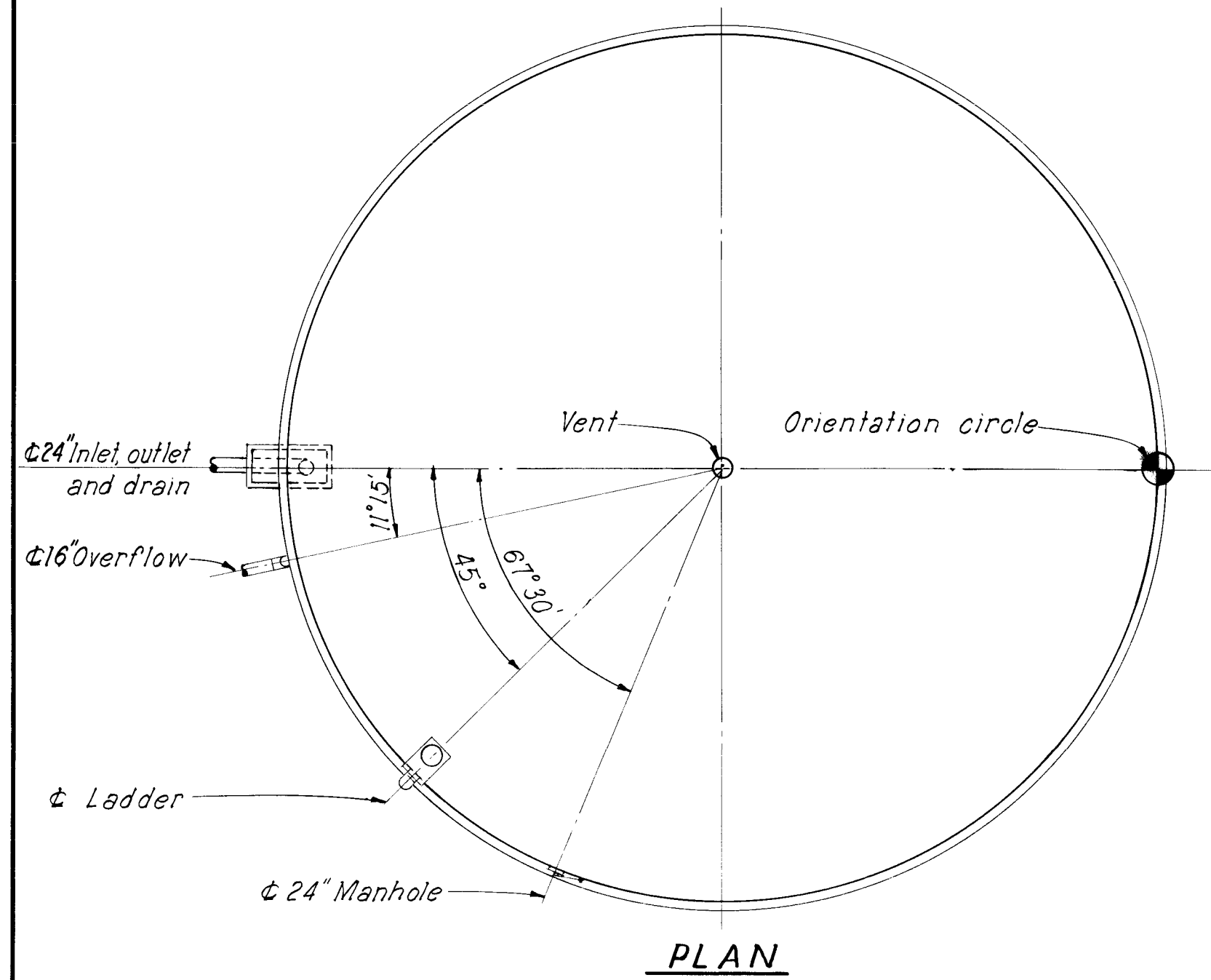
KEY MAP



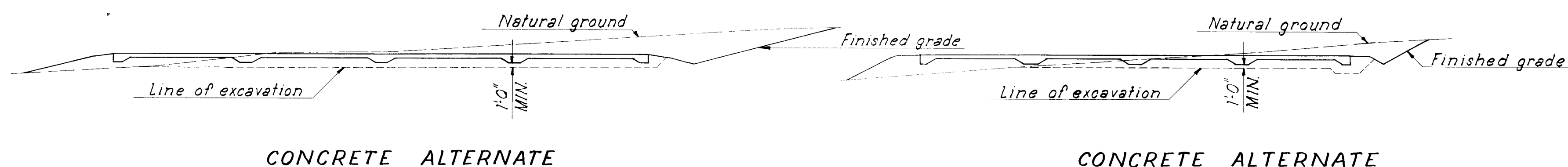
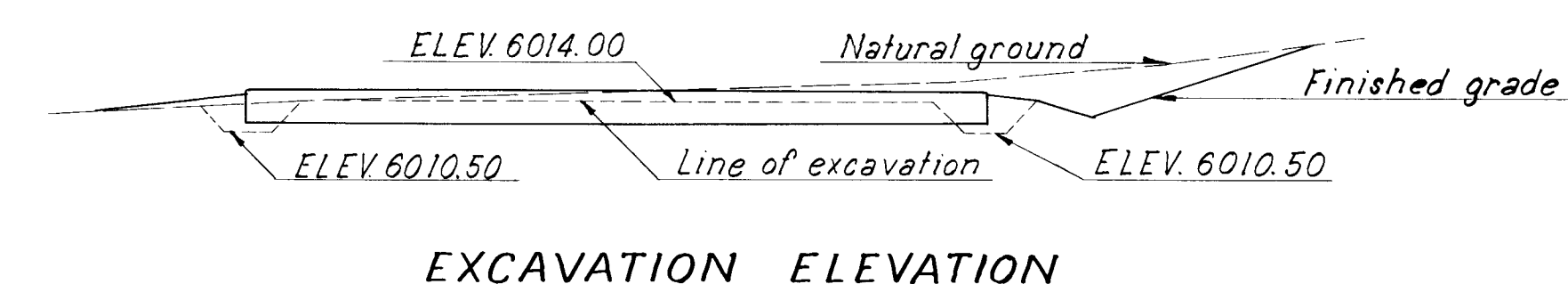
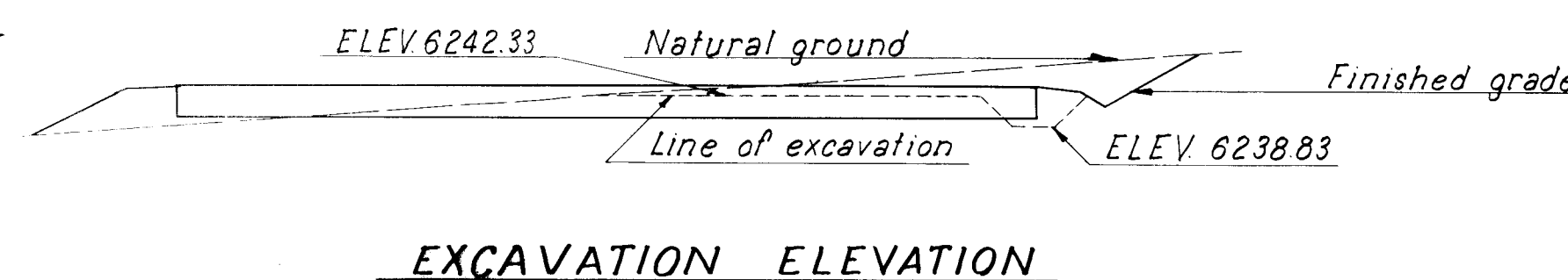
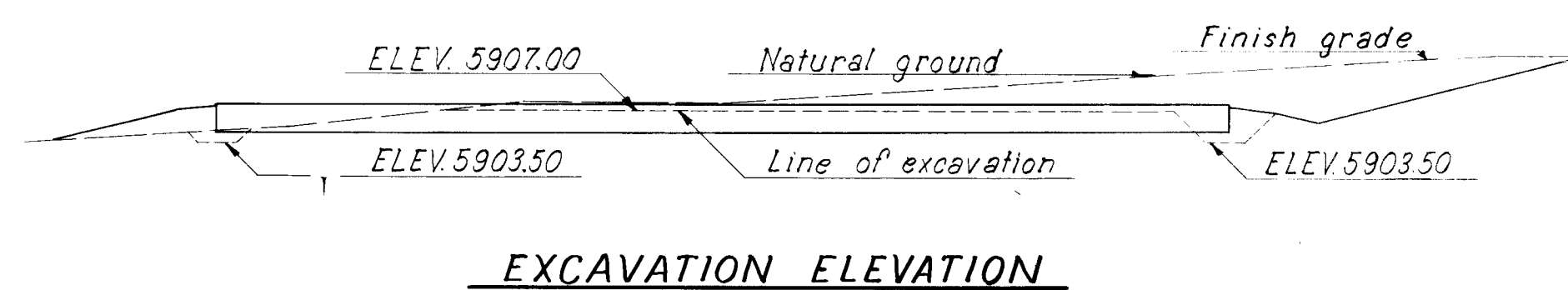
LAYOUT PLAN
Scale: 1"=20'

B.M. - High point on N side boulder
Approx. 700' N.W. Fence corner
125' W Fence Elev. 6228.085

ALBUQUERQUE, NEW MEXICO			
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS			
GRADING AND LAYOUT PLAN			
GORDON HERKENHOFF & ASSOCIATES, INC. CONSULTING ENGINEERS			
ALBUQUERQUE	DATE	DRAWN: R.A.L.	SHEET 5
AS SHOWN	MARCH 1963	CHECKED: G.A.J.	OF 10



Note: 1. The line of excavation for the inlet outlet box shall be the same as for the foundation wall i.e. 1'-0" below the bottom of the box slab.
 2. Where the tank is in cut the line of excavation beneath the floor slab shall be a minimum of 1'-0" below the tank floor or footings whichever is lower.
 3. For each tank provide 2-1/2" conduits from junction box @ ring wall to junction boxes @ platform, including junction boxes.

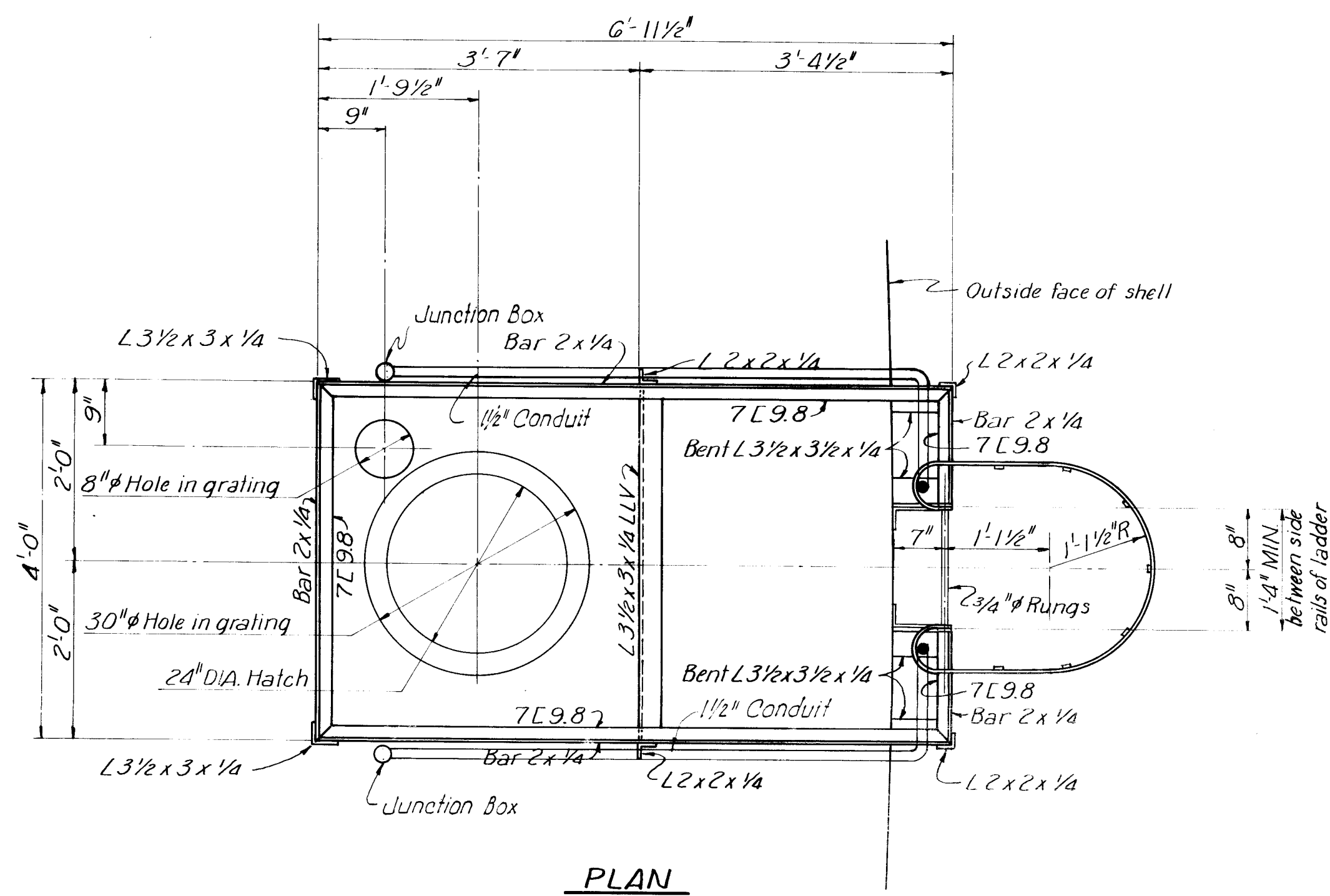


KIVA RESERVOIR
 2.82 MILLION GALLON
 Scale: 1"=20'

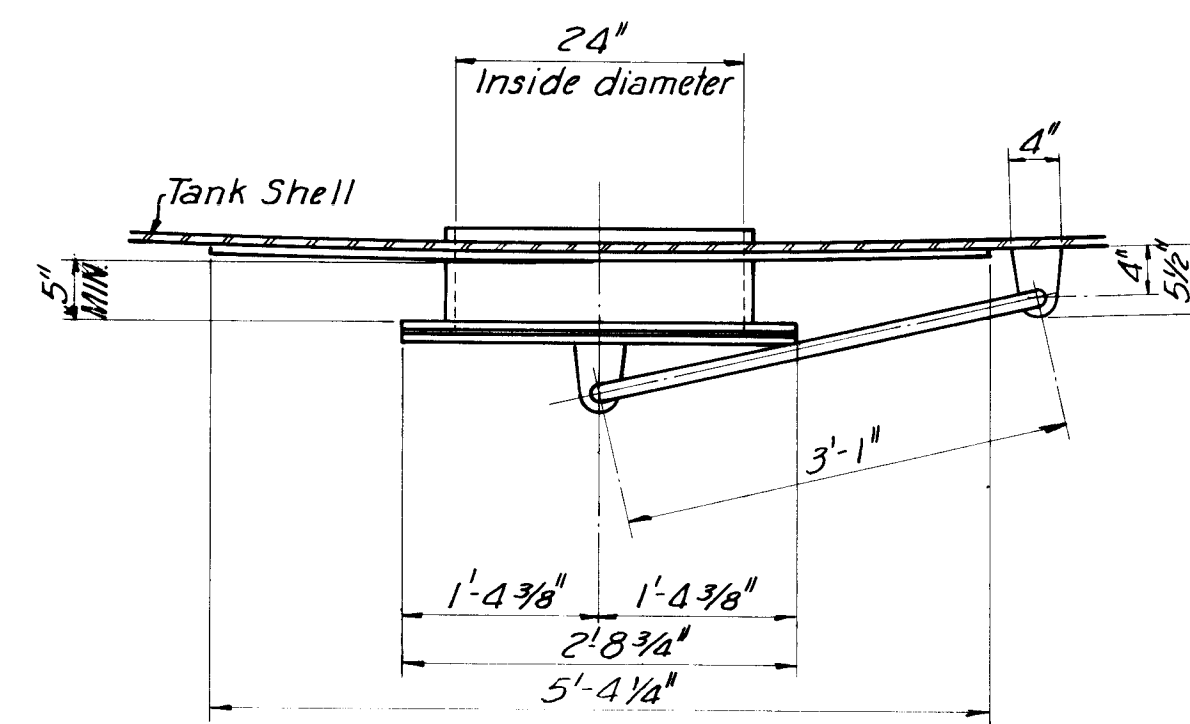
SIMMS RESERVOIR
 25 MILLION GALLON
 Scale: 1"=20'

GLENWOOD HILLS RESERVOIR
 1.7 MILLION GALLON
 Scale: 1"=20'

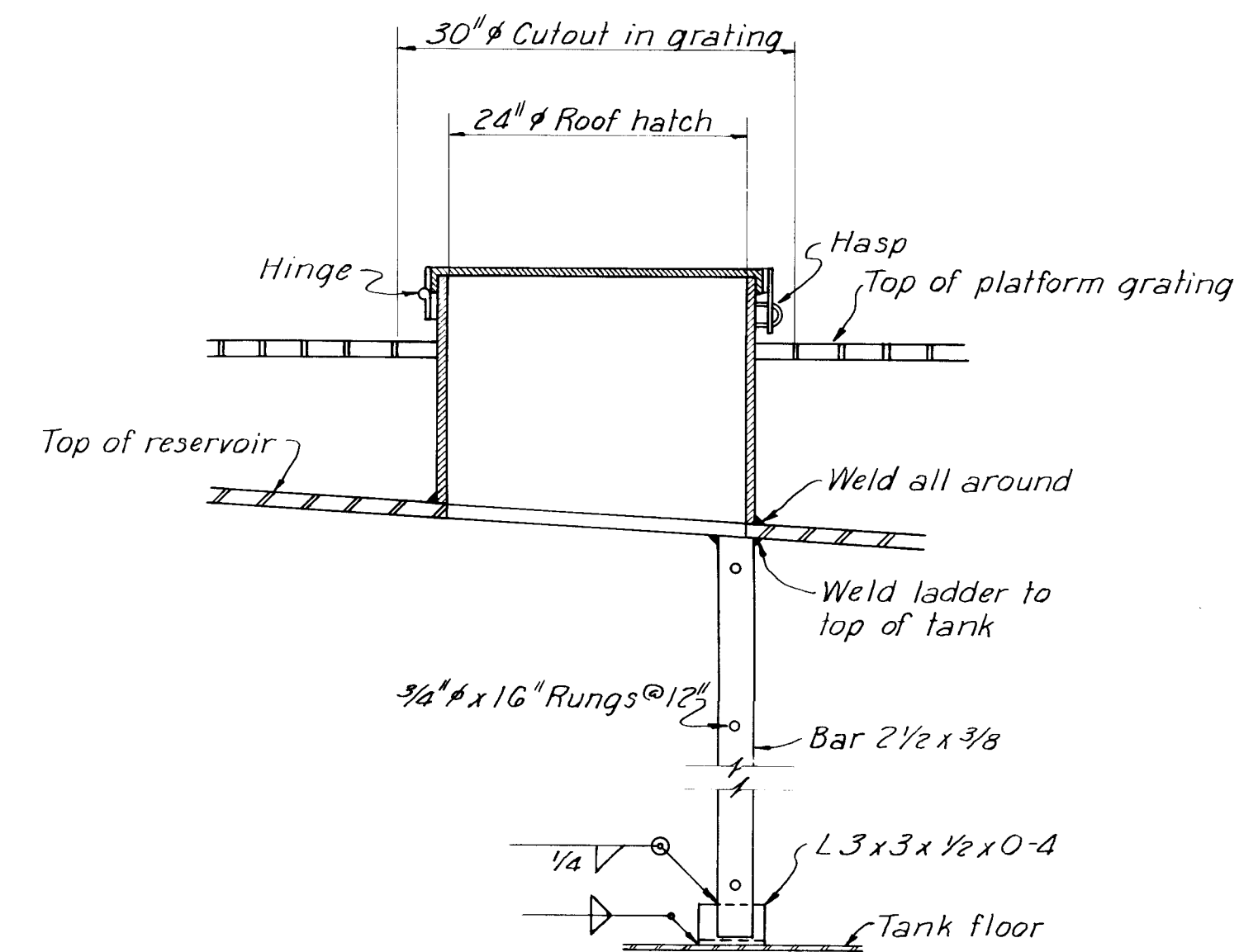
ALBUQUERQUE, NEW MEXICO			
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS			
PLANS AND ELEVATIONS			
GORDON HERKENHOFF & ASSOCIATES, INC. CONSULTING ENGINEERS ALBUQUERQUE NEW MEXICO			
SCALE 1" = 20'	DATE MARCH 1963	DRAWN BY R.A.L. CHECKED BY G.A.J.	SHEET 6 OF 10



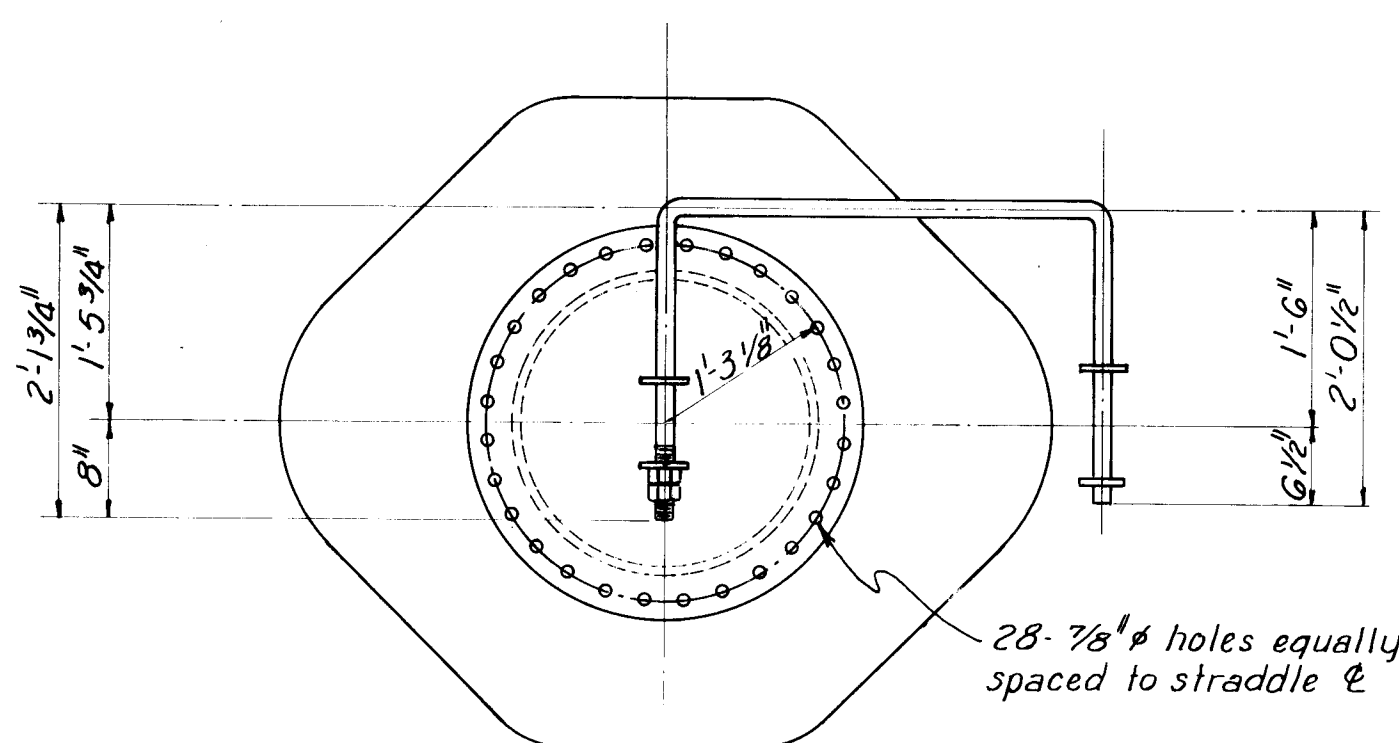
PLAN



PLAN

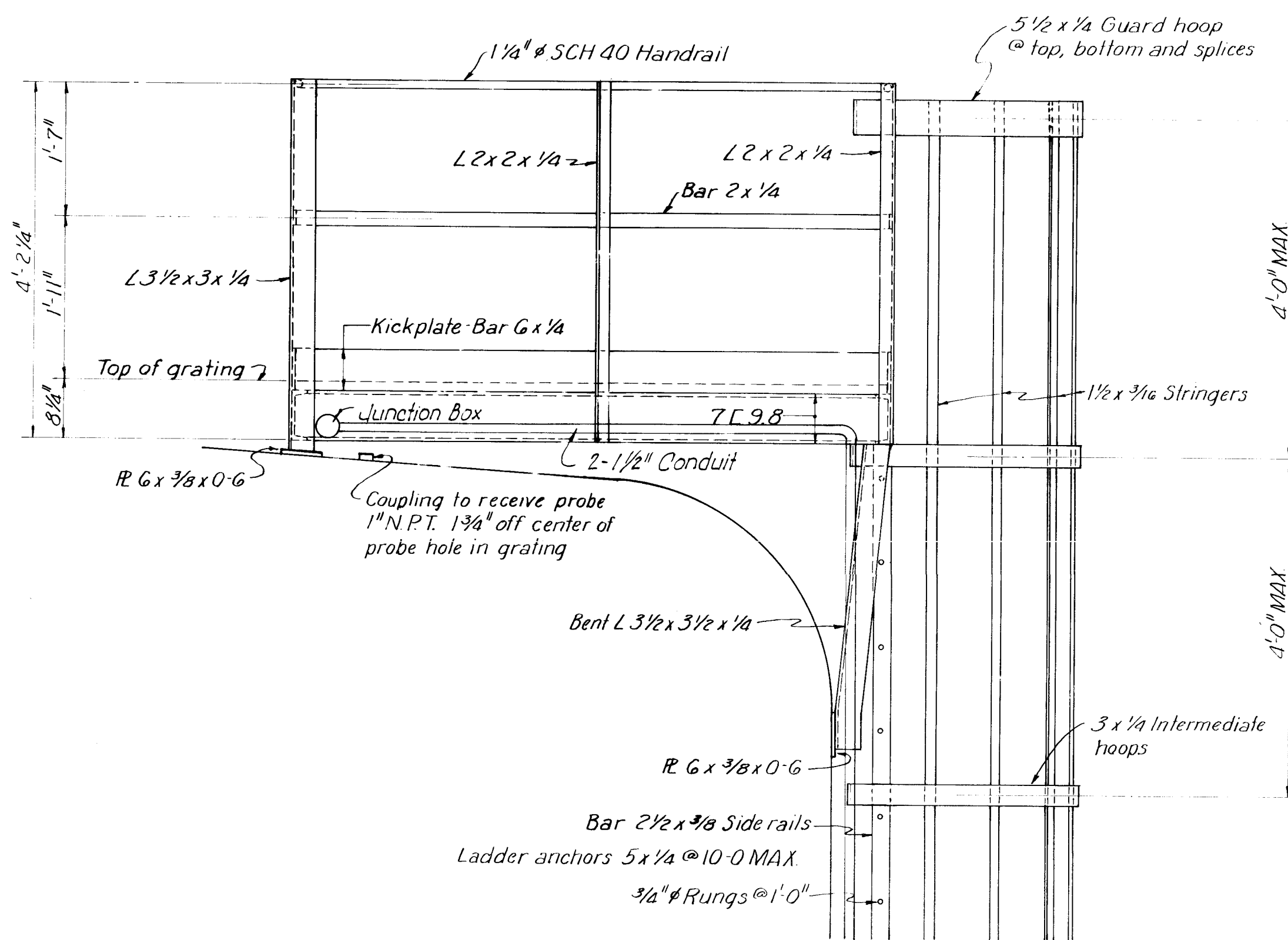


ROOF HATCH DETAIL
Not to scale



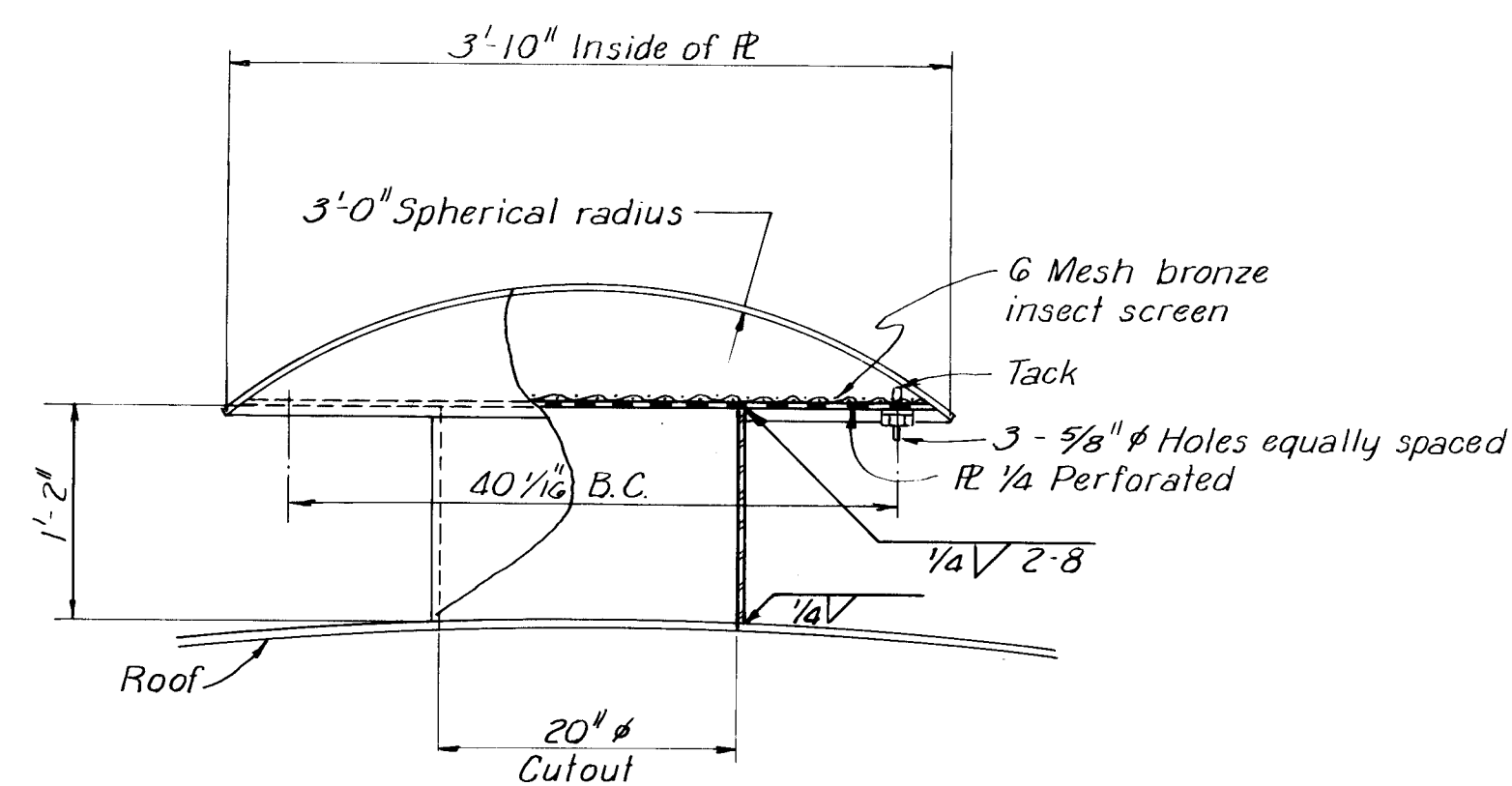
ELEVATION

24' SHELL MANHOLE DETAILS
Scale: 3/4\" = 1'-0"



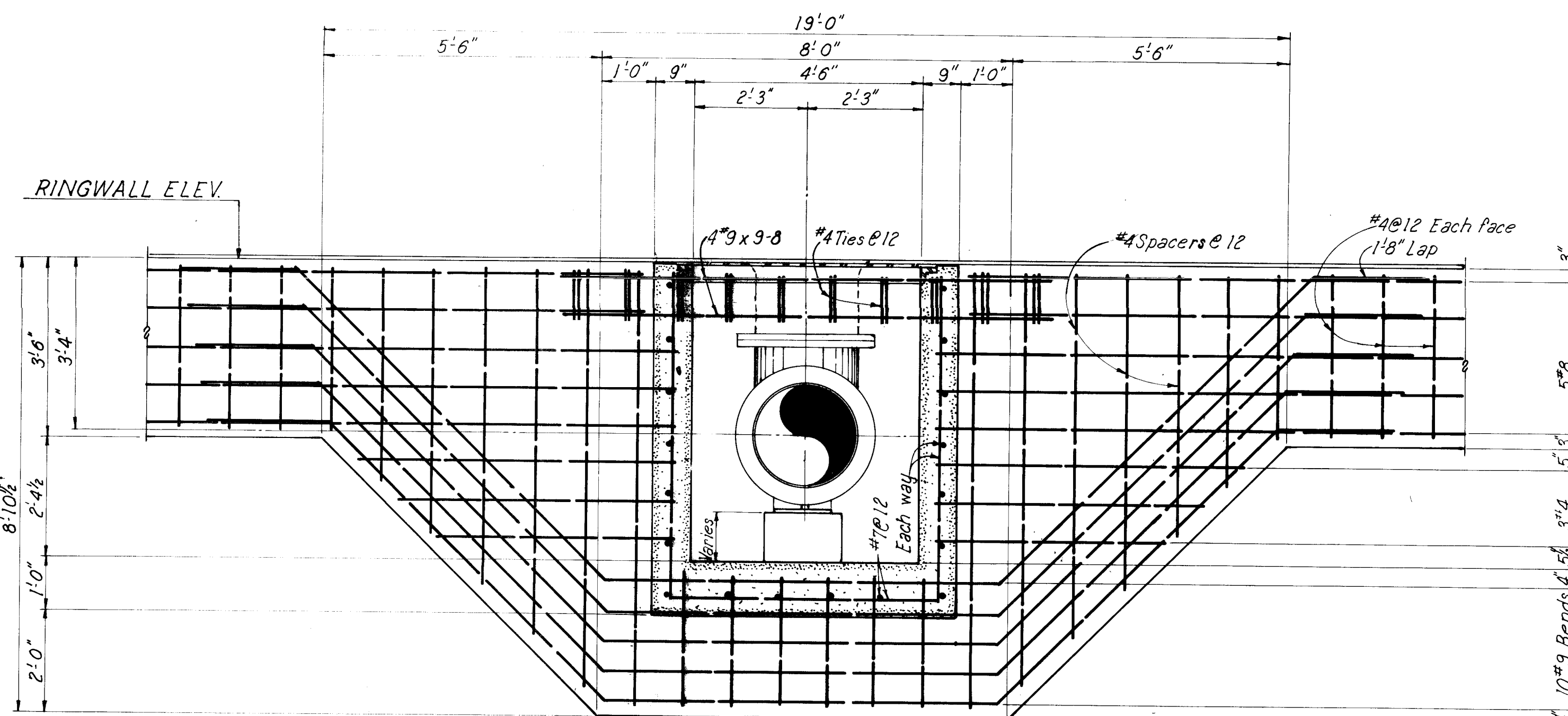
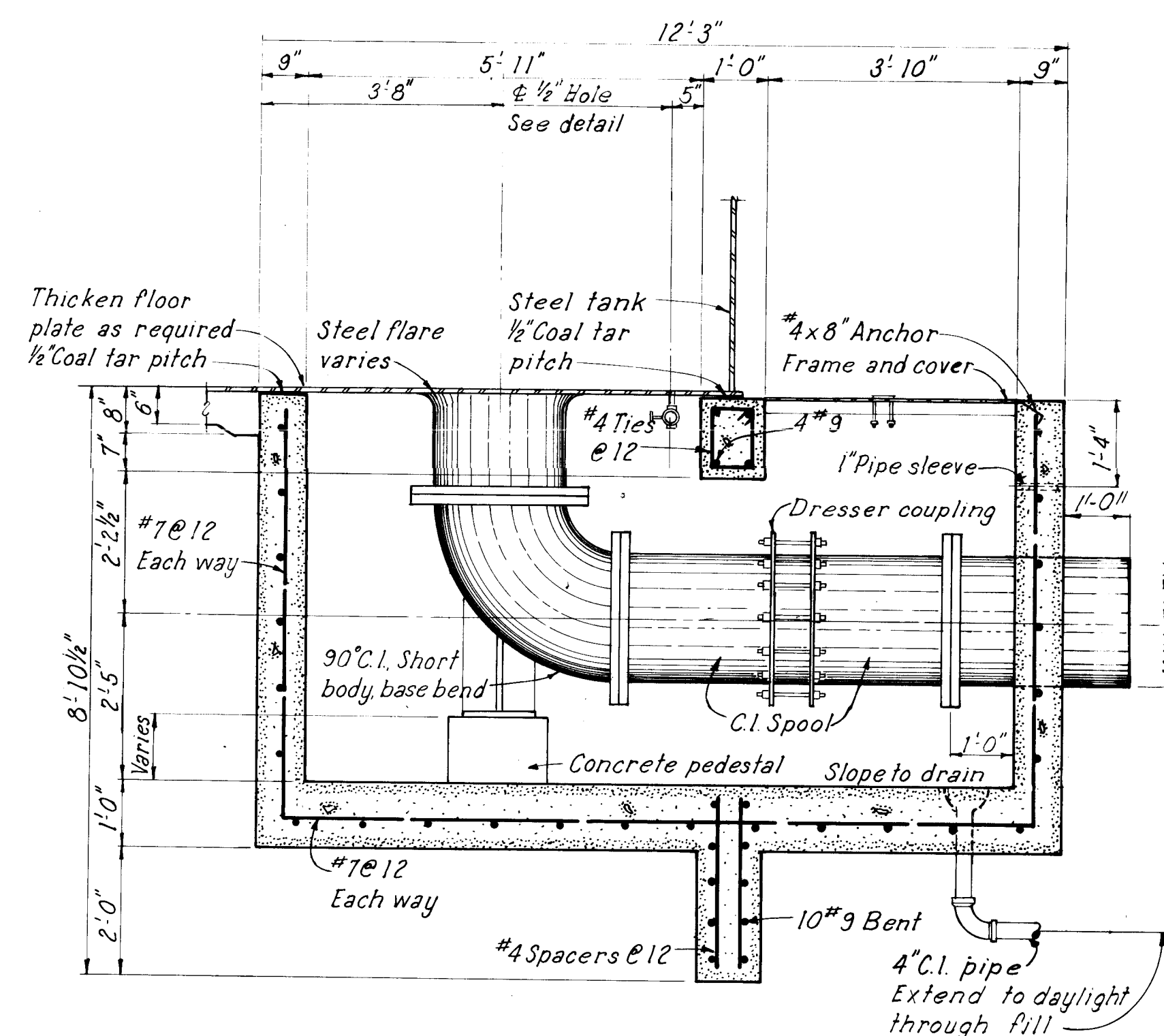
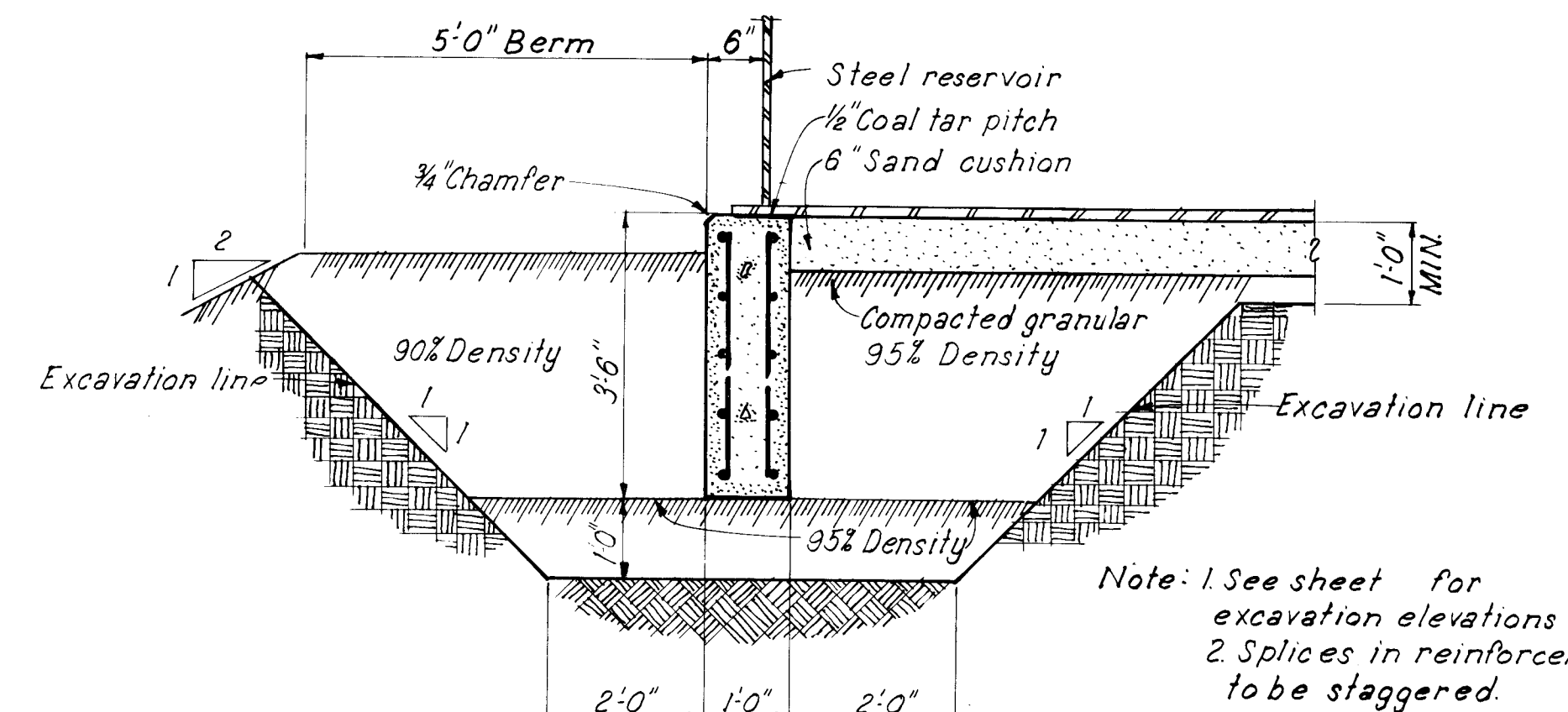
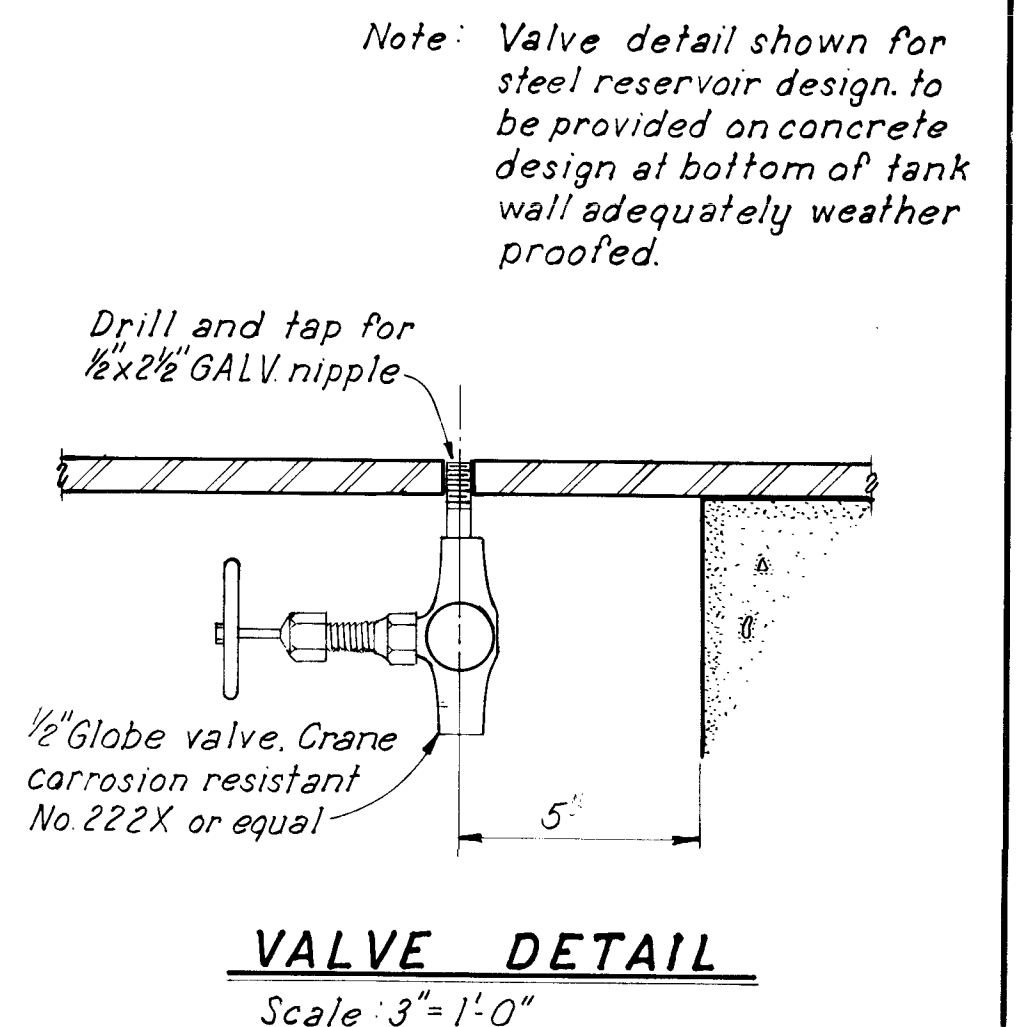
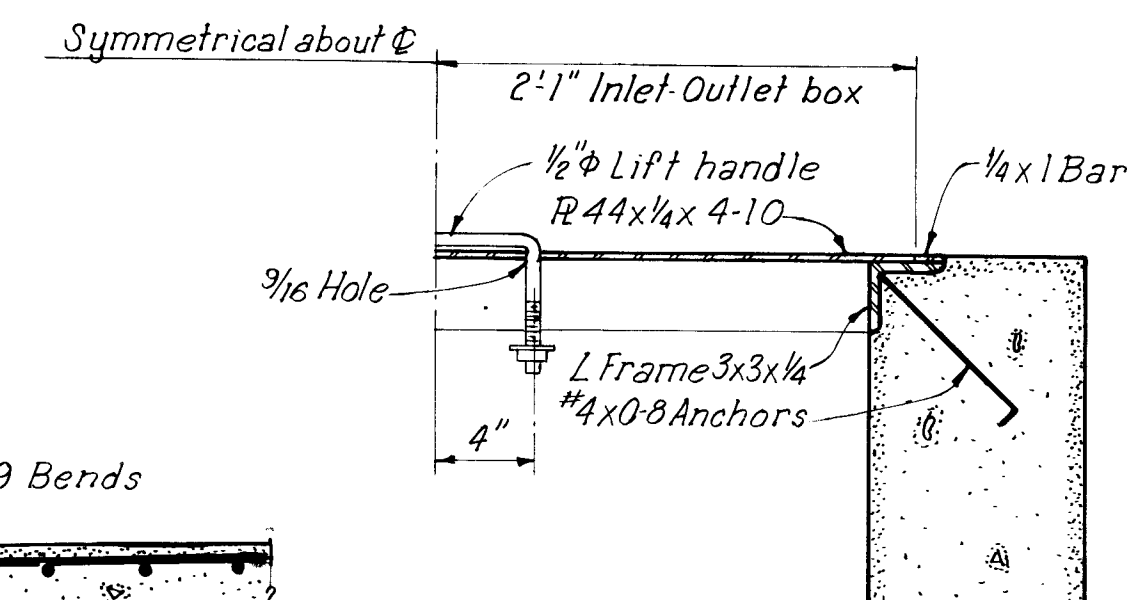
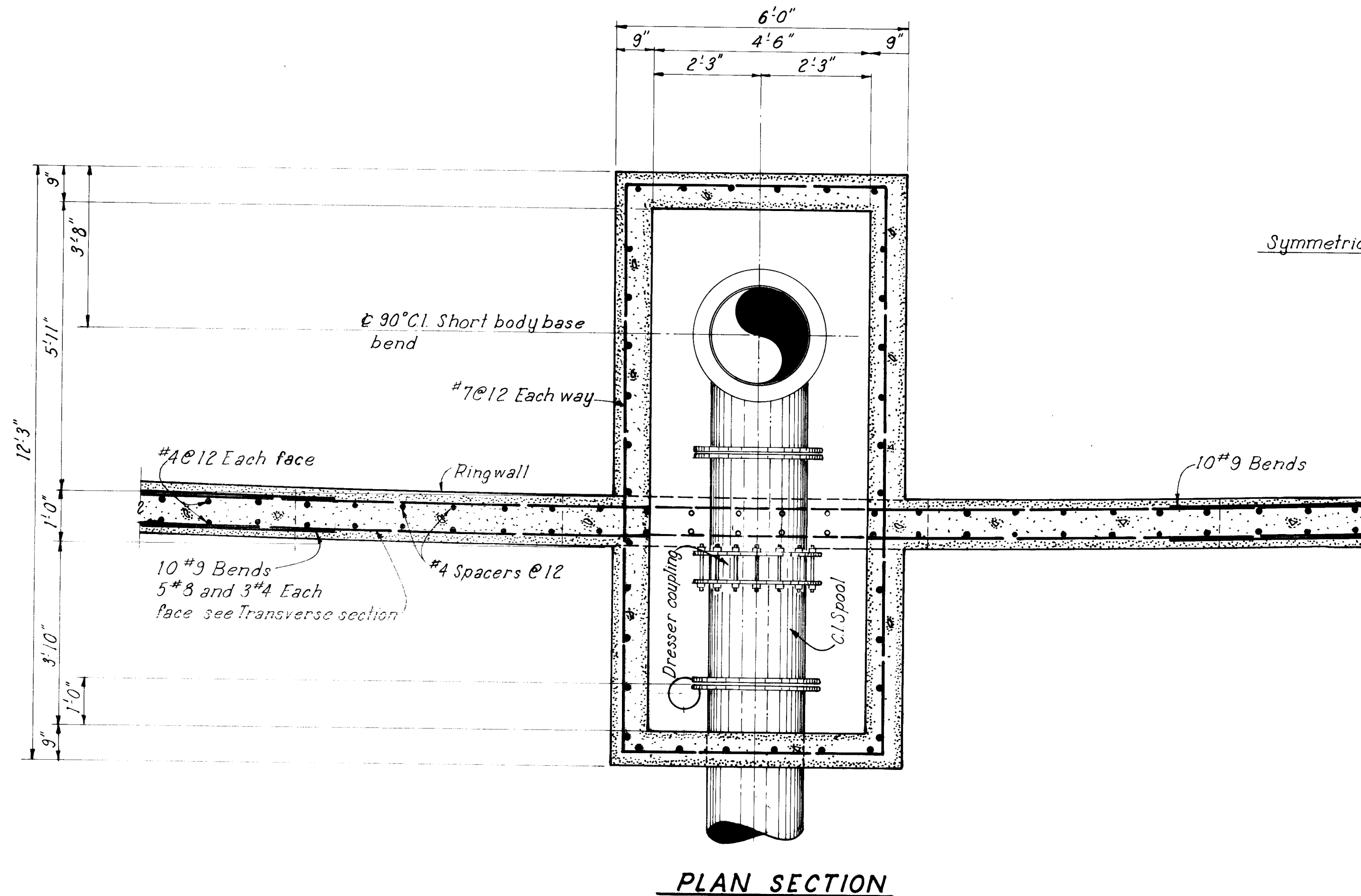
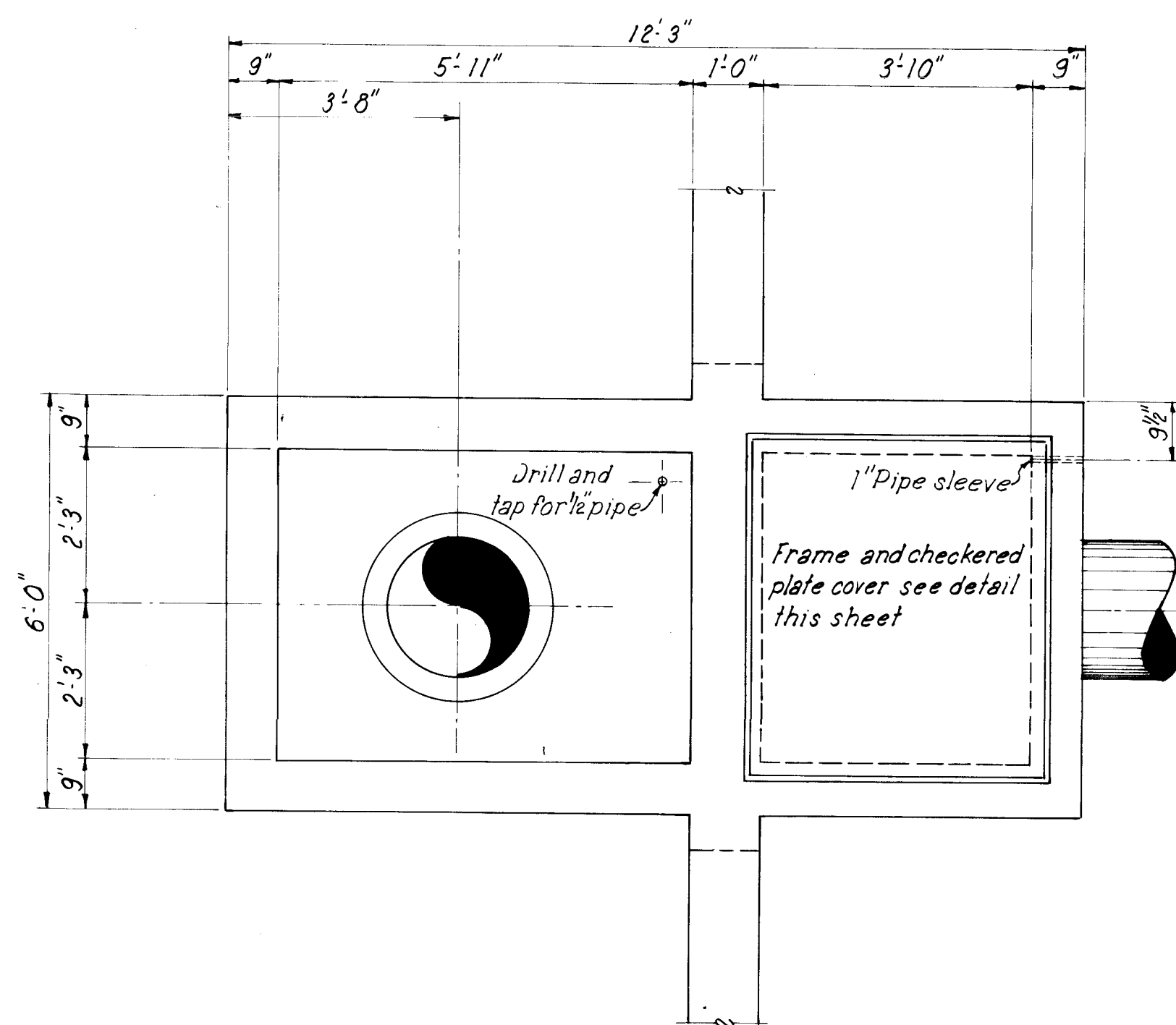
ELEVATION

PLATFORM AND LADDER DETAILS
Scale: 3/4\" = 1'-0"



VENT DETAIL
Scale: None

ALBUQUERQUE — NEW MEXICO			
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS			
HATCH, PLATFORM AND MANHOLE DETAILS			
GORDON HERKENHOFF & ASSOCIATES, INC.			
ALBUQUERQUE CONSULTING ENGINEERS NEW MEXICO			
SCALE AS SHOWN	DATE MARCH 1963	DRAWN: B.E.T. CHECKED: G.A.J.	SHEET 7 OF 10



RESERVOIR	INLET SIZE	OVERFLOW SIZE	RINGWALL ELEV.	INLET INVERT	OVERFLOW INVERT
Glenwood Hills	16	14	6015.00	6010.87	6006.00
Simms	16	14	6243.33	6239.20	6239.20
Kiva	24	16	5908.00	5903.54	5903.54

TYPICAL INLET, OUTLET AND DRAIN BOX DETAILS
Scale: 1/2" = 1'-0"

ALBUQUERQUE, NEW MEXICO

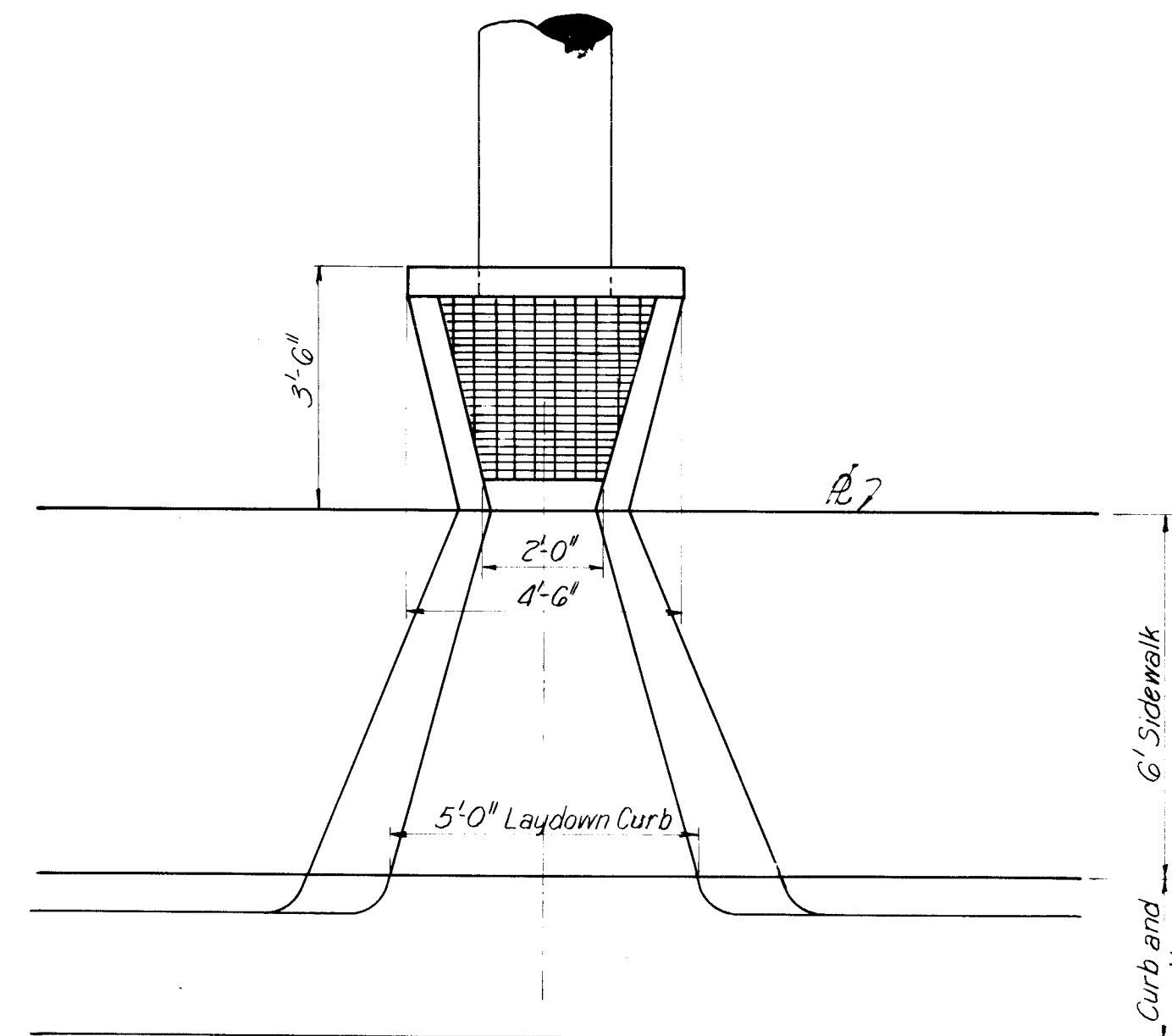
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS

INLET, OUTLET, DRAIN BOX
AND RINGWALL DETAILS

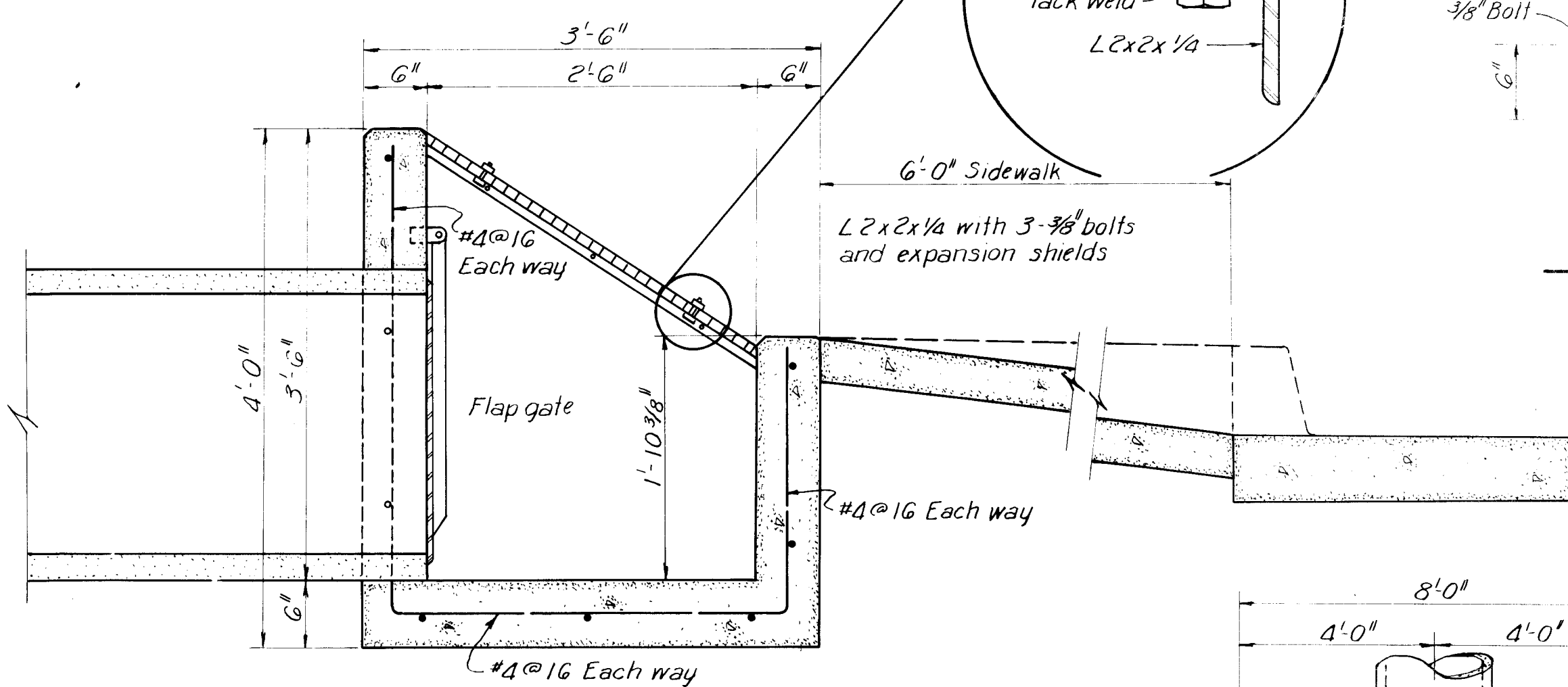
GORDON HERKENHOFF & ASSOCIATES, INC.
CONSULTING ENGINEERS

ALBUQUERQUE NEW MEXICO

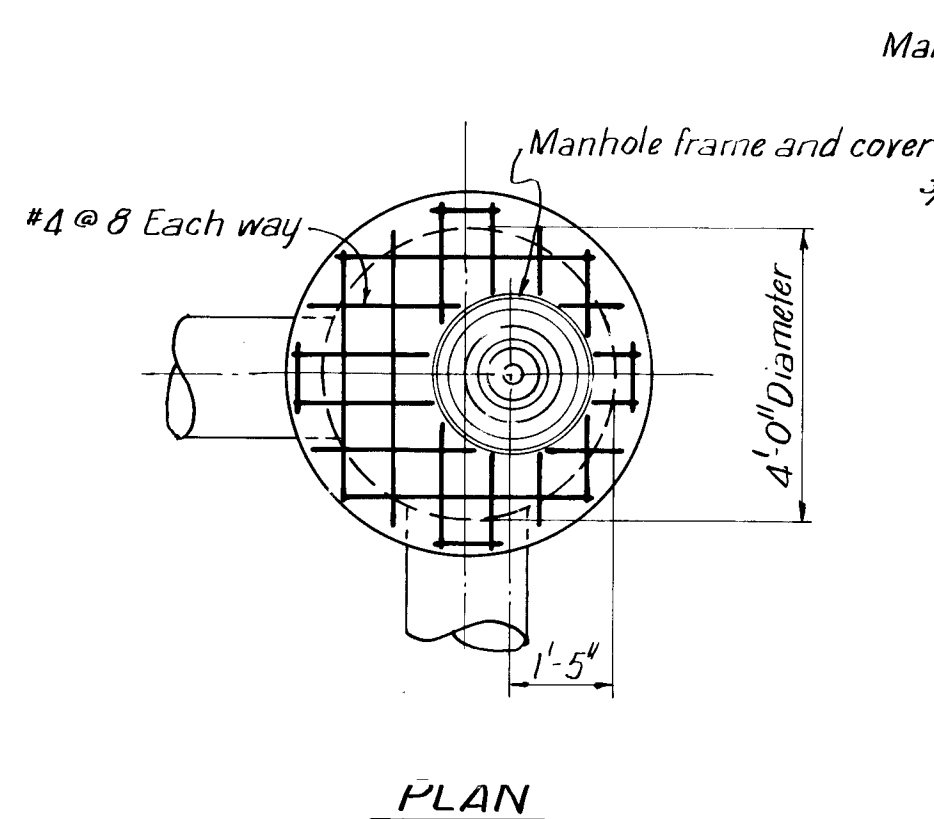
SCALE DATE DRAWN: R.A.L. SHEET 8
AS SHOWN MARCH 1963 CHECKED: G.A.J. OF 10



PLAN
Scale: $\frac{3}{8}'' = 1'-0''$



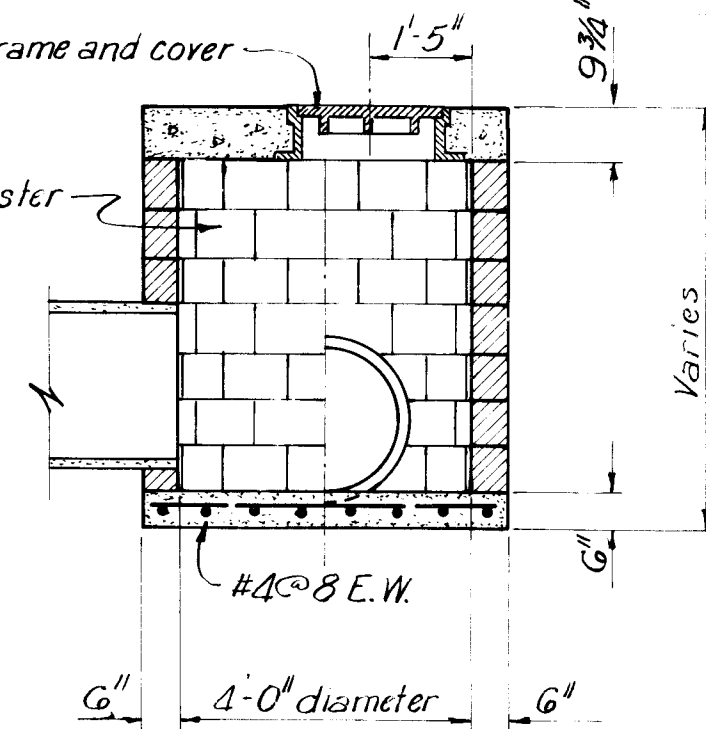
LONGITUDINAL SECTION
Scale: $1'' = 1'-0''$



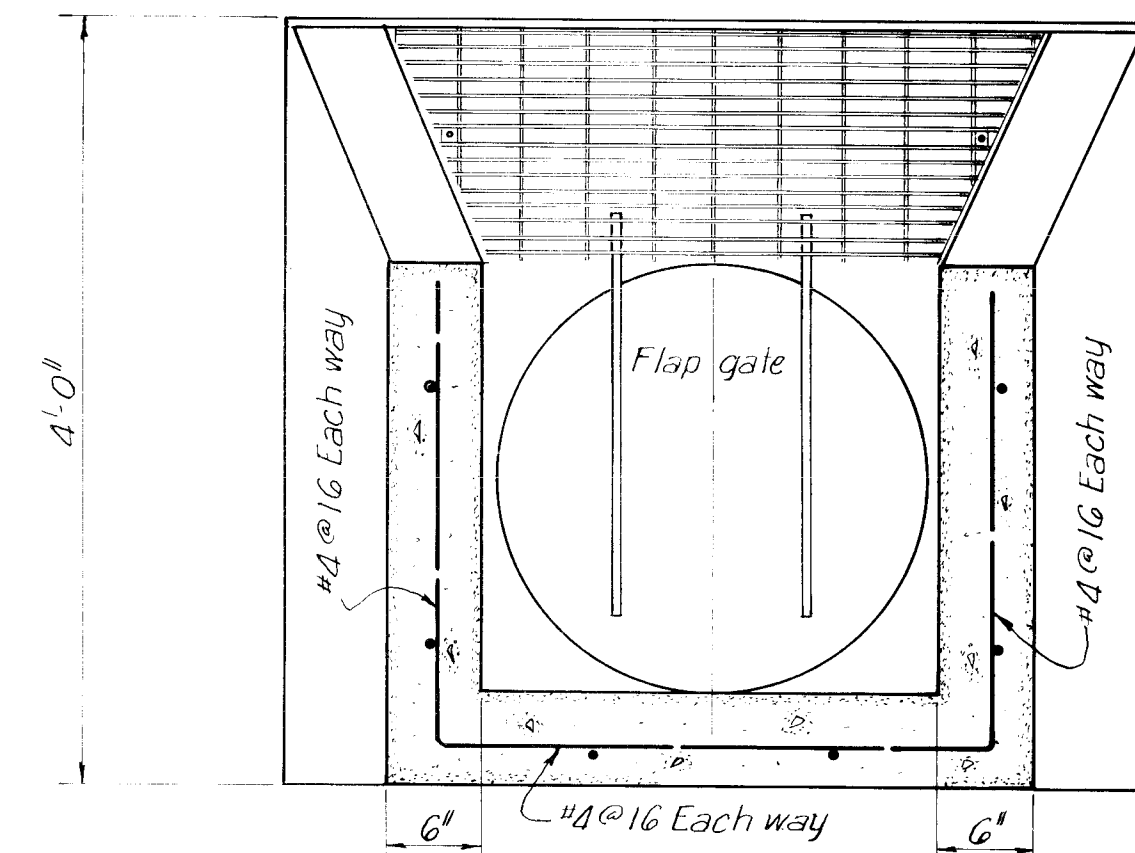
PLAN

MANHOLE DETAILS
Scale: $\frac{3}{8}'' = 1'-0''$

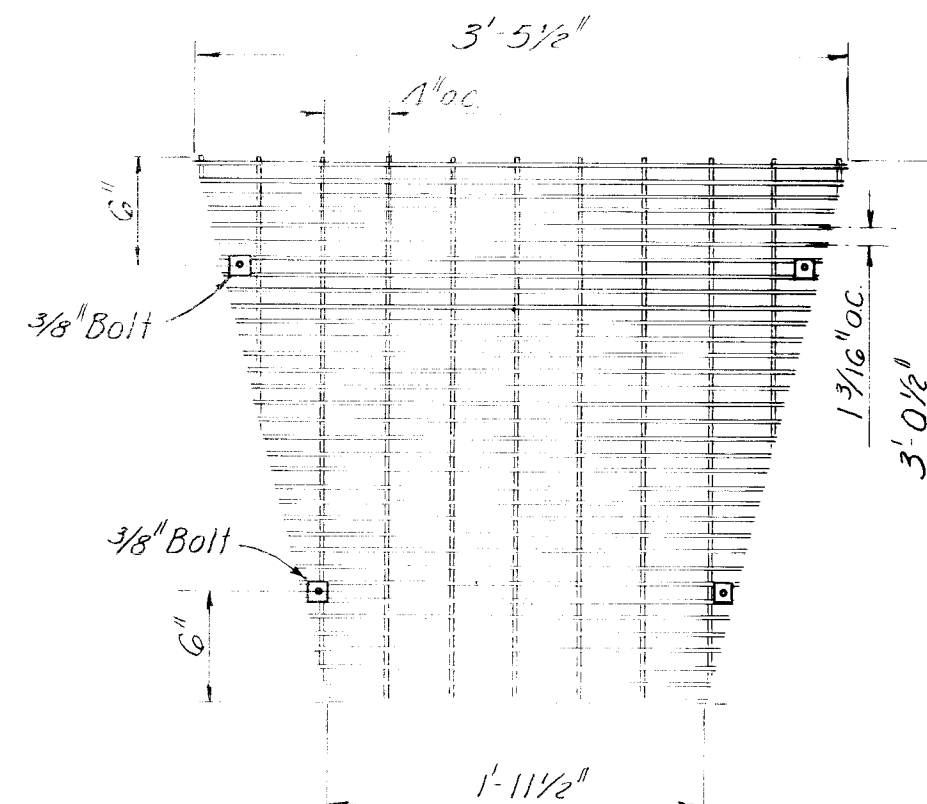
HEADWALL "A"
Scale: As shown



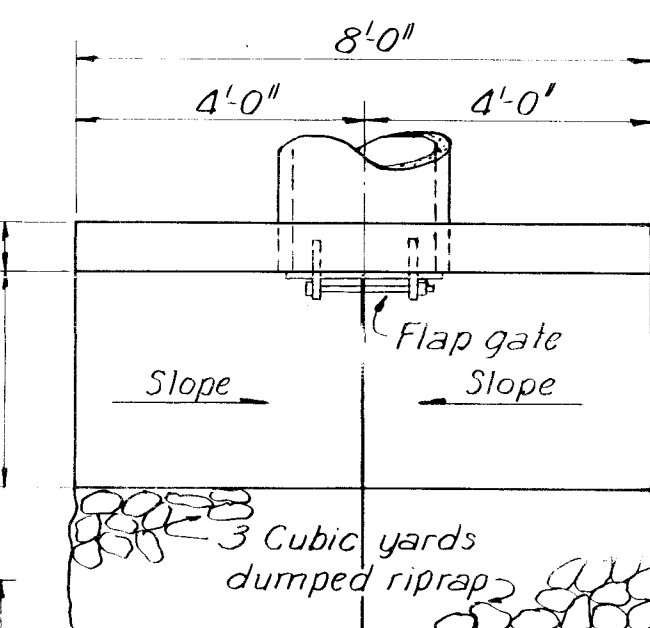
SECTION



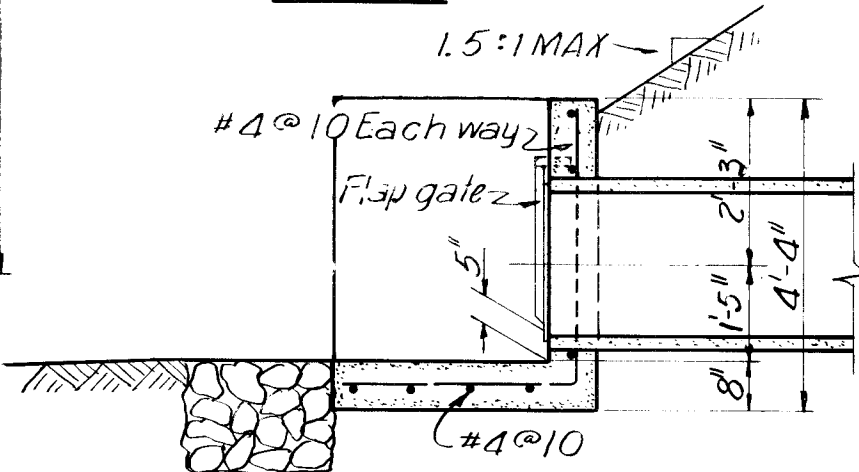
TRANSVERSE SECTION
Scale: $1'' = 1'-0''$



GRATING DETAIL
Scale: $1'' = 1'-0''$

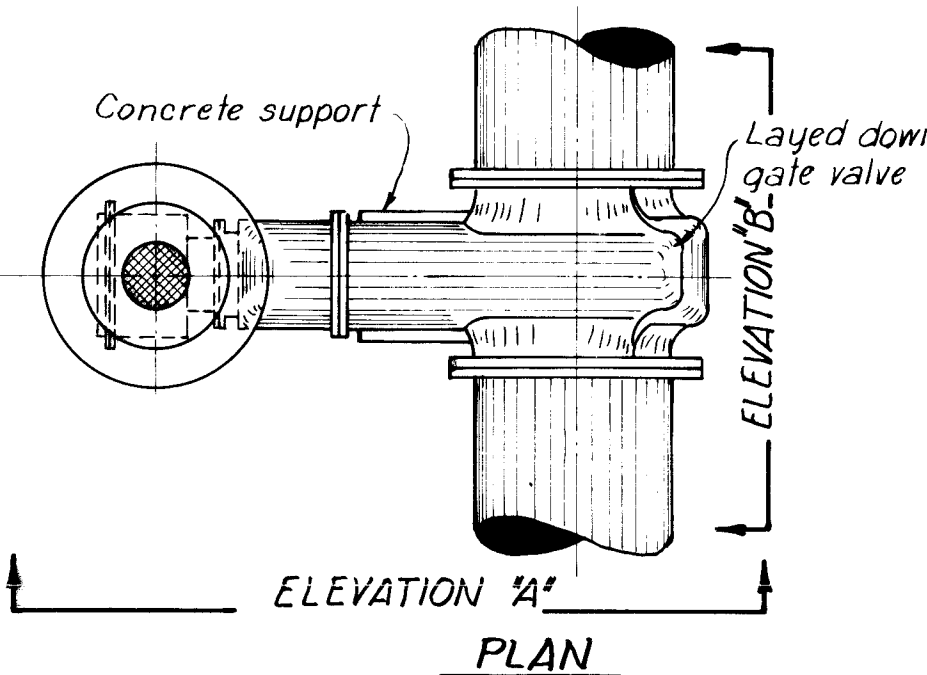


PLAN

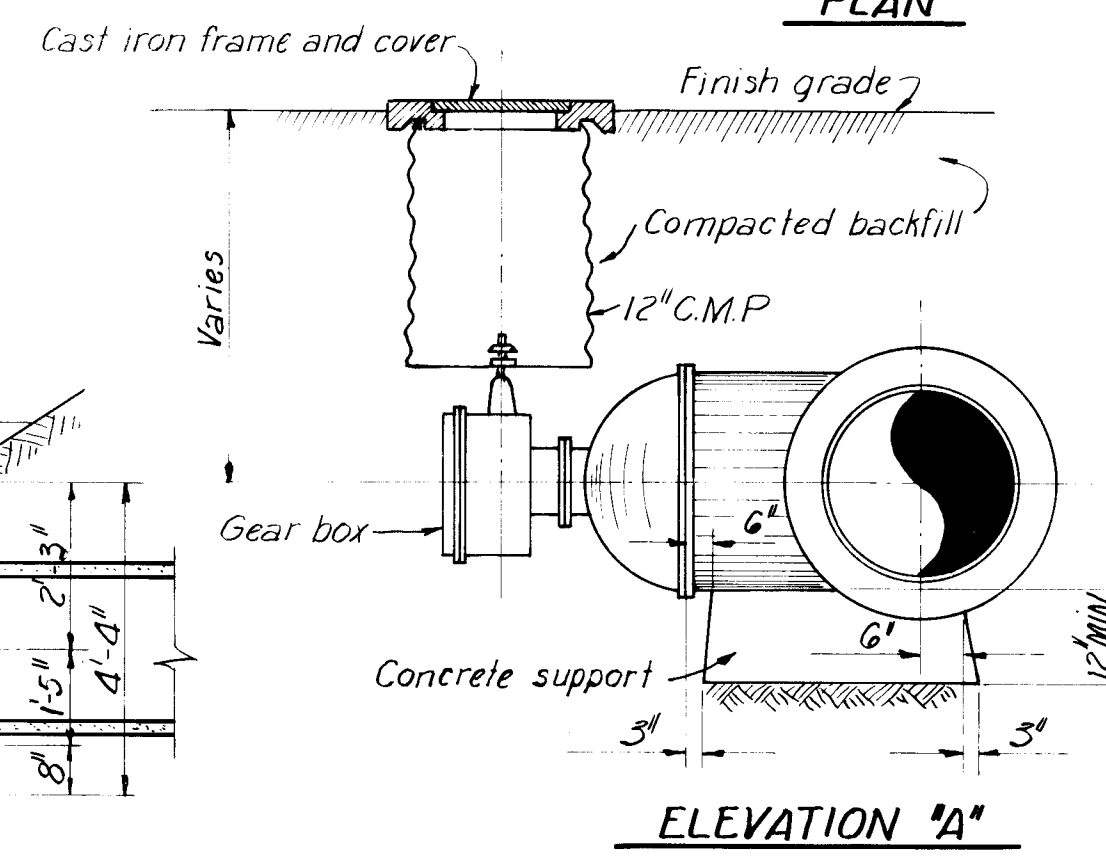


SECTION

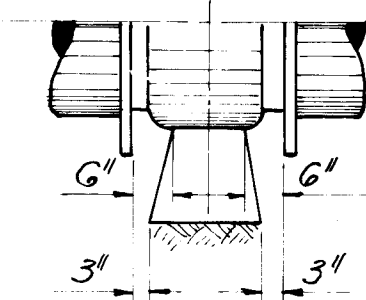
HEADWALL "B"
Scale: $\frac{3}{8}'' = 1'-0''$



PLAN

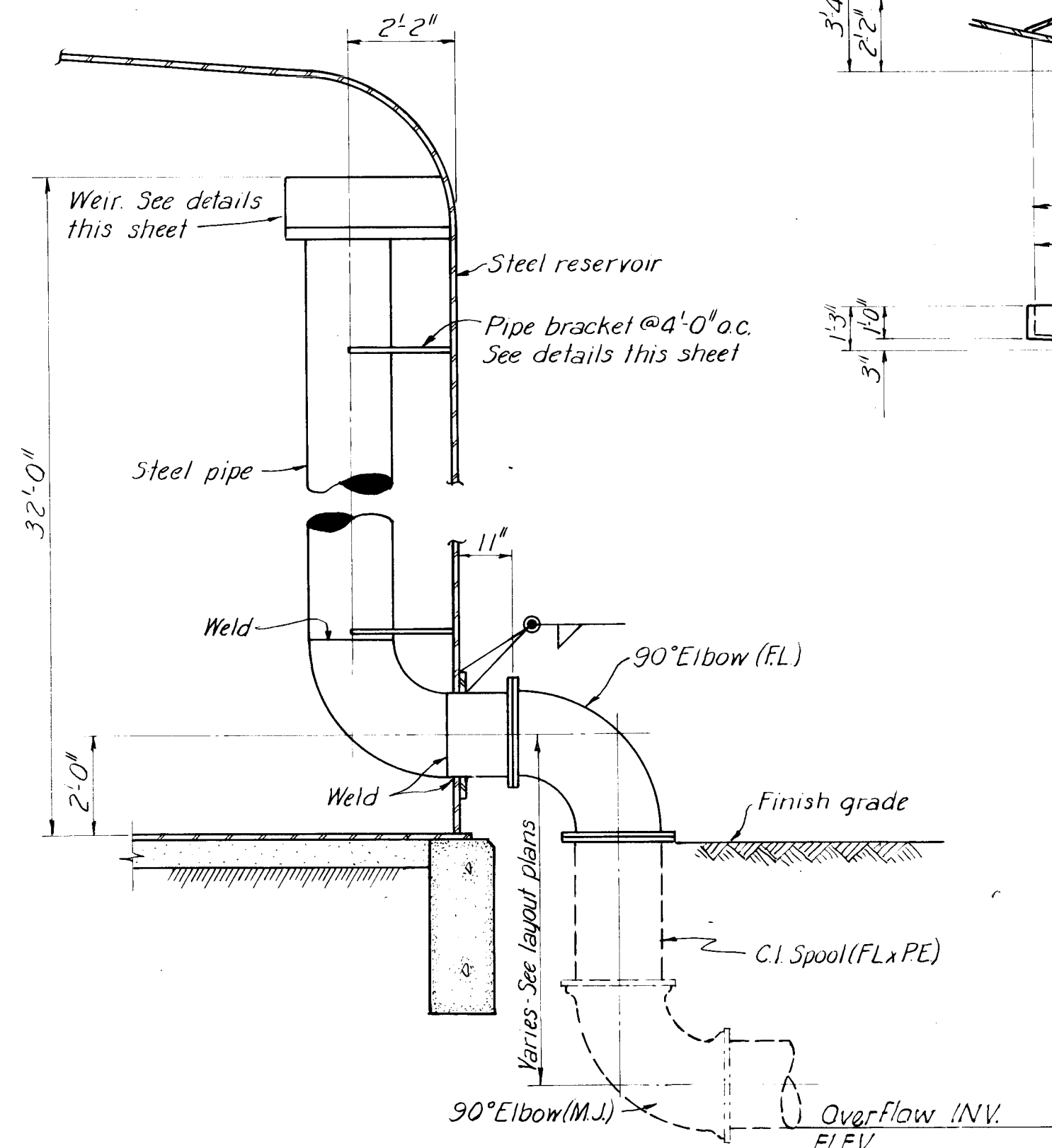


ELEVATION "A"

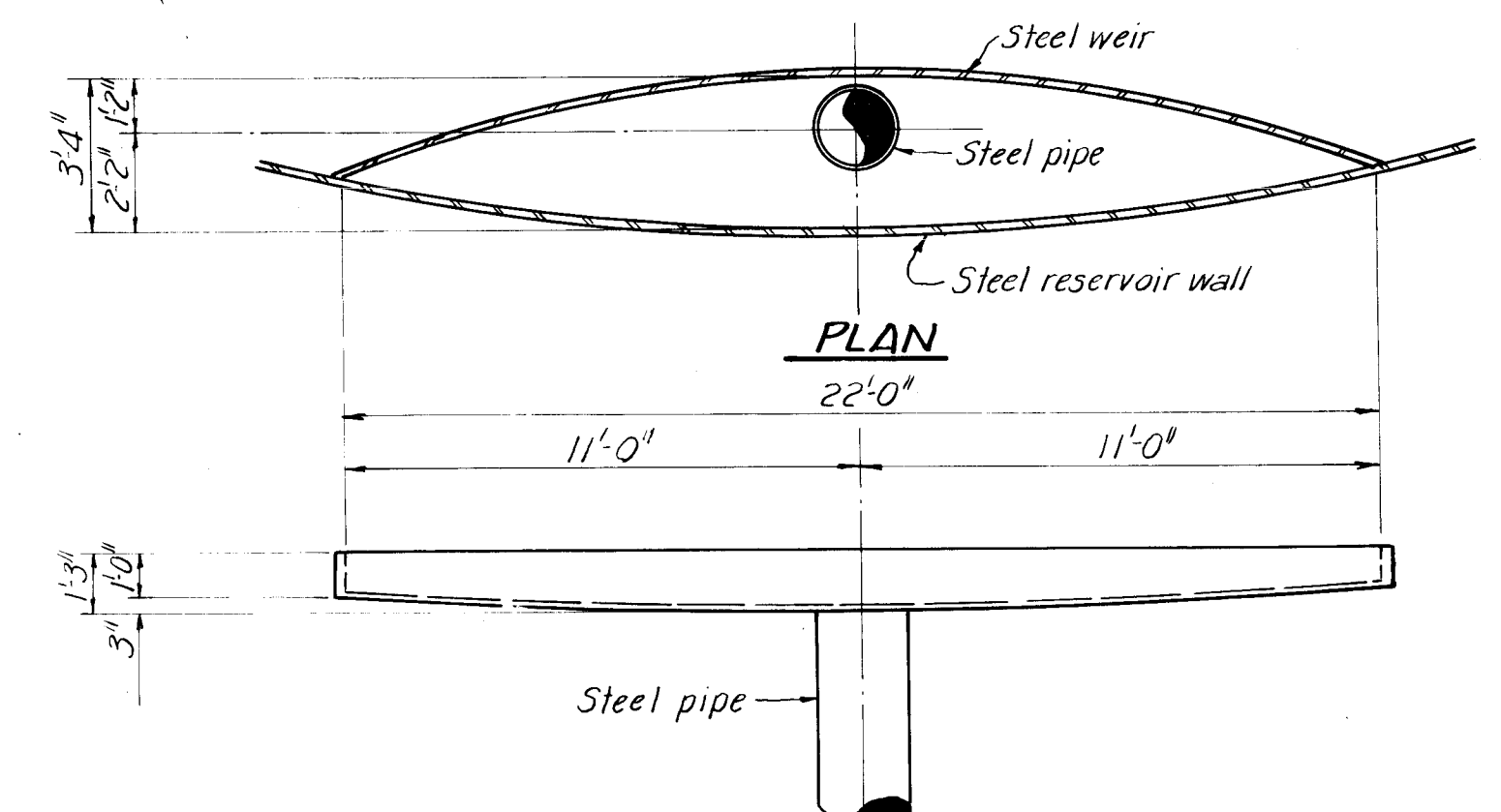


ELEVATION "B"

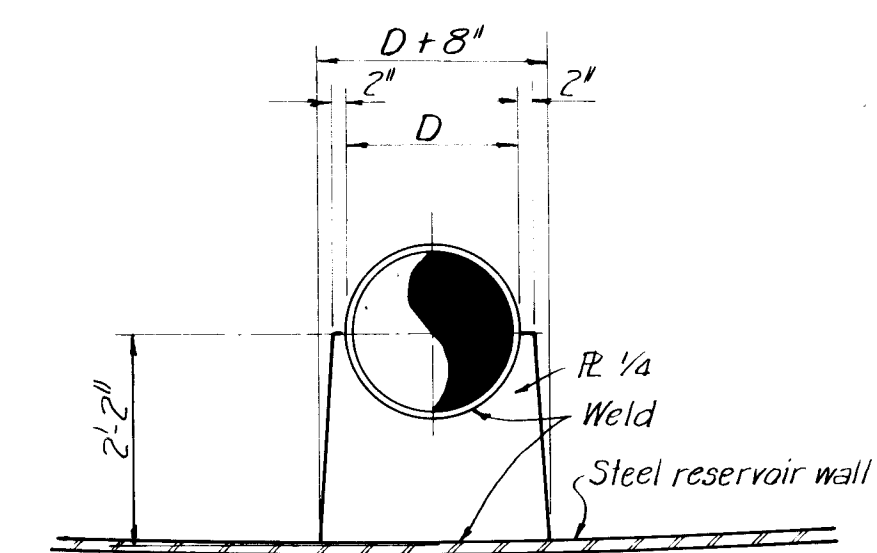
LAY DOWN GATE VALVE DETAILS
Not to scale



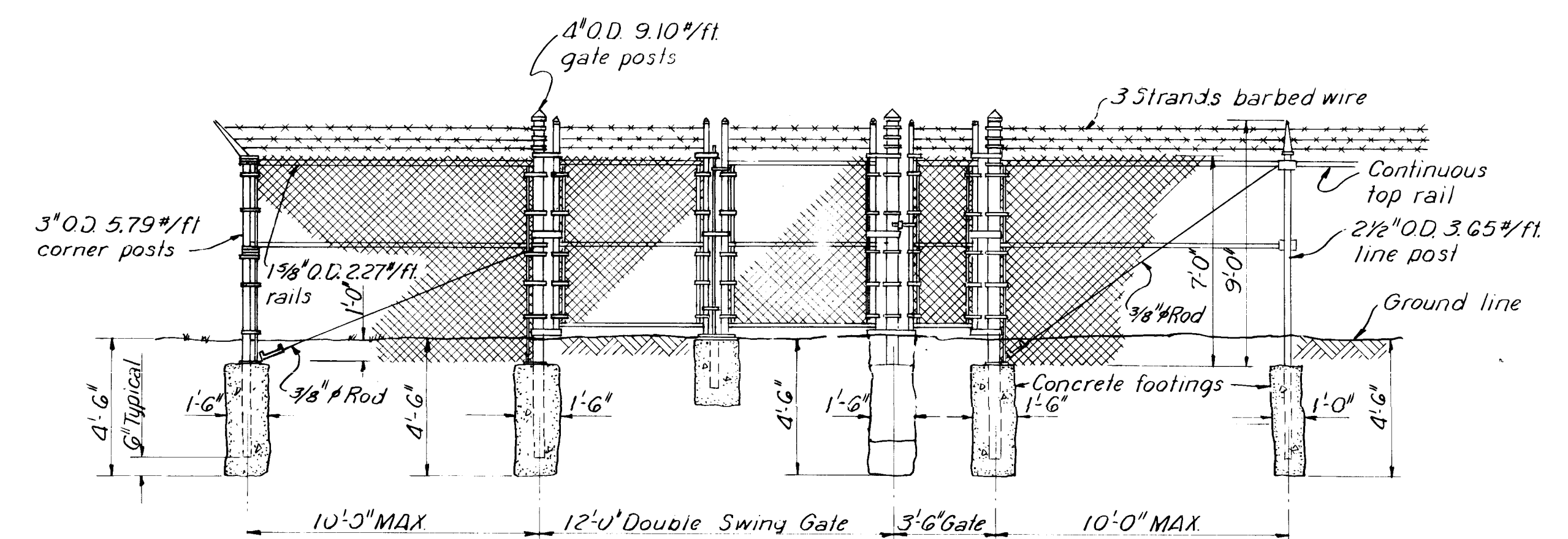
TYPICAL OVERFLOW DETAIL
Scale: $\frac{3}{8}'' = 1'-0''$



WEIR DETAILS
Scale: $\frac{1}{4}'' = 1'-0''$



PIPE BRACKET DETAIL
Scale: $\frac{1}{2}'' = 1'-0''$

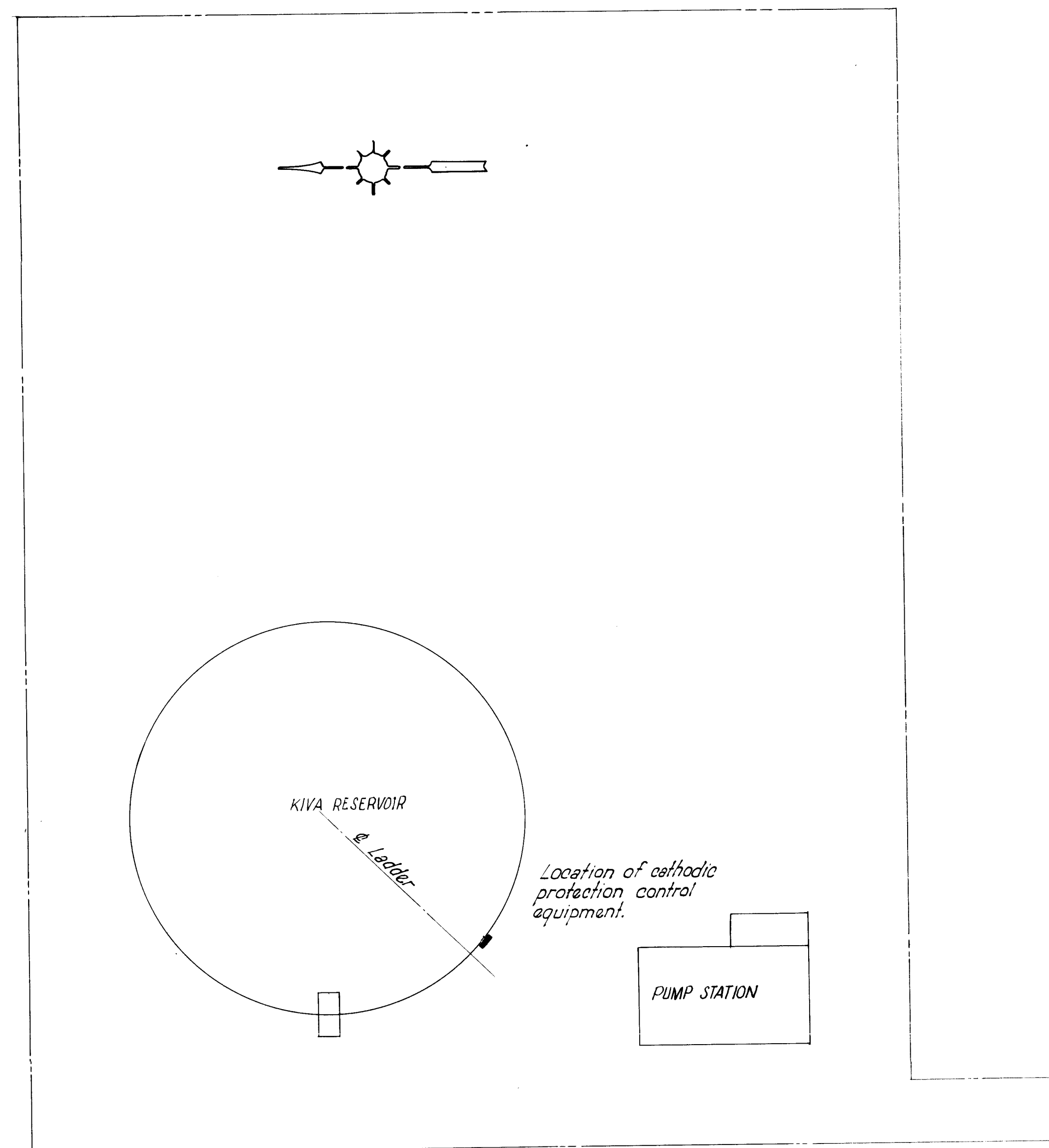


NON-CLIMBABLE FENCE DETAILS

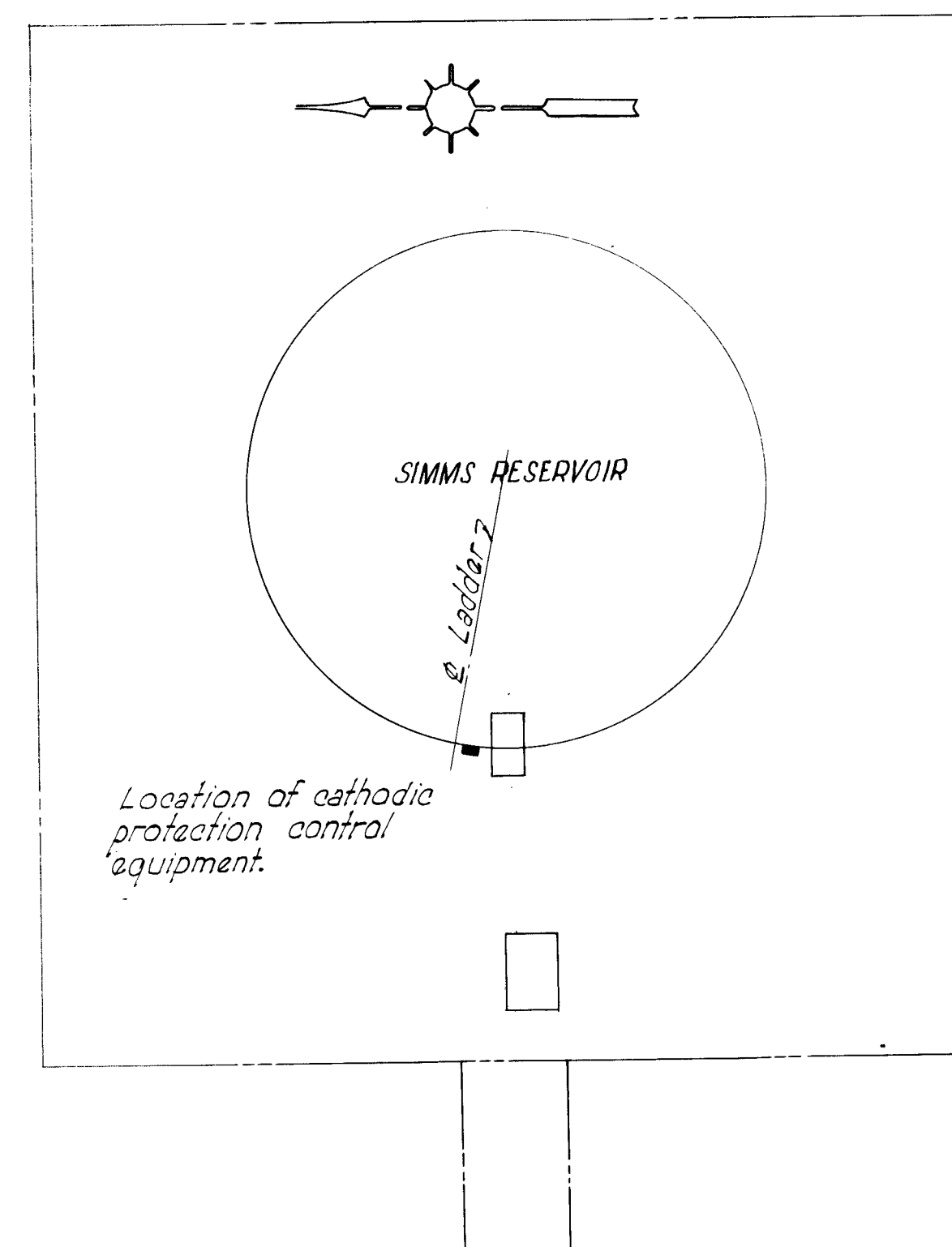
ALBUQUERQUE - NEW MEXICO
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS

MISCELLANEOUS DETAILS

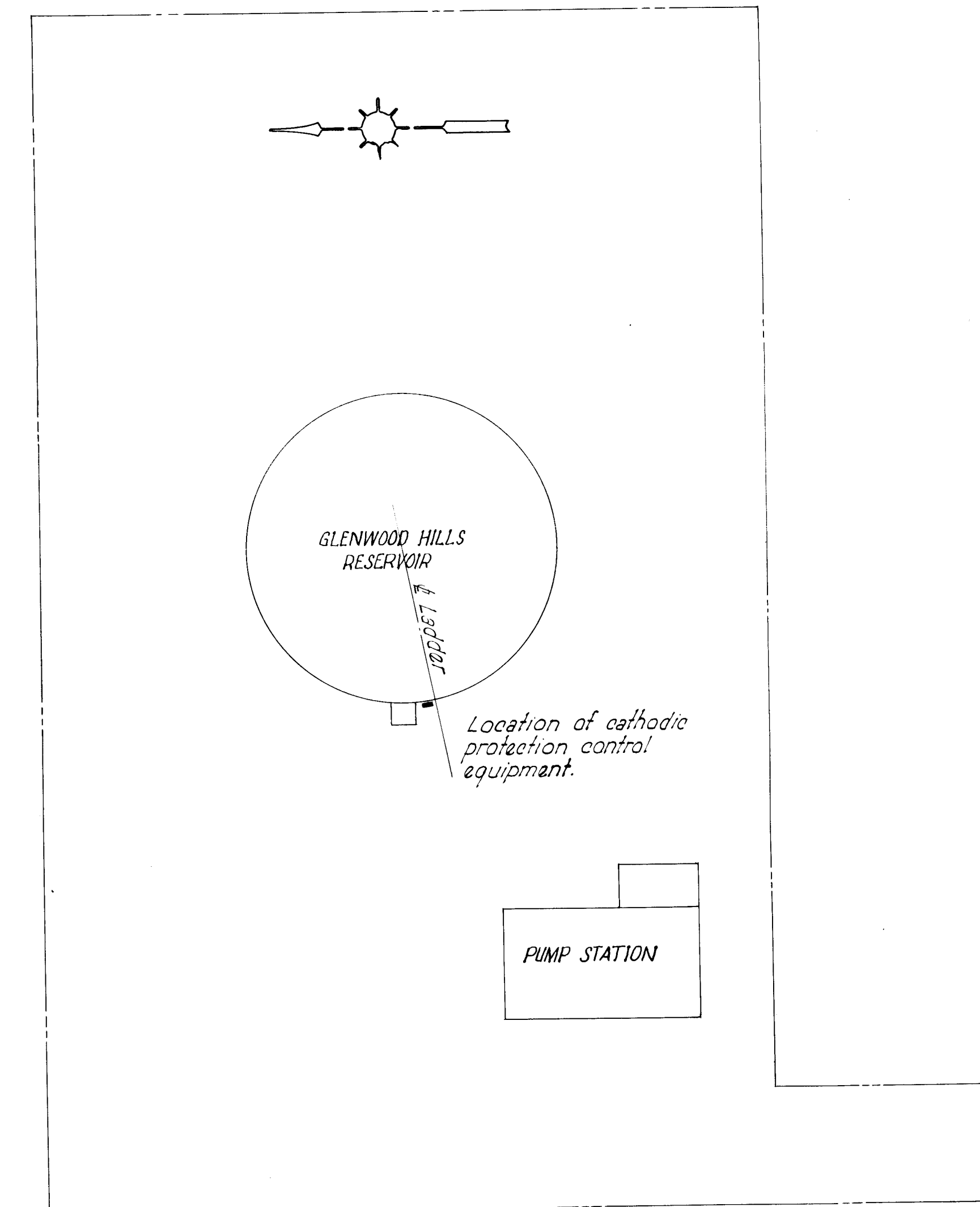
GORDON HERKENHOFF & ASSOCIATES, INC.
ALBUQUERQUE CONSULTING ENGINEERS NEW MEXICO
SCALE AS SHOWN DATE MARCH 1963 DRAWN: B.E.T. SHEET 9
CHECKED: G.A.J. OF 10



KIVA RESERVOIR



SIMMS RESERVOIR



GLENWOOD HILLS RESERVOIR

- NOTE:
1. See platform details for location of junction boxes and conduit.
 2. Cathodic protection contractor to run all wire and conduit as required to make system operational except for power lines.
 3. Conduit on the tank or tank accessories shall be installed prior to painting.

ALBUQUERQUE, NEW MEXICO			
KIVA, GLENWOOD HILLS AND SIMMS RESERVOIRS			
CATHODIC PROTECTION FOR RESERVOIRS			
GORDON HERKENHOFF & ASSOCIATES, INC. CONSULTING ENGINEERS NEW MEXICO			
SCALE	DATE	DRAWN: G.C.	SHEET 10
1" = 30'-0"	MARCH 1963	CHECKED:	OF 10