

SIDE VIEW  
Not to Scale

Table of Quantities							
Item	Unit	Quantity Per Tank (A)			Number of Tanks Planned (B)	Total Quantity (A*B)	As Built
		14x7	16x8	16x8			
Concrete (3500 PSI)	Cu Yd	2.8	3.4	4.9			
#3 Rebar Steel Reinforcement	Lb	160	195	270			
Sand/Gravel Base	Cu Yd	1.5	2.0	2.5			
Wildlife Escape Ramp	Each	2	2	2			
Optional Inlet #1							
30" x 2' Concrete Culvert	Each	1	1	1			
Float Valve	Each	1	1	1			
Optional Inlet #2							
Frost Free Hydrant	Each	1	1	1			
Float Valve	Each	1	1	1			
2" x 6' Board (W + 1'-3" Long)	Each	2	2	2			
2" x 6' Board (3'-6" Long)	Each	2	2	2			
6" Dia. Post (6' Long)	Each	4	4	4			

Steel Schedule								
Tank Size	Mark	Type	Bar Size	Quantity	Length	Total Length	B	C
14x7	1	17	3	30	6'-0"	180'-0"	4'-0"	2'-0"
	2	17	3	16	9'-6"	152'-0"	7'-6"	2'-0"
	3	17	3	8	11'-6"	92'-0"	7'-6"	4'-0"
16x8	1	17	3	34	6'-6"	221'-0"	4'-6"	2'-0"
	2	17	3	18	10'-6"	189'-0"	8'-6"	2'-0"
	3	17	3	8	13'-6"	104'-0"	8'-6"	4'-6"
20x10	1	17	3	42	7'-6"	315'-0"	5'-6"	2'-0"
	2	17	3	22	12'-6"	275'-0"	10'-6"	2'-0"
	3	17	3	8	16'-0"	128'-0"	10'-6"	5'-6"

Tank Selection			
	Length (L) Ft	Width (W) Ft	Gallons
Planned	14	7	1,015
	16	8	1,358
	20	10	2,195
As Built			
As Built			
As Built			

$$C \sqrt{\frac{B}{\text{Type 17}}}$$

As Built - Verify that the tank is 20 or more inches deep, measure the inside tank length and width, and compute the volume in gallons.

CONCRETE STOCKWATER TANK

OWNER:

COUNTY:

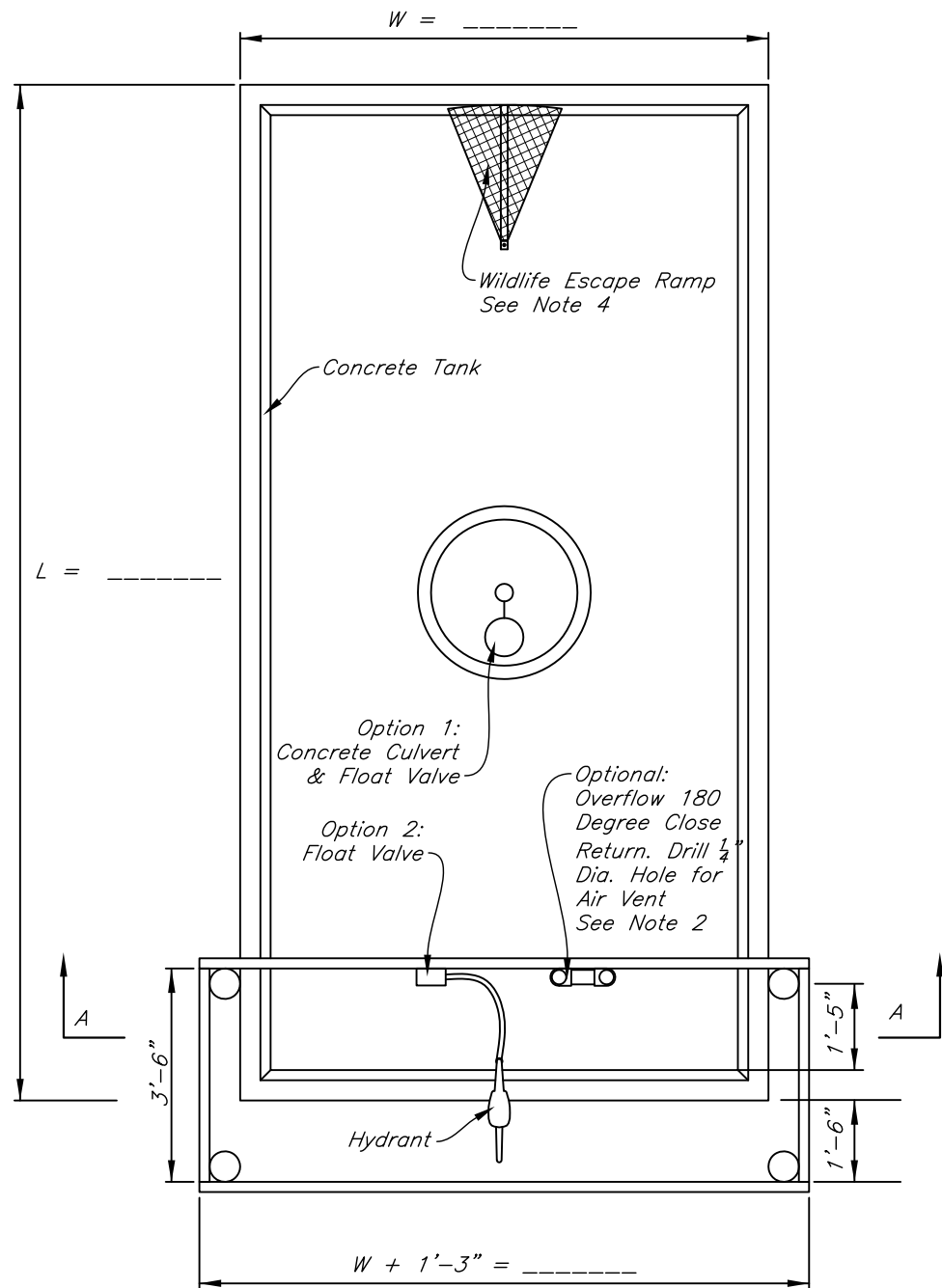


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ND-DWG-112A

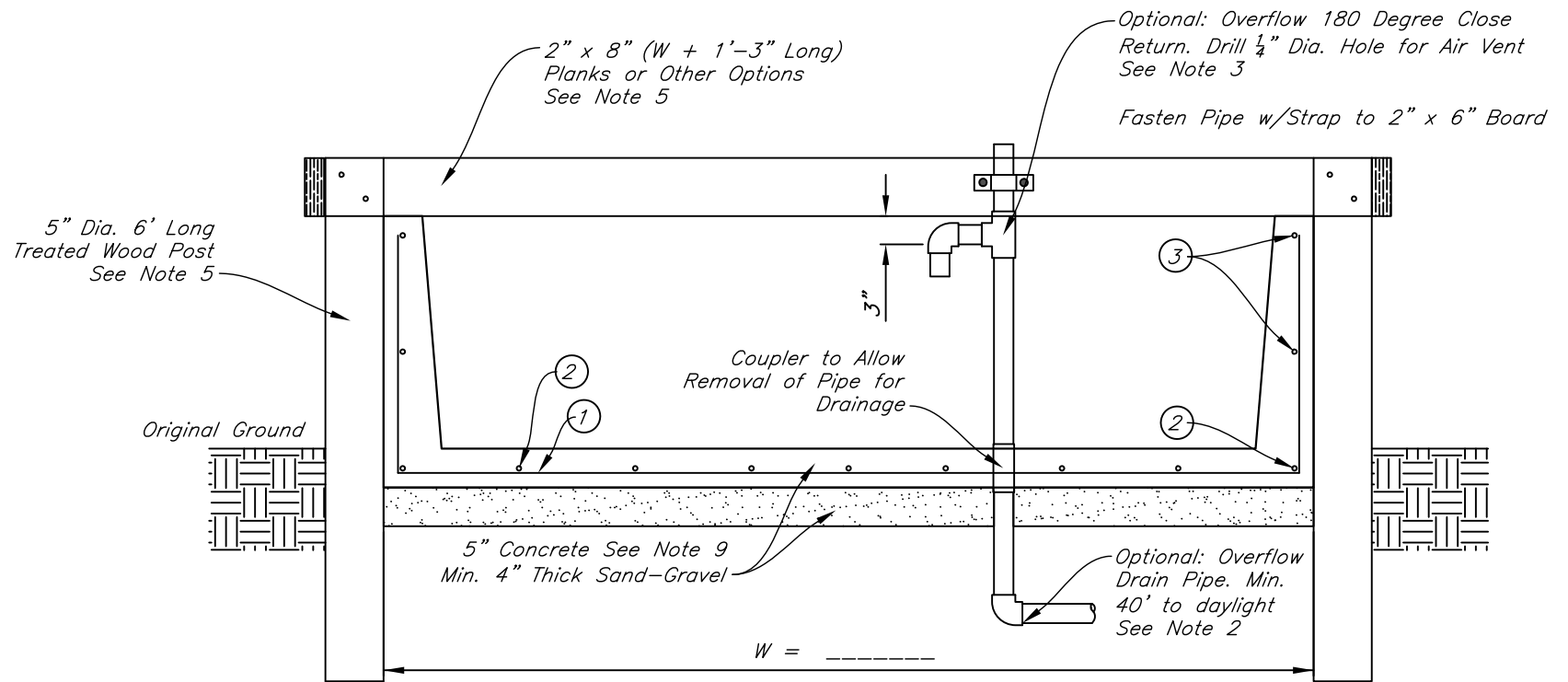
Date  
03-22-2024

Sheet of

Date  
Designed  
Drawn  
Checked  
Approved  
Cassie Ahmed 03-22-2024



PLAN VIEW  
Not to Scale



SECTION A-A  
Not to Scale

CONSTRUCTION NOTES

1. The walls and floor of the concrete tank are required to be poured monolithically; separate pours will not be approved.
2. An overflow and drain pipe with a minimum 2" diameter or at least 1/2" Dia. larger than the supply line, must be installed if the water level in the tank is not controlled with a float. The drain pipe shall be graded to allow drainage and a min. of 40' from the tank. Protect drain pipe at outlet end by backfilling over pipe with field stone.
3. Hydrant and float or overflow must be protected as shown. Other materials are acceptable with NRCS approval. See Anchoring and bracing detail sheet for alternative materials.
4. A wildlife escape ramp is required every 30' of the perimeter of the tank with exception for tanks with less than 10 square feet of contiguous open water area. See wildlife escape ramp detail sheet.
5. PVC pipe shall be made of ultraviolet (UV) resistant materials or shall have a durable coating of UV resistant paint to protect it from deterioration due to sunlight. PVC pipe used for access to appurtenances is exempt from this requirement.
6. The concrete tank will be constructed in accordance with North Dakota Construction Specification 102 - Concrete for Minor Structures, having a minimum 28-day compressive strength of 3500 psi. Air shall be entrained within the concrete mixture in accordance with CS-102. The concrete must have a maximum water/cement ratio of 0.45. The maximum size aggregate shall be 1/2 inch. Apply a curing compound to the surface as recommended by the manufacturer.
7. Use concrete culvert for water supply pipe protection with Option 1. Use wood protection system for hydrant and float protection with Option 2.

CONCRETE STOCKWATER TANK

OWNER:

COUNTY:



File Name  
ND-DWG-112B

Date  
03-22-2024

Sheet of

Designed	_____	Date	_____
Drawn	Cassie Ahmed 03-22-2023		
Checked	_____		
Approved	_____		