

WARNING
This plan may require structural and other changes to meet local site conditions, climatic loads, user requirements and applicable building regulations (such as the Canadian Farm Building Code). Before construction, the user of this plan is responsible to ensure that all required changes are made.

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Revised & re-numbered
(was 2371)

JET

MAR/77

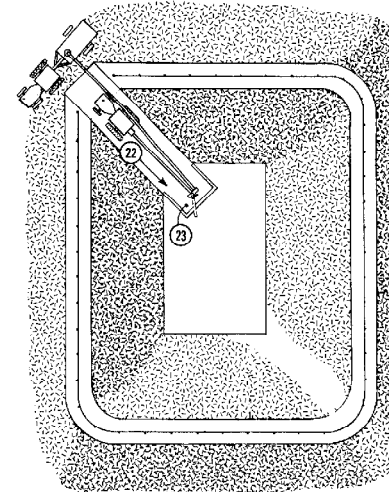
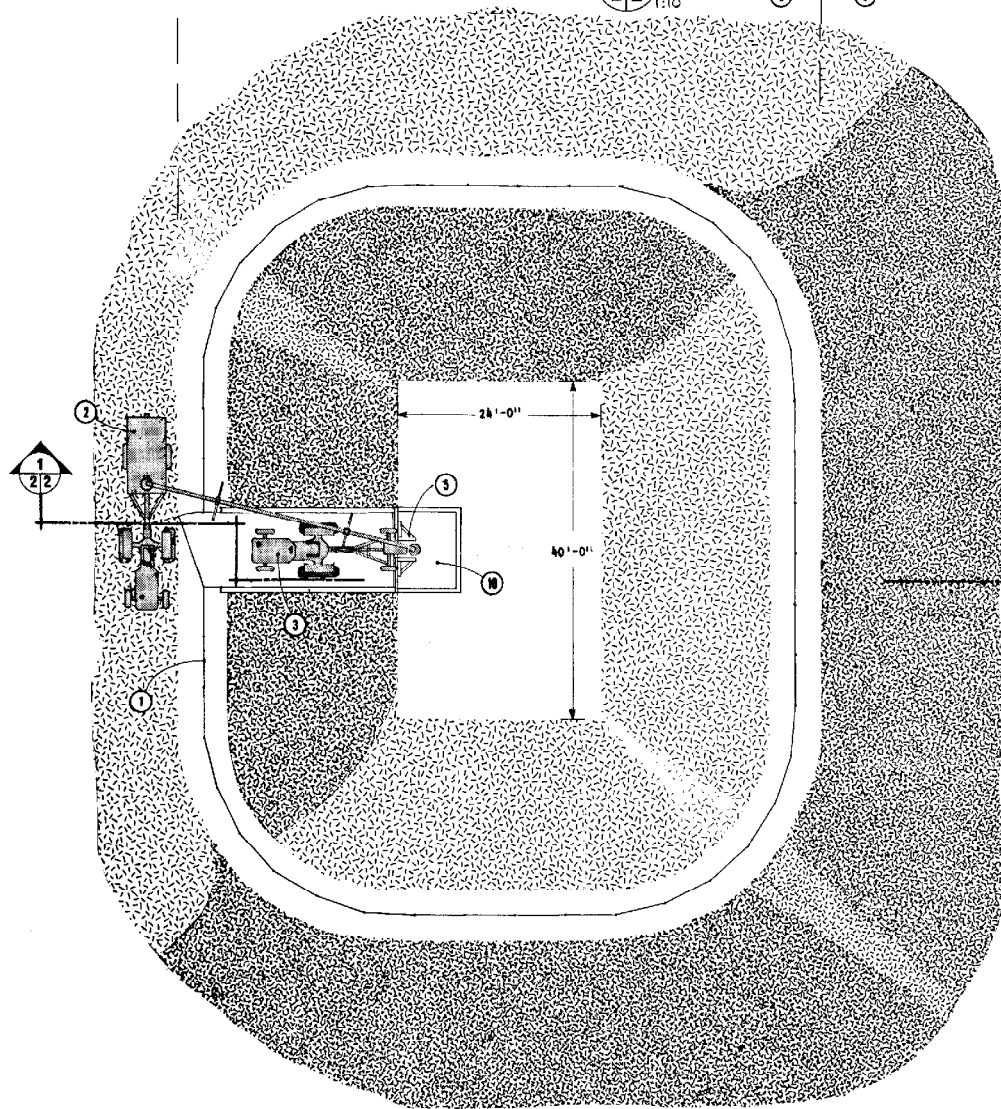
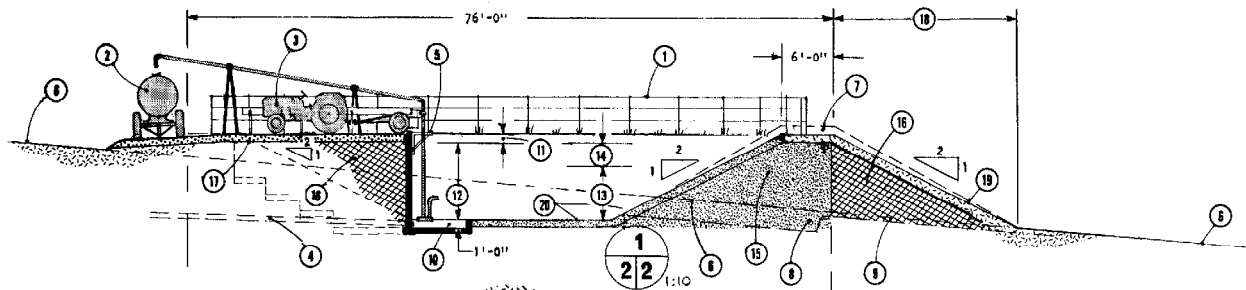
H.A.J.

SYN	REVISIONS	CHECKED	DATE	APPROVED

CANADA FARM BUILDING PLAN SERVICE

CLAY-LINED MANURE STORAGE POND

DESIGNED J.E.J.	DATE JUL-73	PLAN
DRAWN LEO BLAIS	REVISED MAR/77	10706
TRACED	SCALE N/A	
CHECKED H.A.J.		SHEET 1 OF 3



21 1:20

1. safety fence
2. vacuum tanker
3. tractor & agitator pump
4. 12" PVC pipe from plunger type manure pump, below frost, locate at north side of storage
5. pump support brackets to suit agitator pump (see pump manufacturer)
6. original grade
7. add 1'-0" of extra height to bank at low side to allow for settlement
8. remove original soil to 2'-6" below grade and fill to top of bank with clay well packed in 6" layers
9. remove 6" top soil from filled area before building bank
10. 7'-0" x 7'-0" x 1'-0" deep sump
11. 1'-0" freeboard
12. total storage depth, 9'
13. available manure storage varies (see table)
14. precipitation varies
15. compact clay
16. compact fill
17. 6" gravel or crushed stone
18. dimension varies with site slope
19. top soil on outside of earth embankment
20. clay floor & walls
21. alternate ramp for tractor-powered pit pumps designed for operating on slope
22. maximum ramp slope 1:3, concrete ramp surface deeply grooved for traction
23. ramp extends to 1' below storage floor for sump

A Detail No.
B Sheet No. On Which Detail Originates
C Sheet No. On Which Detail is Shown

LIQUID MANURE STORAGE CAPACITIES

Accumulated Precipitation during Storage Period (inches of water)	Manure Storage (cuft), Pond with 24 x 40-ft bottom, 9-ft storage depth	Manure Storage (cuft), Pond with 24 x 80-ft bottom, 9-ft storage depth
0	22,000	37,000
5	20,070	34,130
10	18,081	31,070
15	16,091	28,020
20	14,101	24,960
25	12,111	21,911
30	10,121	18,850
35	8,131	15,800
40	6,141	12,740

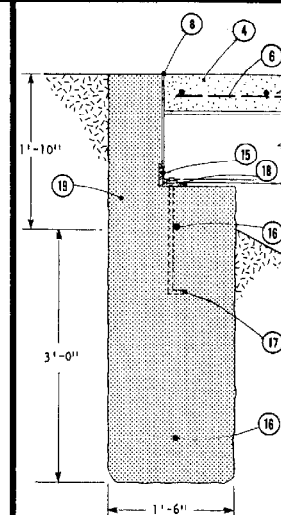
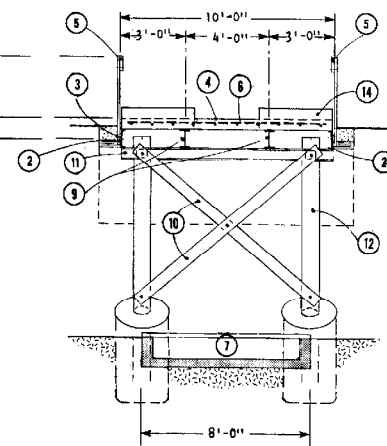
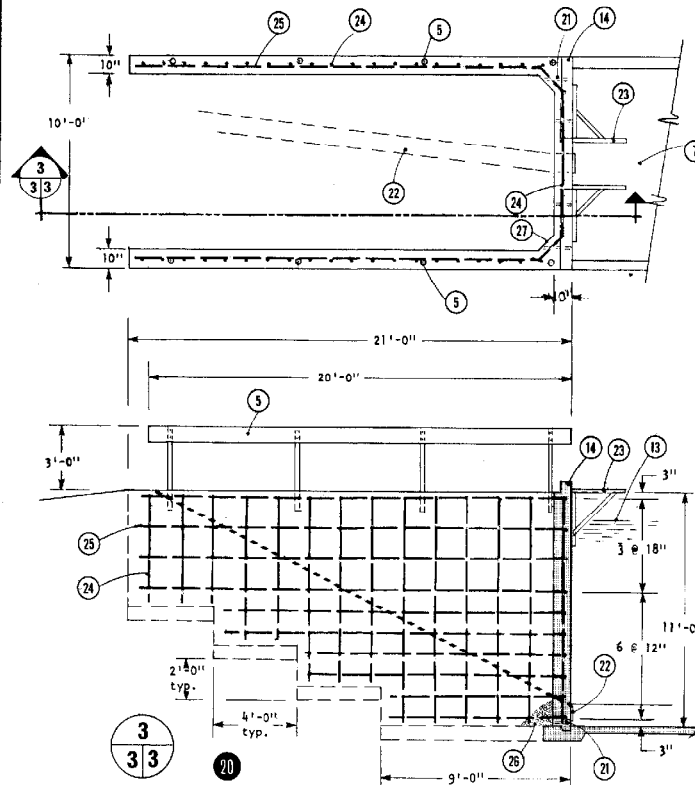
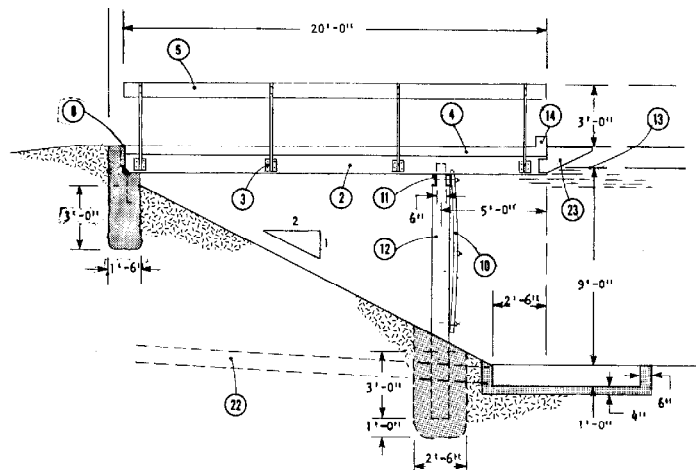
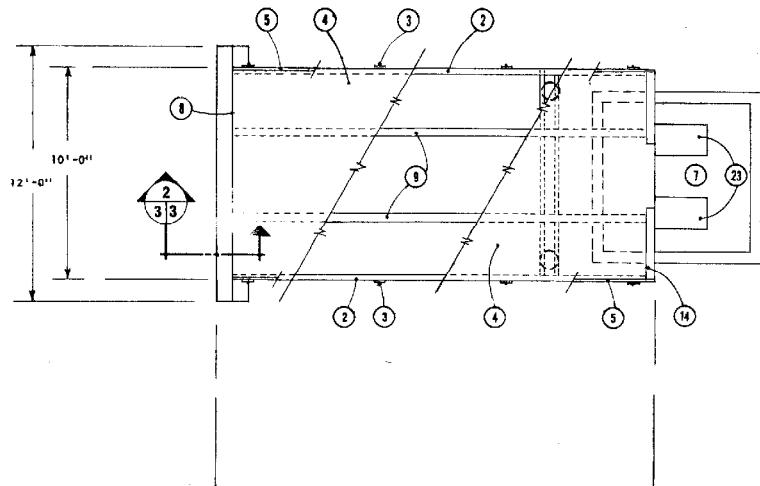
Revised & re-numbered (was 2371) J.E.T. HAR/77 H.A.J.

SYM REVISIONS CHECKED DATE APPROVED

CANADA FARM BUILDING PLAN SERVICE

PLAN AND SECTION

DESIGNED J.E.T. DATE July/73 PLAN
DRAWN J.E.T. REVISED HAR/77 10706
TRACED SCALE AS SHOWN
CHECKED H.A.J. SHEET 2 OF 3



1	wood and steel frame pumping dock with concrete deck
2	10" x 2 5/8" I @ 15.3 lb/ft., 20' long
3	1/4" x 6" x 6" flat steel plate welded to 1 1/2" galv. pipe - bolt to 10" I with 4 1/2" x 1 3/4" machine bolts, nuts and lock washers
4	10' x 20' x 5" thick concrete slab over (2) and (3)
5	2" x 8" x 20' guard rail, bolt to 1 1/2" galv. pipe posts with 2-3/8" carriage bolts, nuts and washers
6	#3 rebars @ 12" O.C. both ways, 2 1/2" from bottom
7	sump
8	construction joint
9	10" I beam @ 25.4 lb/ft., 20' long
10	2" x 6" brace - pressure treated
11	6" x 2" I @ 8.2 lb/ft. x 10' long - posts to be notched to fit, bolt to posts and weld to (2) and (3) as in (10)
12	10" top x 12" pressure treated post
13	max. liquid level 1' below top of pumping platform
14	6" x 6" concrete curb wheel stop
15	3" x 3" x 3/8" L 10' long
16	3/4" Ø x 11'-6" rebar
17	5/8" x 18" anchor bolt and nut, 6 req'd - 2 to be located 5" from each end of (15), 2 per I beam, 8" apart, one on each side
18	2" field weld - to both sides of 10" I (12) & 10" I beam (9)
19	anchor wall to be 12' long, bottom 2'-6" to be poured in trench of undisturbed firm soil
20	concrete pumping dock
21	3/4" pipe drains @ 2' O.C.
22	12" pvc pipe from plunger manure pump
23	pump support brackets to suit agitator pump (see manufacturer)
24	#6 vertical rebars 18" O.C. in side walls, 24" O.C. in front wall
25	#6 horizontal rebars 18" O.C.
26	crushed stone for drainage
27	9" cove

NOTE

All concrete to be 3000 P.S.I. min. strength at 28 days, air entrained.
All rebars to be 50,000 P.S.I. min. yield strength

Revised & re-numbered was (2371) JET MAR/77 H.A.J.

SYM REVISIONS CHECKED DATE APPROVED

CANADA FARM BUILDING PLAN SERVICE

PUMPING DOCK DETAILS

DESIGNED JET	DATE July/73	PLAN
DRAWN JET	REVISED MAR/77	10706
TRACED	SCALE 1/4" = 1'-0"	
CHECKED H.A.J.		SHEET 3 OF 3