Clarke, Decatur, and Ringgold County

Environmental Health

Office: 641-223-8299 fax: 641-342-2603

144 W. Jefferson St., Osceola IA 50213



Greg Kent, Lead Field Specialist-gkent@clarkecountyiowa.org
Jessica Conley, Field Specialist – jconley@clarkecountyiowa.org

OPERATING PROCEDURES/GUIDELINES ON-SITE WASTEWATER TREATMENT & DISPOSAL

The first goal is to ensure that all new housing be equipped with an approved septic system (tank, lines & secondary treatment), and that efforts be made to inform citizens of the county on health hazards relating to septic systems, aware of their existing systems, and the county regulation.

These procedures/guidelines may require additions as new questions or circumstances arise. They will be reviewed yearly in January or February prior to the construction season beginning. They will provide guidance to the Sanitarian to ensure that everyone asking a similar question gets the same answer. Not all sites are alike though, and may require limited variations.

- New construction requires an application be filled out and a permit issued prior to a contractor starting work on the septic system.
- Existing septic systems that requiring digging, the Sanitarian will be notified. Replacement of short sections of pipe will not require a permit but if the tank has to be replaced, a permit will be needed and the entire system upgraded. If the existing secondary treatment system fails or if the entire discharge line from a tank has to be replaced creating a new direct discharge, then the entire system shall be upgraded.
- The application for permit shall be filled out completely including a drawing of proposed site on back of application.
- Uncovering a septic tank to have it pumped is considered maintenance, no notification or permit is needed.
- Rebuilding of a home or moving a manufactured home onto a site with an existing system will be considered the same as new construction. This may require upgrading or replacement of the existing system if it does not meet current State and County regulations.
- In upgrading a system, if the tank is found to be in acceptable condition but too small or containing only one compartment, another tank could be put with it to meet requirements.
- If just adding another bathroom, upgrading of system not necessary.
- As the Sanitarian is not always available, notification for final inspection is needed in advance. Special arrangements may be needed.
- If request is made for a time of sale inspection, both parties must agree to the inspection. If an inspection is done and the system is found to be inadequate, the system would require upgrading.
- Anyone wanting to install an alternative type system will need approval of the Board of Health. The board could
 then allow the Sanitarian to approve future systems of the same type, or require their approval on each system.
 These variances could also require written agreements between owner and Board of Health addressing testing,
 failure or poor results of the system. The owner shall see that this agreement is recorded with the County
 Recorder, in the abstract of title for the property containing the alternative system.
- Contractors doing septic work will "register" with the Sanitarian to be on a list provided to individuals along with application. This would mean they understand the county regulations and agree to follow them. There will be a \$50 registration fee.
- When a system requiring a service agreement is installed, it will be the responsibility of the owner to see that
 the service agreement (original copy) is recorded with the County Recorder, in the abstract of title for the
 property containing the system, within thirty days after inspection. A service agreement shall be maintained at
 all times.
- The individual, contractor or company that is providing the maintenance agreement is responsible for testing the effluent at the required times with a copy of the results being submitted to the Sanitarian.
- When planning your septic system, consideration should be given to its location, future plans and required
 distance requirements. Anyone planning to do their own work shall discuss their site with the County Sanitarian
 prior to starting the work to make sure they understand all of the requirements. The Sanitarian can do a site
 preview with the contractor and/or homeowner prior to the work being done.

- If a system is installed which has a surface discharge, that discharge shall be on your own property within distance requirements from property lines, easement areas, etc. Systems should discharge away from road ditches. If a road ditch is the only option, a permit shall be obtained from the road authority to perform work in the road right-of-way.
- Any dwelling where plumbing does not exist shall be served by an impervious vault toilet meeting the
 requirements of IAC 567-69.13(455B). Any dwelling with plumbing (drains from a sink, tub, etc.) that discharges
 water out of the dwelling shall be served by an on-site septic system consisting of a primary and secondary
 treatment system as required per IAC 567-69.1(455B). If the dwelling does not contain a toilet connected to the
 plumbing system, the dwelling shall also be served by an impervious vault toilet meeting the requirements of IAC
 567-69.13(455B).
- There is a low interest loan program available for those who qualify. This program is intended for those sites that currently have improper septic systems and have to or want to upgrade their system. It is only available for unincorporated portions of the county. Ask for information on the Onsite Wastewater Assistance Program (OSWAP).
- There may also be grant money or low interest funds available from USDA Rural Development. These are generally based on your income and age. Ask for information on these programs.

Set back requirements (from Chapter 69)

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Minimum Distance in Feet From	Closed Portion of Treatment System	Open Portion of Treatment System
Private water supply well	50	100
Groundwater heat pump borehole	50	100
Lake or Reservoir (over 1 acre)	50	100
Stream or pond (under 1 acre)	25	25
Edge of drainage ditch	10	10
Dwelling or other structure	10	10
Property Lines	10	10
Water lines continually under	10	10
pressure		
Suction water lines	50	100
Foundation drains/subsurface tiles	10	10

LIST OF LOCAL CERTIFIED WELL PLUGGING CONTRACTORS 6-1-2020

Kenny Holmes-8088	Corydon	641-870-0402
Terry Munyon-4174	Kellerton	641-783-2262
Jeff Starlin-9975	Diagonal	641-344-9783
Gene Cameron-6944	Osceola	641-342-3413
Glen Bedwell-7263	St. Charles	641-396-2462
Gerald Snyder-8479	Murray	515-975-2594
Kevin Buckingham- 10529	Leon	641-414-7702
Tim Newberry- 10533	Lamoni	641-414-1731

This is not a complete list. This list is just a few that we know of that do work in the county.

Options for Secondary Treatment Systems

<u>Subsurface Absorption Systems</u> – Soil absorption systems are the best available treatment technology and shall always be used where possible. A percolation test or professional soil analysis is <u>required</u> before any soil absorption system is installed. There are different types of absorption systems – gravel system and chamber system.

<u>Mound System</u> – Mound systems shall be permitted only after a thorough site evaluation has been made and landscaping, dwelling placement, effect on surface drainage and general topography have been considered.

The following systems generally have a surface discharge and may require a NPDES permit. The NPDES permit will specify the sampling frequency. If the system is designed with no discharge, then the NPDES permit and sampling is not required.

<u>Intermittent Sand Filter System</u> – Subsurface sand filters may be used when the site is unacceptable for a soil absorption system.

<u>Constructed Wetlands</u> – Constructed wetlands shall only be used when the site is unacceptable for a soil absorption system. Because of higher maintenance requirements, preference should be given to sand filters, where conditions allow. The effluent from a constructed wetland shall receive additional treatment through the use of sand filters.

<u>Individual Mechanical Aerobic System</u> – Mechanical aerobic systems may be used when the site is unacceptable for a soil absorption system. Because of higher maintenance requirements of the mechanical aerobic systems, preference should be given to sand filters, where conditions allow. There are different brands of mechanical aerobic systems and they shall all be certified. A maintenance contract with a manufacturer-certified technician shall be maintained at all times.

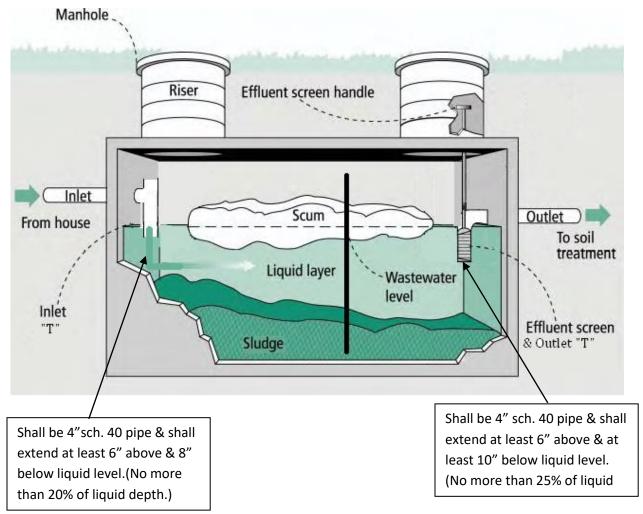
<u>Impervious Vault Toilets (Outhouses)</u> – Impervious vault toilets may be used if designed and constructed in accordance with Chapter 69.

<u>Peat Filters & Re-circulating Textile Filters</u> – May be used when the Administrative Authority determines the site is unacceptable for a soil absorption system. There are different brands and they require a maintenance contract.

Alternative or innovative systems are to be designed and operated in accordance with approved standards and operating procedures established by the administrative authority.

Every on-site system, except mechanical-aerobic systems, shall have, as a primary treatment unit, a septic tank meeting state's requirement. Size is based on the number of bedrooms for homes and water usage for businesses. Tank size shall increase if high volume water use fixtures are used.

Homeowners are responsible for the maintenance, care and proper functioning of their septic system. This includes maintaining maintenance contracts with service providers for those types of systems that require maintenance contracts.



Every septic tank shall be divided into 2 compartments. This may be obtained by using more than 1 tank. Influent compartment shall not be less than ½ nor more than 2/3 of total capacity. Effluent compartment shall not be less than 1/3 nor more than ½ of total capacity. Any tank placed in fill soil shall be placed on a level, stable base that will not settle. Access must be provided to all parts of tank necessary for adequate inspection, operation & maintenance. If only 2 opening in tank located over inlet & outlet. They must be at least 18". A 24" diameter opening may be provided at the center of tank with 2 smaller openings of at least 6 "over the inlet & outlet. If top of tank is more than 12 " below finished ground level, a riser at least 24" in diameter must be installed over each manhole of 18" or more in diameter to ring the top of the manhole lid to within 6" of the finished ground level.

- Tank shall not be used for disposal of chemical wastes or grease in quantities, which might be detrimental to the bacterial action in the tank.
- Interior length of tank should not be less than 5' & shall be at least 1 ½ times the width. No tank or compartment shall have an inside width of less than 2'. The minimum inside diameter of a vertical cylindrical septic tank shall be 5'.
- Minimum liquid depth shall be 40". Maximum liquid depth for calculating capacity shall not exceed 6 ½.
- Tanks shall be constructed of poured concrete or plastic resistant to corrosion or decay & designed so they will not
 collapse or rupture. Metal tanks are prohibited Fiberglass or plastic tanks shall be bedded according to manufacturer's
 specifications.
- Inlet and outlet connections at the tanks shall be made by self-sealing gaskets cast into the concrete or formed into the plastic or fiberglass

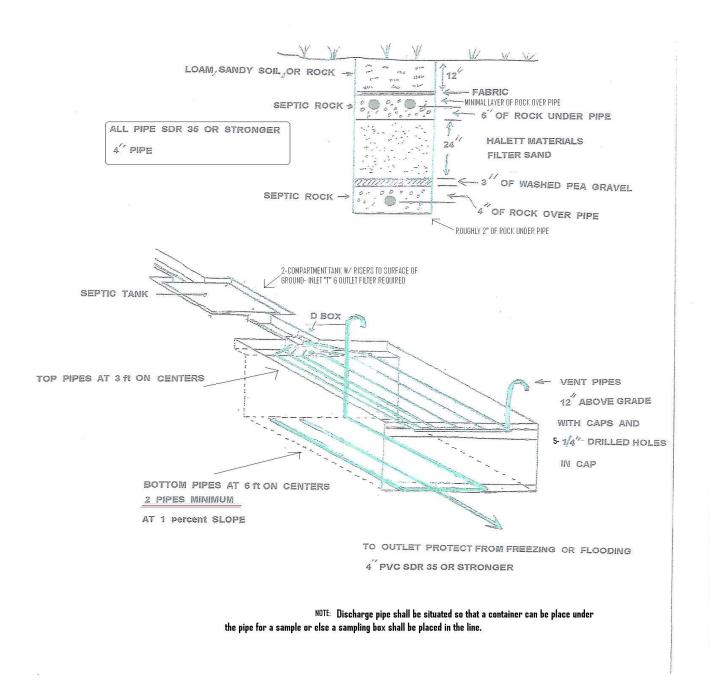
Tank capacity		
3 bedroom or less	1,250 gals	
4 bedrooms	1,500 gals	
5 bedrooms	1,750 gals	
6 bedrooms	2,000 gals	

SUB-SURFACE SAND FILTER				
Bedrooms	Sq. ft.	E	kamples	
1	240	12 X 20	15 X 16	8 X 30
2	480	20 X 24	12 X 40	16 X 30
3	720	24 X 30	12 X 60	20 X 36
4	960	30 X 32	20 X 48	12 X 80



Reduction sizing: Siphon-Dosed-- 180 sq. foot per bedroom Pressure-Dosed--150 sq. foot per bedroom

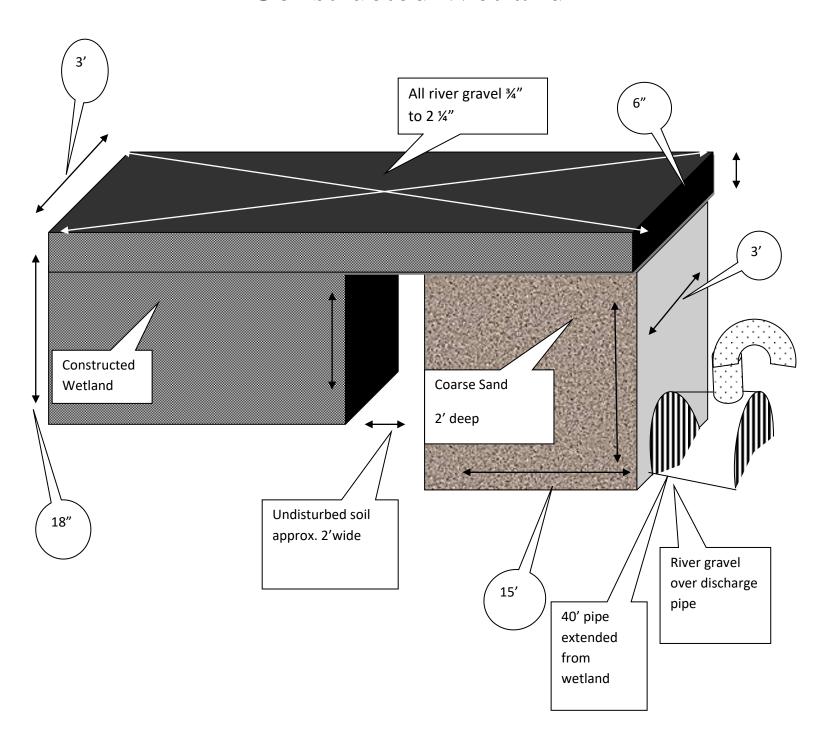
240 Square Foot Per Bedroom



Sub-surface sand filter-based on chapter 69 guidelines

- For residential systems, subsurface sand filters dosed by a dosing siphon shall be sized at a rate of 180 square feet of surface area per bedroom and those dosed by a pump shall be sized at 150 square feet of surface area per bedroom.
- All materials are to be clean and washed. Sand shall meet Iowa DOT standards for concrete sand, pea gravel is to be 1/8 to 3/8 inch in size and the septic rock is to be 3/4 to 2 1/2 inches in size.

Constructed Wetland



May be in trenches or beds-300 sq ft per bedroom. (45 sq ft) sand filter required following any constructed wetland system

SEPTIC TANKS

<u>LIEBUS CONCRETE PRODUCTS</u>—1-800-491-6869 115 8TH Ave EAST – Oskaloosa, Iowa

<u>LISTER INDUSTRIES</u> ---- Phone – 515-244-3149 300 NW 48TH PL. – Des Moines, Iowa

PRE-CAST CONCRETE COMPANY—-641-782-4515 622 ½, New York Ave. –Creston, Iowa

<u>INDIANOLA PRECAST</u>- 515-961-5158/515-865-8815 12995 80th Ave--- Indianola, IA

<u>YODER'S PRECAST LLC</u>- 641-898-2803 2874 210th St--- Seymour, IA

Soil Borings, Soil Analysis

<u>Jim Carroll,PE</u> Clive, IA

515-250-2103

<u>Choquette Engineering-Ken Choquette, PE</u>

Des Moines, IA

515-306-0019/265-8681

Stiens Soil Evaluations-Chris Stiens Maryville, MO

(660)-562-0726

<u>Lee Engineers & Surveyors-Wally Greenlees</u>

Urbandale, IA

(515)252-7457

ABACI Consulting, INC Grimes, IA

(515)986-5048

<u>Douglas Oelmann</u> Altoona, IA

(515)419-2926

<u>Camron Collier, PE</u> Grand River, IA

(515)238-6330/641-414-4669

TRAINED SERVICE/MAINTENANCE PROVIDERS

Bedwell Builders: Ben Bedwell, 2924 Quaker St, St Charles, IA; 515-681-2053

Derry Construction Inc.: Brad Derry; 1600 210th St, New Market, IA 51646; (712)370-1547

H & H Commercial Services: Trent Holliday: 1510 260th St, Diagonal IA 50845; (641)-344-7109, (641)-782-2269

J&H Construction: Josh Jackson; 1410 Grade Lake Drive, Osceola, IA 50213; (641) 414-3171

Mike's Construction & Excavating LLC: Mike Yutzy: 18659 270th Ave, Leon, IA 50144; (641) 344-7220

Molitor Construction LLC: Paul Molitor: 1246 Noble Hills Place., Boone, IA 50036; (515)298-1268

O.W.W.T, LLC: James Carney: 1541 NE 66th Ave, Des Moines, IA 50313; (515) 244-4646

Page Construction: Mike Page: 2613 HWY 169, Shannon City, IA 50861; (641)-340-1888

Rogers Septic LLC: Rick and Brandon Rogers, 401 NE 52nd Ave, Des Moines, IA 50313; 515-745-8352/515-729-0649

This is not a complete list. This list is just a few that we know of that do work in the county or supply materials needed in septic construction.

Licensed Septic Pumpers

Cannon's Porta John Rentals	641-464-2906/641-344-7343
Greg Cannon-202 N. Grant St. Mt Ayr	Truck holds up to 375 Gallons
Page Construction	641-340-1888
Mike Page, Shannon City	Truck holds up to 2000 Gallons
Rauch's Septic Service	<u>641-773-5351</u>
Eddie Rauch- 13326 205 th St. Lamoni	Truck holds up to 2500 Gallons
Anytime Septic Services II, 502 W. Main St. St. Charles	641-396-2440
	Truck holds up to 2500 Gallons
Dave's Pumping Service, 1685 Upland Trail Prole	<u>515-462-1903</u>
Don's Jons LLC, Craig Shippley - PO Box 88, Lineville	800-944-2317/660-953-1611
	Truck holds up to 900 gallons
Forest Septic Tank Service, Po Box 219 Indianola	<u>515-961-2113</u>
	Truck holds up to 4500 Gallons
<u>Lathrop Farms,</u> 6921 219 th Trail Albia	641-777-3774
Mike Killen Construction, 1679 140th Ave Carlisle	<u>515-480-6082</u>
	Truck holds up to 2200 Gallons
RM Plumbing & Construction, Robert McCaulley, Lucas	<u>515-321-6623</u>
	Truck holds up to 2,000 gallons
Southern Iowa Plumbing, LLC, John Buttz- 411 N Dotur Dr, Corydon	641-870-1640
	Up to 2,000 gallons
Wiegert Disposal Inc., PO Box 344 Martensdale	641-764-2389
	Up to 5,000 gallons
Willets & Woosley Sewer & Septic, 411 New York Ave Creston	641-782-4220
	Truck holds up to 1,700 gallons

This is not a complete list. This list is just a few that we know of that do work in the county.

ALL CONTRACTORS MUST BE REGISTERED WITH THE ENVIRONMENTAL HEALTH OFFICE AT THE CLARKE COUNTY PUBLIC HEALTH OFFICE PRIOR TO DOING INSTALLATION OF ANY SEPTIC SYSTEM in Clarke, Decatur, or Ringgold Counties. UPDATED 8/2020

Contractors Typed in RED letters are State of IA Registered Contractors for 2020.

Yellow Highlighted are DNR certified Time of Transfer Inspectors.

CIOWTS- denotes current CIOWTS certification

Maintenance Provider- denotes currently a certified maintenance provider

All Contractors on this list have attended the required training in 2019-2020

Adams Plumbing	Allen Akers Septic Installation
Cody Adams (641)202-6600 201 ½ E Temple, Lenox IA 50851	Allen Akers (641)468-0091 or (641) 462-1015 2204 175 th CT, Winterset, IA 50273 CIOWTS
Bedwell Builders	Bright Excavating and Septic
Glen Bedwell (641)396-2462 2924 Quaker, St. Charles, Iowa 50240 CIOWTS Maintenance Provider	Mark Bright Cell:(641)295-7033, Home:(641) 763-2794 1334 Shore Street Peru, IA 50222 CIOWTS
Bob Jackson Trucking	Bob's Septic & Portable Services
Tyler Jackson Bob: 641-445-5228 Tyler:641-414-5920 20014 122 nd St., Van Wert, IA 50262	Jason Shepherd 515-262-9174 2785 NE 46 th Ave, Des Moines, IA 50317 CIOWTS
Bud Jones Construction	CIO WID
Bud Jones Office: (641)342-3413 Cell:(641)-340-1410 P.O. Box 84, Osceola, IA 50213	
David Bear Custom Dozing & Tiling	Gerald Kinyon Construction, LLC
David Bear (641)414-4359 3033 Mormon Trail, Weldon, IA 50264	Scott Kinyon (641)-221-0061 or (641)344-9832 1556 Clover Ave, Creston, IA 50801
Giza Contracting Jesse Giza 641-782-8820 or 641-344-3072 301 W. Union St, Creston, IA 50801	H & H Commercial Services Trent Holliday (641)-344-7109, (641)-782-2269 1510 260 th St, Diagonal IA 50845 Maintenance Provider
Holmes Tiling Inc	Huff Well, LLC
Kenny Holmes (641)-870-0402 209 E Monroe, Corydon, IA 50060	Travis Witt (515) 971-0549 133 S. 10 th st., Winterset, IA 50273 CIOWTS

J&H Construction	Jim Rouse Construction
Josh Jackson/Kyle Halls (641)414-3171/(641)-414-2848 1410 Grade Lake Drive, Osceola, IA 50213	Jim Rouse (641)-446-7020/(641)-340-0128 18602 190 th st, Leon, IA 50144
Maintenance Provider Walls Contains Inc.	Washant Canatanatian
Kelly Cortum Inc	Kephart Construction
Nick Waterhouse W-(515)981-5491/ C-(515)333-6302 PO Box 249, Norwalk, IA 50211	Bryan Morris/Dale Kephart (641)-396-2239/Dale(515)-681-3417 310 W. Clanton, St. Charles, IA 50240
CIOWTS	CIOWTS
L & D Trenching	Lathrop Farms
Bob Lee Cell: (515) 202-3945 2932 SE 124 th St, Runnells, Iowa 50237	Dean & Michael Lathrop 641-777-3774 1978 642 nd ave, Albia IA 52531
CIOWTS Mease Construction	Miled Control of a Control of Tax
Mark Mease H(641)765-4765, C(515)-468-1671 3189 Truro Rd Truro, IA 50257	Mike's Construction & Excavating LLC Mike Yutzy (641) 344-7220 18659 270th Ave, Leon, IA 50144
CIOWTS	Maintenance Provider
Molitor Construction LLC	Murphy's Outdoors
Paul Molitor (515) 298-1268 1246 Noble Hills Pl, Boone, IA 50036	Brian Murphy, Jr (515)689-1987 PO Box 99, Lineville, IA 50147
Maintenance Provider CIOWTS	Rex Amstutz Construction
Page Construction	Rex Amstutz Construction
Mike Page (641)-340-1888 2613 HWY 169, Shannon City, IA 50861	Rex Amstutx 515-350-8116 17750 R57 Hwy, Indianola, IA 50147
Maintenance Provider	CIOWTS
Rose Construction	Schaefer Excavating
Jephrey Rose 641-774-7449 cell: 641-203-2108 50574 215 th Ave, Chariton, IA 50049	Bill Schaefer H (641)464-2419, C (641)344-6873 1864 215 th St. Mount Ayr, IA 50854
CIOWTS	
Short Construction	Snyder Plumbing
Randy Short	Gerald Snyder
641-342-3354/641-414-4331 2517 Hwy 34, P.O. Box 226 Osceola, IA 50213	Cell (515) 975-2594 1817 Shore Street, Truro, IA 50257
2517 Hwy 54, 1.O. DOX 220 Oscola, IA 50215	1017 Shore Succe, 11th 0, 1A 30237
Southern Iowa Plumbing, LLC	Starlin Construction
John Buttz (641)870-1640	Monty & Jeff Starlin (641)344-9783, (641)344-9782
411 N Dotur Dr, Corydon, IA 50060	1525 190 th St. Diagonal, IA 50845
CIOWTS <u>Maintenance Provider</u>	

Swartzentruber Construction	Tonka Toy Construction
Enos Swartzentruber Cell 515-681-0433 10263 290 th St. Lamoni, IA 50140	Jeff Kennedy (712)542-8592 2009 263 rd St, Bedford, IA 50833
Total Septic Solutions	Vanderpool Construction
Chris Hansen Sr (515)-202-5005/(515)-999-9298 29468 200 th St, Dallas Center, IA 50063	Toby Vanderpool 515-961-4682/515-249-0184 1100 N 14 th St, Indianola IA 50125
CIOWTS	CIOWTS

Notice: In providing you with the names of those contractors and/or individuals who have registered with Clarke County Sanitarian, Clarke, Decatur, and Ringgold Counties in no way guarantees or warrants the work to be performed by any contractor or individual. The County strongly recommends that you conduct your own investigation into the experience and reputation of any contractor or individual prior to hiring.