

**SAFETY REGULATIONS**

ALL EXCAVATION AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MARYLAND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (MOSHA) STANDARDS AS SET FORTH IN THE LATEST VERSION OF THE CODE OF MARYLAND REGULATIONS

THERE WILL BE NO CHANGES IN SPECIFICATION, DIMENSIONS, OR MATERIALS UNLESS APPROVED BY THE ENGINEER RESPONSIBLE FOR THIS DRAWING.

THE DRAWINGS ARE PREPARED COOPERATIVELY BY THE NATURAL RESOURCE CONSERVATION SERVICE FOR THE NAMED LANDOWNER. CONSTRUCTION FOUND NOT IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS SHALL VIOLATE THE COOPERATIVE AGREEMENT AND ALL DRAWINGS, SPECIFICATIONS, AND QUANTITIES ESTIMATE SHALL IMMEDIATELY BE RETURNED TO THE LOCAL NRCS OFFICE.

# LANDOWNER/PROJECT

## 313 - WASTE STORAGE STRUCTURE

561 - HEAVY USE AREA

### (DISTRICT SOIL CONSERVATION DISTRICT)

AS-BUILT STATEMENT

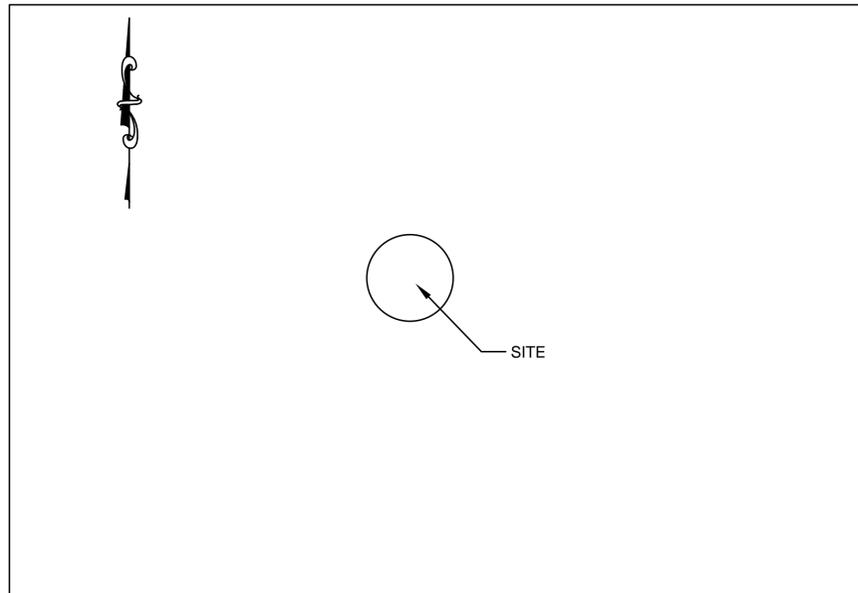
**PROJECT MEETS NRCS STANDARDS AND SPECIFICATIONS**

INSPECTED BY	SIGNATURE _____	DATE _____
CONSTRUCTION APPROVAL	SIGNATURE _____	DATE _____
VERIFIED DISTRICT CONSERVATIONIST	SIGNATURE _____	DATE _____

MM/YY	Designed	Drawn	Checked
_____	_____	_____	_____
LANDOWNER 313 WASTE STORAGE FACILITY TRACT City, Maryland			
Approved	Date	Job	Class
_____	_____	_____	_____
Maryland Department of Agriculture DISTRICT Soil Conservation District			

**GENERAL NOTES:**

- PLEASE CONTACT THE DISTRICT SOIL CONSERVATION DISTRICT AT LEAST 3 DAYS PRIOR TO CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING @ PHONE #
- A CONSERVATION TECHNICIAN SHALL VERIFY CUT/GRADE STAKES AT THE CONTRACTORS REQUEST



**VICINITY MAP**  
N.T.S.

SHEET	TITLE
2.....	PLAN VIEW/PROFILES
3.....	DESIGN CUT SHEETS
4.....	DESIGN CUT SHEETS
5.....	DESIGN CUT SHEETS
6.....	DESIGN CUT SHEETS/O&M PLANS



Know what's below.  
Call before you dig.

\*The Soil Conservation District makes no representation as to the existence or Non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities\*

**MATERIALS LIST**

**OWNER/CONTRACTOR STATEMENT**

I CERTIFY THAT THIS DESIGN HAS BEEN EXPLAINED TO ME BY A REPRESENTATIVE OF THE \_\_\_\_\_ DISTRICT \_\_\_\_\_ SOIL CONSERVATION DISTRICT, AND I UNDERSTAND THE CONTENTS, ALL CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND SPECIFICATIONS, I FURTHER UNDERSTAND THAT ALL CONSTRUCTION WILL BE UNDER THE INSPECTION OF THIS OFFICE.

OWNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
CONTRACTOR'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**CONSTRUCTION NOTIFICATION**

The Contractor/Owner is to notify the \_\_\_\_\_ DISTRICT \_\_\_\_\_ SOIL CONSERVATION DISTRICT at least 72 hours prior to construction to facilitate any scheduling, layout, or preliminary mobilization necessary to ensure proper construction inspection to enable appropriate certification of the project.

It is the Landowner's responsibility to obtain all County, State, and Federal permits that may be needed, and to maintain this structure and related regulations.

United States Department of Agriculture
Natural Resources Conservation Service

REVISIONS	Date	Description

File No. \*DWG



- LEGEND**
- EL --- EXISTING CONTOURS (1FT INTERVALS)
  -  EXISTING GRAVEL
  -  PROPOSED CONCRETE
  -  PROPOSED 10" HIGH CONCRETE CURB
  -  PROPOSED 12" HIGH CONCRETE KICKER WALL
  -  PROPOSED BRIDGE PAD
  -  PROPOSED 4" PERIMETER TILE DRAIN
  -  PROPOSED 4" SOLID DRAIN PIPE
  - SF --- SF --- PROPOSED SILT FENCE
  -  TBM/BENCHMARK

**PLAN VIEW**

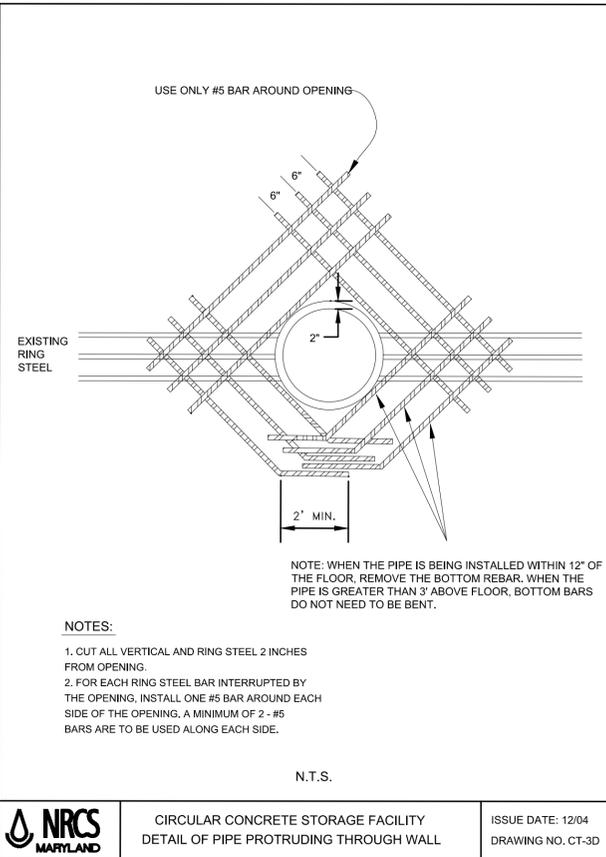


**CROSS SECTION TANK  
AND PUSH OFF/BARNYARD**

**CROSS SECTION TANK  
AND PUMP PAD**

	Designed _____ Drawn _____ Checked _____	MM/YY _____ _____ _____
<b>LANDOWNER</b> 313 WASTE STORAGE FACILITY TRACT City, Maryland		
Approved _____ Date _____ Title _____ Job Class _____		
United States Department of Agriculture	Maryland Department of Agriculture DISTRICT Soil Conservation District	
 <b>Natural Resources          Conservation Service</b>		
<b>REVISIONS</b>	Approved	
Date	Description	
File No. *.DWG		
Sheet 2 of 5		



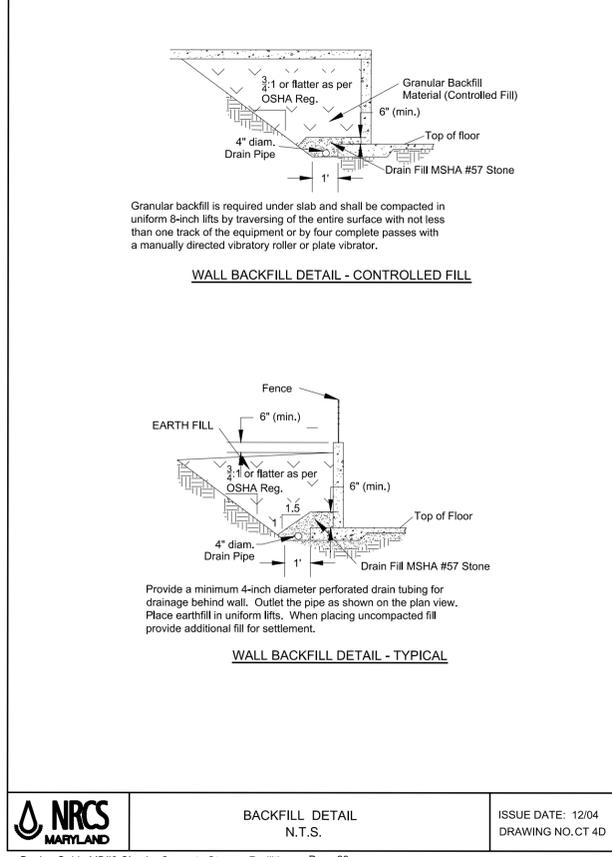


**NRCS MARYLAND**

CIRCULAR CONCRETE STORAGE FACILITY  
DETAIL OF PIPE PROTRUDING THROUGH WALL

ISSUE DATE: 12/04  
DRAWING NO. CT-3D

Design Guide MD#2 Circular Concrete Storage Facilities Page 28  
NRCS Engineering, Maryland  
April 2004



**NRCS MARYLAND**

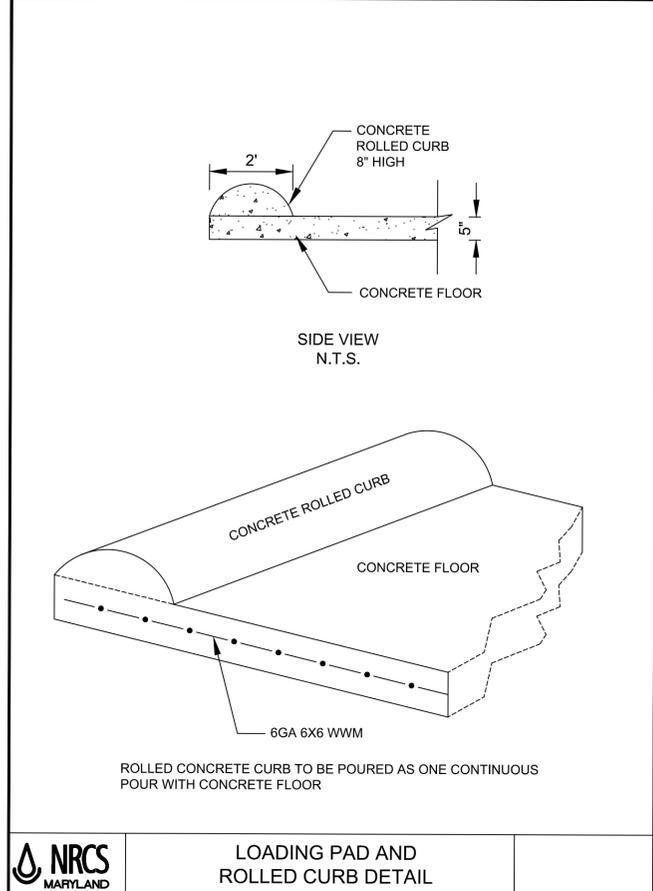
BACKFILL DETAIL  
N.T.S.

ISSUE DATE: 12/04  
DRAWING NO. CT-4D

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NRCS Engineering, Maryland  
April 2004

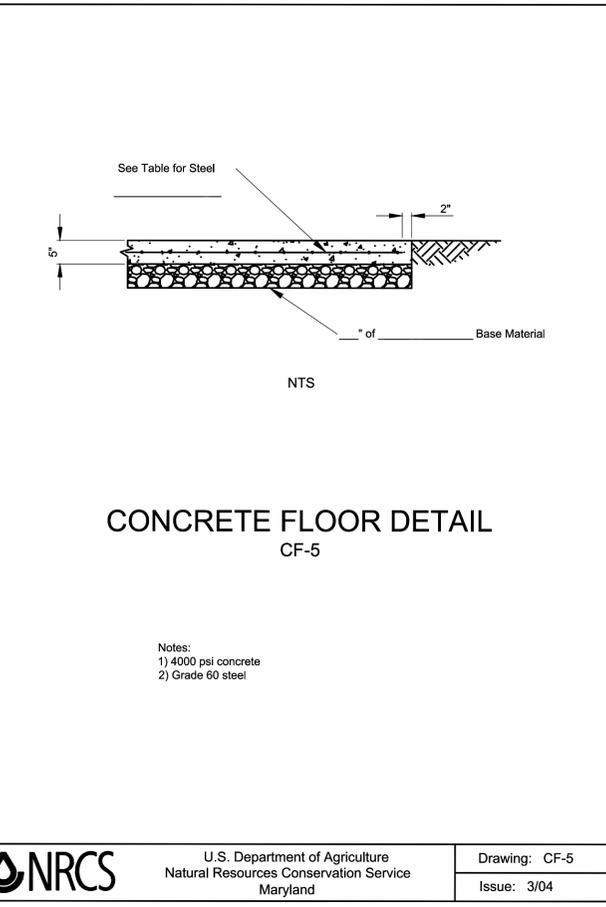
- CONCRETE CONSTRUCTION SPECIFICATIONS**  
Formed Concrete  
Revised 4/14
- All materials and construction shall be in accordance with applicable NRCS Practice Standards and ACI-318.
  - Any changes in the plans or specifications must be approved by the design approver prior to being made. Changes are to be reviewed by the landowner for concurrence.
  - Concrete shall have Type IA or IIA cement, 28-day compressive strength of 4,000 psi, 5% air entrainment and a slump of 3 to 5 inches. Air entrainment admixtures shall conform to ASTM C260.
  - Reinforcing steel shall conform to ASTM A615, Grade 60 steel. All reinforcing material shall be free of dirt, loose rust, scale, oil, paint or other coatings. The steel shall be accurately placed into position, as shown on the plans, and securely restrained and blocked into position prior to placement of concrete. Insertion of steel into fresh concrete is not permitted. Reinforcement steel shall have a minimum of 2 inches of concrete cover against all forms and 3 inches against soil, unless otherwise shown on the plans. Ring steel shall have a minimum overlap of 24 inches. All other reinforcement steel splices shall overlap a minimum of 18 inches. Welded wire mesh shall conform to ASTM A1064 and overlap a minimum of 6 inches. The welding of reinforcing steel is not permitted.
  - Waterstop will be used as shown on the plans and at all cold and construction joints. The type of waterstop will be approved by the field technician prior to use.
  - Plasticizing or plasticizing and retarding admixtures may be used and shall conform to ASTM C1017 or ASTM C494 Types F or G.
  - Concrete forms shall have sufficient strength and rigidity to hold the concrete to withstand the necessary pressure, tamping and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete. The inside of the forms shall be oiled with a non-staining mineral oil or thoroughly wet before concrete is placed. Forms may be removed 24 hours after the placement of concrete.
  - Metal ties or anchorages shall be full dimension. Nominal size wall ties are not permitted. Wall tie ends must be broken off and patched with a concrete epoxy or polymer cement. Patching is required on both the inside and outside of concrete structures.
  - Concrete shall be delivered to the site and discharged completely into the forms within 90 minutes after the truck leaves the plant. This time shall be reduced to 45 minutes when the atmospheric temperature is over 90° F. The concrete shall be maintained at a temperature below 90° F during mixing, conveying and placement. Set retarding admixtures may be used to increase mixing time. Water reducing and/or retarding admixtures shall conform to ASTM C494 Types A, B, D, F or G.
  - All concrete for walls shall be consolidated with internal type mechanical vibrators or by rodding. Concrete shall be placed in horizontal lifts not greater than 2 feet. Concrete shall not have a vertical drop greater than 5 feet. An elephant trunk, chute, or similar means shall be used when applicable to minimize the vertical drop. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.
  - Concrete shall not be placed when the daily minimum atmospheric temperature is less than 40° F unless facilities are provided to prevent the concrete from freezing. The concrete shall be protected from freezing for a minimum of 7 days or the concrete shall be kept at a temperature of 55° F for a minimum of 3 days. Accelerating or water-reducing and accelerating admixtures shall be noncorrosive and conform to the requirements of ASTM C494, Types C and E. Cold weather concreting procedures shall conform to ACI-306.
  - Concrete shall be kept continuously moist for the curing period after the placement of the concrete. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may be used in lieu of the application of moisture. Curing compounds shall conform to ASTM C309, type 2.
  - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with quickset, non-shrink hydraulic cement, concrete epoxy or polymer cement. Voids left by wall ties shall be patched with a concrete epoxy or polymer modified cement.
  - Concrete top surfaces shall be screeded, troweled and broom finished unless otherwise approved.
  - Walls may be backfilled 7 days after the placement of concrete, unless otherwise approved.
  - Fill material under concrete shall be accomplished by placing maximum 8-inch lifts (before compaction). The lifts shall be compacted by the traversing of the entire surface by not less than one track of the equipment or by a minimum of four complete passes with a sheepsfoot, vibratory, or rubber tire roller.
- Compaction around structures (i.e. around pipes, adjacent to walls, etc.) shall be accomplished by placing fill in maximum 4-inch lifts and compacting by means of hand tampers or other manually directed compaction equipment.
- The technician shall determine if the moisture content is suitable for fill placement. The contractor shall make adjustments as directed by the technician. The method of compaction shall be approved prior to placement of fill material.
- The backfill behind walls shall conform to the grades shown on the plans. When placing uncompacted fill provide an additional foot of fill to allow for settlement.
  - Subsurface drainage must be provided as shown on the plans. Drain tubing must meet the requirements of ASTM F405 Heavy Duty.

- CONCRETE CONSTRUCTION SPECIFICATIONS**  
FLAT WORK ONLY  
Revised 4/14
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  - Concrete surfaces shall be screeded, floated, troweled and broom finished unless otherwise approved.
  - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with quickset, non-shrink hydraulic cement.



**NRCS MARYLAND**

LOADING PAD AND  
ROLLED CURB DETAIL

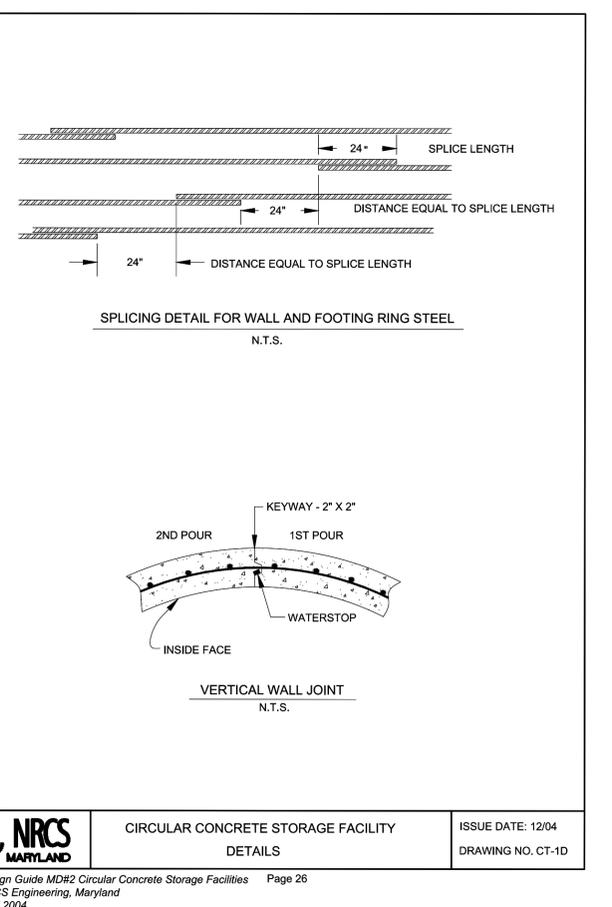


**NRCS MARYLAND**

U.S. Department of Agriculture  
Natural Resources Conservation Service  
Maryland

Drawing: CF-5  
Issue: 3/04

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NRCS Engineering, Maryland  
April 2004

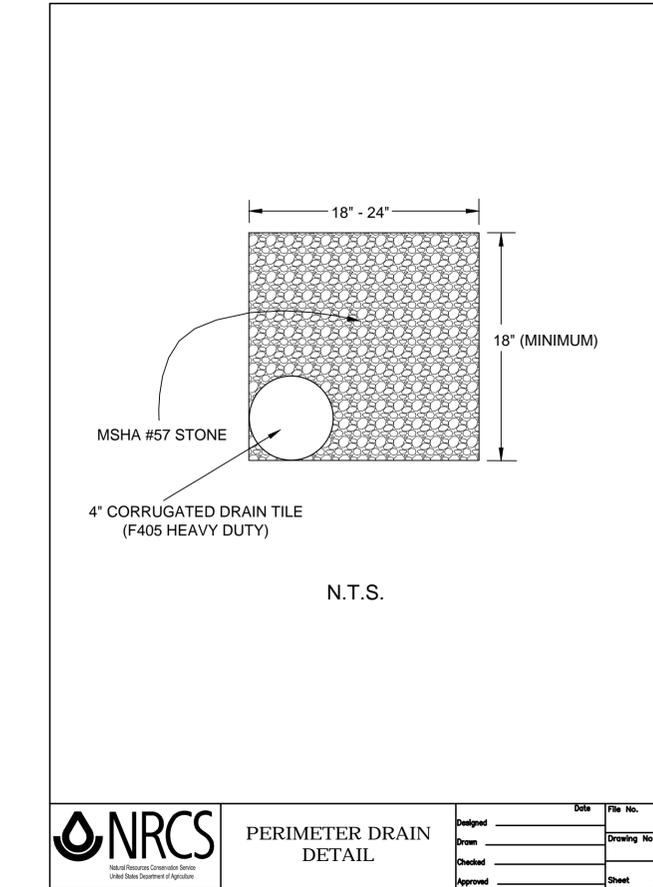


**NRCS MARYLAND**

CIRCULAR CONCRETE STORAGE FACILITY  
DETAILS

ISSUE DATE: 12/04  
DRAWING NO. CT-1D

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April 2004

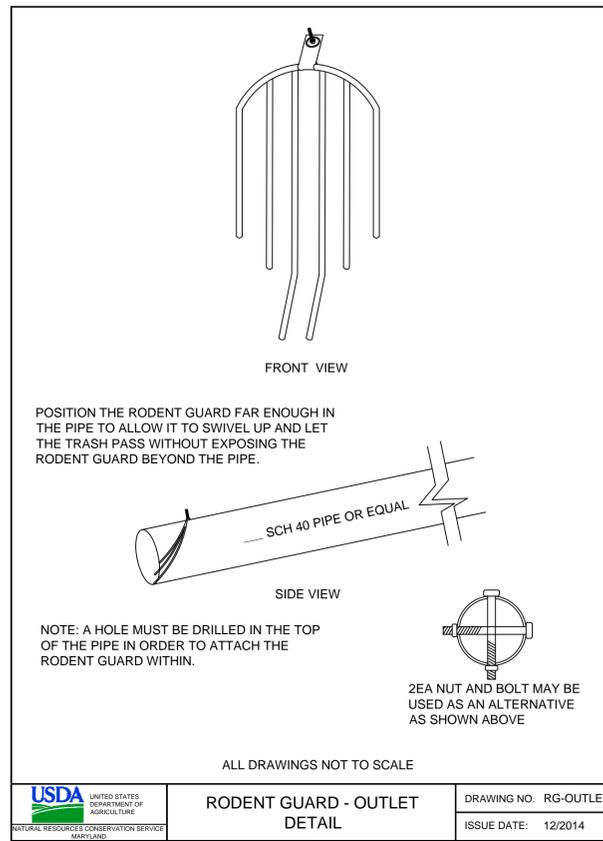


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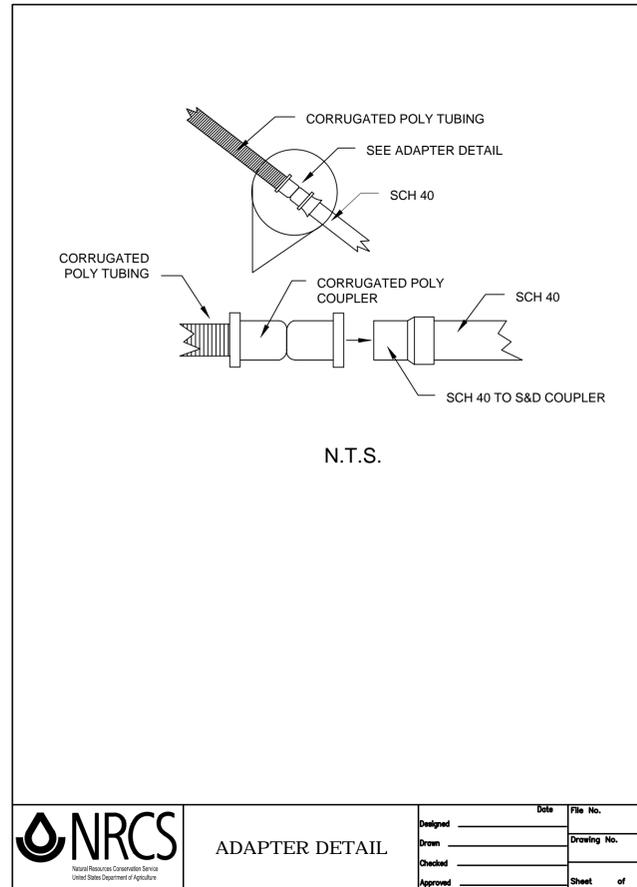
PERIMETER DRAIN  
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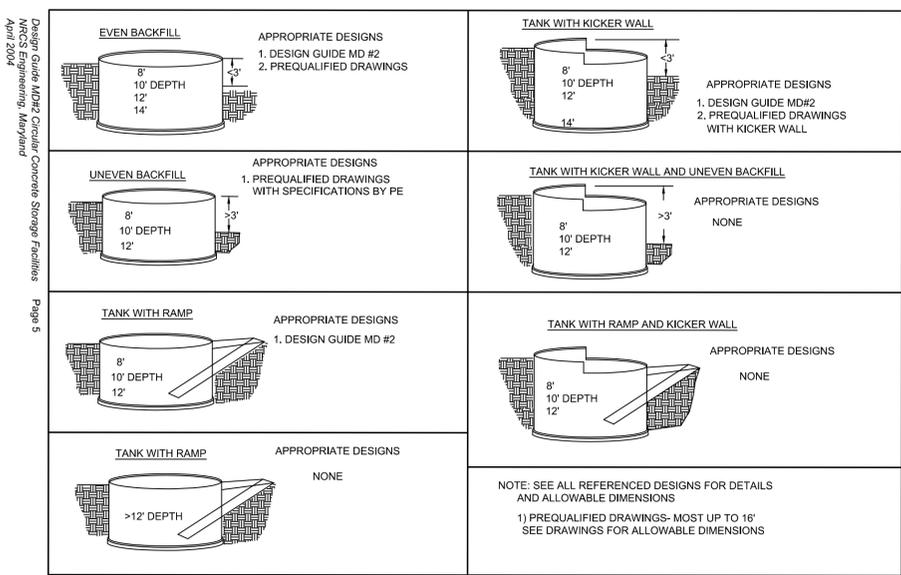
MM/YY	Designed	Drawn	Checked	Approved	Date	Class
LANDOWNER				Approved		
313 WASTE STORAGE FACILITY				Title		
TRACT				Job		
City, Maryland				Date		
Maryland Department of Agriculture				Title		
DISTRICT Soil Conservation District				Job		
United States Department of Agriculture				Date		
Natural Resources Conservation Service				Title		
USDA				Date		
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UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE MARYLAND	RODENT GUARD - OUTLET DETAIL	DRAWING NO. RG-OUTLET
		ISSUE DATE: 12/2014

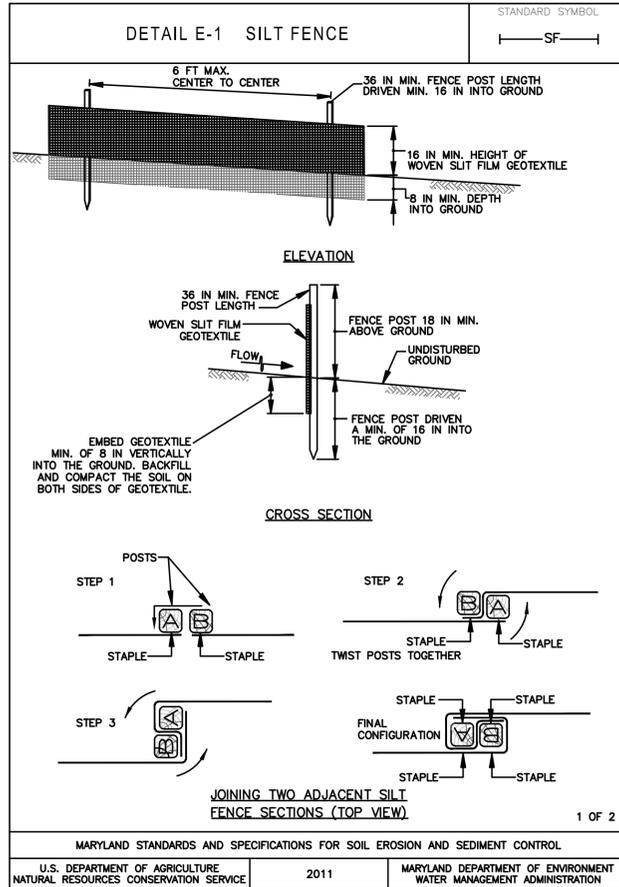


NATIONAL RESOURCES CONSERVATION SERVICE UNITED STATES DEPARTMENT OF AGRICULTURE	ADAPTER DETAIL	Designed _____	Date _____	File No. _____
		Drawn _____		Drawing No. _____
		Checked _____		Sheet _____
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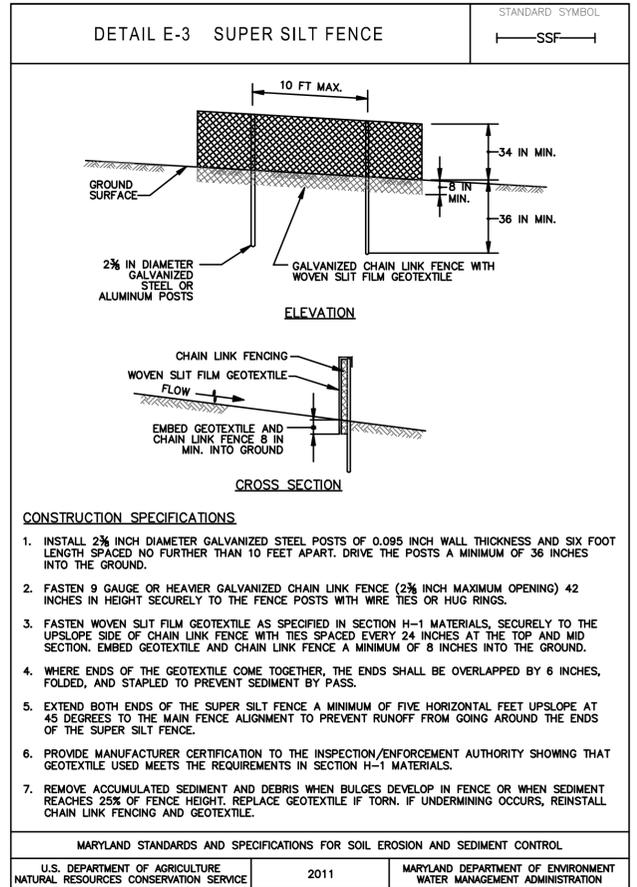


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NRCS Engineering, Maryland April 2004

ROUND TANK LIMITATIONS



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

	Designed	Drawn	Checked	MM/YY
United States Department of Agriculture  Natural Resources Conservation Service	LANDOWNER 313 WASTE STORAGE FACILITY TRACT City, Maryland			Approved _____ Date _____ Title _____ Job _____ Class _____
REVISIONS				
Date	Description	Approved		
File No. *DWG Sheet 5 of 5				

FACT SHEET #4 AGRICULTURAL WASTE SYSTEM SAFETY SIGNS

It is the RESPONSIBILITY of the CONTRACTOR/INSTALLER to provide safety signs as shown below or equal. One shall be located at each entrance/access point where access can result in a fatality due to manure gases and/or drowning. Several signs are specified for larger facilities. Three types of signs are required to cover different hazards. Bilingual operations should consider using both types.

**DANGER** PELIGRO

Place one sign at each entrance/access point to a below-ground manure storage pit, covered ground-level storage, a covered above-ground storage, and all manure hoppers and reception pits.

**Example locations:** Collection hoppers, agitation point for slatted pits, septic tanks that hold milking center and manure wastes and any other confined space where waste is collected.

**DANGER** PELIGRO

Place one sign at each entrance/access point of a manure storage pond, in-ground uncovered storage structure OR on each accessible side of a storage pond.

**Example locations:** Open storage tanks, earthen storage ponds, and HDPE lined ponds.

**WARNING** AVISO

Place one sign at each entrance/access and each agitation point of an uncovered manure storage pond, an uncovered above-ground manure storage structure, an uncovered below-ground manure storage structure, and all reception pits. Also place one where visitors or children might congregate.

**Example locations:** All agitation/pump out locations of above and below ground storages. Any areas where visitors or children might tend to congregate such as at the end of the access road near the manure storage.

**IMPORTANT!** Safety signs are designed to serve as a reminder of a hazard and consequences; the signs do not replace or substitute for original product warnings or labels, equipment safety literature, or specific safety training associated with manure systems and handling equipment. Owner/operators shall consult their site specific engineering designs, safety plans, and operation/maintenance plans for additional safety requirements. If no information is found, or more is needed, additional information can also be received from equipment manufacturers and distributors, county extension offices, private consultants, and NRCS offices.

- Sources:**
- U.S. Municipal Supply, Inc.
  - Local Conservation District
  - 1-800-222-1980
  - Local Sign Making Company
  - Local Extension Service
  - Self-Made Equal

USDA UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE MARYLAND

MANURE STORAGE WARNING SIGNS

DRAWING NO. 313-SIGNS

ISSUE DATE: 1/2015

Open Air Manure Storage Safety Tips

Injuries and fatalities occur in confined space manure storages that are enclosed, such as beneath animal quarters, or below-ground reception and pump out pads, and in non-enclosed storages, such as earthen, lined and concrete manure pits and ponds. Non-enclosed manure storages are open to the atmosphere but still meet the definition of a confined space in terms of occupational safety and health.

- In the case of open air manure storage pits and ponds, some hazards can include:**
- A thick liquid and floating crust that make swimming, buoyancy or even moving around very difficult.
  - Steep and slippery slopes that can make getting out of manure storages difficult or impossible.
  - Localized layers of hazardous gases existing above manure surfaces, especially on hot, humid days with little to no breeze.
  - A speeding up of manure gas release from movement, agitation, removal or additional of manure to a storage pond.
  - Not having sufficient oxygen to breath if a person is "treading" in manure because of an inability to get out.
  - Not being able to see into depths of manure like you can with water.
  - A slow response time for adequate emergency actions because of site isolation and remoteness.

- Safety guidelines to follow:**
1. Make sure everyone that needs to be near manure storage structures understand the hazards that exist, including the effects that the various gases has on them.
  2. Make sure the open air manure storage has a fence installed around the perimeter and access gates are locked to keep unauthorized personnel from entering the area.
  3. The open air storage should have manure drowning hazard signs and no trespassing signs on all sides of the storage.
  4. If you must go into the fenced area of the open manure storage, consider wearing a safety harness with life line attached to a safely located solid object or anchor.
  5. Never work alone. The second person's role is to summon help in an emergency and assist with rescue without entering the storage.
  6. Rescue equipment, such as a flotation devices and lifelines, should be attached to every manure pump.
  7. Move slowly around manure storages as the ground can sometimes be uneven and may cause a person to trip or stumble.
  8. Bystanders and non essential workers should stay away from pump out or other accessible areas.
  9. There should be no horseplay near the open manure pit or pumping equipment.
  10. If equipment malfunctions during agitating or pumping of the manure, shut all equipment of and remove it from the storage before servicing or repairing.
  11. If you feel unsure or uncomfortable with what you are getting ready to do near the open manure pit, step back, contact someone and review the situation before proceeding.
  12. Toxic gas, and oxygen deficiency gas monitors can be used to determine if unsafe conditions exist.
  13. Be prepared t call 911 if an emergency happens. Being prepared means accurately describing the incident, number of victims, and giving specific directions to the site of the emergency.

Supplement to Fact Sheet 4- Provide this for situations where the producer or contractor does not want to purchase signs from US Municipal and wishes to use an alternate source or make their own signs. Signs should have similar wording and be made of materials that will last the life of practice. March 2014

These layouts were developed by: US Municipal, 1-800-222-1980. They represent input from USDA-NRCS for the actual wording. Alternate sign suppliers should use the same wording.

DRAWING NO. 313-SIGNS

ISSUE DATE: 1/2015

MANURE STORAGE WARNING SIGNS

USDA UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

OPERATION AND MAINTENANCE SCHEDULE FOR WASTE STORAGE FACILITY 15 year maintenance life

1. NUTRIENT MANAGEMENT
  - a. A Nutrient Management Plan will be followed. The soil and manure will be tested and any commercial fertilizer will be balanced with the organic fertilizer (manure) so that the application rates are balanced with the soils potential to yield.
  - b. Application equipment should be calibrated annually. This service can be provided by the Maryland Cooperative Extension.
  - c. For maximum nutrient value and odor control, the manure should be incorporated into the soil where feasible. Spreading rates will follow those contained in the Nutrient Management Plan. When not injected, incorporating the manure will be done within 24 hours of application.
2. COMPONENT DETAILS
  - a. The waste management system will provide 150 days of storage for bedding, manure, and barnyard runoff for the dairy herd, along with direct rainfall plus one 25-year 24-hour storm event.
  - b. A 60ft x 10ft concrete circular manure storage tank is planned and a 3,186sqft concrete barnyard with 10in high concrete curbs used to divert water into the proposed storage tank.
  - c. A 15ft x 10ft curbed concrete pump pad is planned.
  - d. All storage areas shall be fenced to keep people and livestock from entering the waste storage area. The concrete circular manure storage tank and pump pad will be fenced using 4ft high chain-link fence. Warning signs will be posted to alert users, visitors and trespassers of potential dangers of a Drowning Hazard and Deadly Manure Gases.
3. WASTE UTILIZATION
  - a. The system is designed to store wastes for the most critical storage period, during the winter when the ground is frozen, snow covered or excessively wet. The storage structure will be completely emptied during each spreading period.
  - b. Storage period will be as follows:
    - i. November 1 – March 31 and June 1 – September 30
  - c. Spreading period will be as follows:
    - i. April 1 – June 30 and September 1 – October 31
  - d. Manure shall not be spread on fields that are snow covered, frozen, or excessively wet. Avoid spreading manure within 50ft of grassed waterways and do not spread adjacent to streams, ponds, or other water courses. Spread only on land in which soil loss is or at below tolerable limits.
  - e. The circular concrete manure storage tank will be unloaded using an agitation pump and tank spreader. The manure should be thoroughly agitated before pumping. The bedpack area will be cleaned out using a loader or box spreader.
  - f. Due to the possibility of noxious gases, it is important to ensure adequate ventilation of the manure storage area. If adequate ventilation cannot be achieved, proper safety precautions must be taken. Anyone entering the structure shall oxygen masks, gas masks are not adequate protection.
  - g. To reduce odor problems, spread in the morning when possible, avoid spreadin before holidays, weekends and when the wind in blowing toward populated areas. Incorporating and injecting the manure into the soil helps reduce odors.
4. SYSTEM MAINTENANCE AND MANAGEMENT
  - a. All structures will be inspected twice a year for any structural damage. Should any repairs be necessary, they are to be made immediately.
  - b. Inspect all warning signs, fences, gates and any other safety devices frequently. Make any repairs immediately.
  - c. The outlets to all subsurface foundation drainage should be inspected frequently to ensure they are functioning properly. Outlets that are closed or blocked shall be opened immediately.
  - d. Backfill should be checked at least twice a year for animal burrow, cracking, or excessive settlement. If problems noted are occurring, contact the Cecil Soil Conservation District office.
  - e. Maintain a good vegetative cover on backfill. Mow at least twice a year. Reseed and fertilize as needed.
  - f. The 24" gravity manure transfer pipe from the barn gutters must be kept free of blockages. Immediately clear any blockage that develops.
  - g. Barn manure gutters must be checked daily for blockage.
  - h. Do not worm more than a few cows at a time to promote good biological activity in the manure gutters.
  - i. Straw bedding must not be used at a rate of more than 1lb/day/animal.
  - j. The waste storage tank must be emptied to achieve the 150 days storage by the landowner. The storage volume calculations are based on the landowner's management decisions. Any management changes must be discussed with a representative of the Soil Conservation District office to determine the effect in the waste management system.
  - k. Order and/or temperature influences in the barn from the 24" gravity manure transfer pipe may be managed until the outlet is covered in the waste storage tank with a gate valve or other approved barrier.
  - l. The manure in the barnyard must be cleaned often enough to prevent discharges and maintain good drainage for runoff into the waste storage tank.
  - m. Openings in the 10in high concrete curb in the barnyard must be free, clear any blockages that may be present immediately.

OPERATION AND MAINTENANCE SCHEDULE FOR HEAVY USE AREA PROTECTION

10 year maintenance life

1. Inspect Heavy Use Area twice a year, minimum.
  2. Scrape surface as needed to remove excess manure and or sediment.
  3. Repair any deteriorating areas with original surface material used, by replacement of lost gravel, repaving holes, and regrading paving materials.
  4. Inspect inlets and outlets of pipes and culverts and remove any obstructions present.
  5. Fences must be inspected and maintained in order to control livestock to certain areas such as filter borders, diversions, or waterways
- If filter borders are a component of the Heavy Use Area the following operation and maintenance plan needs to be followed:
6. Mow, fertilize and lime to maintain flow capacity, grass height, plant density and to promote vigorous growth.
  7. Inspect at least once a year and after major storms for areas that are eroding and need reseeding. Repair problems immediately. Fill in and reseed, following original seeding specifications.
  8. Maintain the width of filter borders when tilling and planting surrounding fields.
  9. Do not use filter borders as a road. Vehicle tire tracks can become gullies.
- If filter borders are to be flash grazed the following operation and maintenance plan needs to be followed:
10. Filter borders shall not be grazed during the first growing season.
  11. Filter borders shall be grazed to maintain a grass height of 4-6 inches.
  12. At least one month prior to the first killing frost animals shall be removed to maintain a grass height of 4-6 inches through out the winter. Filters may be flash grazed at beginning of next growing season.
  13. Repairs should be made as soon as possible. Repairs should be made to return the structure to the same condition as it was designed.

REVISIONS	Approved	Date	MM/YY
	Description		
Date			
File No. *.DWG		Approved _____ Date _____	
Sheet 5 of 5		Title _____ Job Class _____	

LANDOWNER: 313 WASTE STORAGE FACILITY TRACT, City, Maryland

United States Department of Agriculture, Natural Resources Conservation Service, Maryland Department of Agriculture, DISTRICT Soil Conservation District