

9-11-06

VARIANCE REQUEST

14.2.3

Iowa Department of Natural Resources

1. Date : 10/30/96 13. Decision: Approved
2. Review Engineer : Fred Evans Date: 10/31/96
3. Date Received : 10/29/96
4. Facility Name : Meadows Golf Course 14. Appeal:
5. County Number : 31 Date:
6. Program Area : CP
7. Facility Type : C05
8. Subject Area : 308
9. Rule Reference : 64.2(3) a
10. Design Std. Ref. : 14.2.3
11. Consulting Engr. : ITW Engineers & Surveyors
12. Variance Rule : 64.2(9) c

15. Description of Variance Request

A project has been submitted for wastewater treatment facilities to serve a new golf course located west of the City of Asbury in Dubuque County, Iowa. The treatment facilities will include septic tanks, dosing tanks and a subsurface sand filter. The sand filter will be located more than 400 feet from the deep well which supplies water to the clubhouse; however the separation distance between the well and the septic tanks and dosing tanks will be approximately 375 feet. Inasmuch as chapter 64 of the IAC requires a separation distance of at least 400 feet between deep wells and wastewater treatment facilities, a variance has been requested.

16. Consulting Engineer's Justification

At this time we also formally request a variance for the separation distance of the septic tanks and dosing tanks with respect to the well to serve the clubhouse. These tanks are presently sited about 375 feet from the well. The reasons to justify this variance request are:

1. The well is a deep well - please see the enclosed October 10, 1996 letter from field office #1.
2. The well is located topographically uphill from the septic tanks at a site elevation of 502. The elevation of the ground at the septic tanks is 485. The difference is 17 feet in elevation. The site continues to slope toward the irrigation pond and drainageway in a direction opposite the direction to the well.
3. The clubhouse footings and foundations lie directly between the well and the septic tanks. The footings and foundations are approximately 15 to 25 feet from the septic tanks

16. Consulting Engineer's Justification (cont.)

4. Environmental Protection Chapter 64 regulations require a four hundred foot separation distance from treatment or lagoon water surface to public deep wells. However, Chapter 43, Table A of the water regulations allows a deep well to be sited within 100 feet of concrete vaults and septic tanks. Chapter 69 of the Environmental Protection regulations pertaining to on-site wastewater treatment systems requires a separation distance of 200 feet from the closed portion of an on-site wastewater treatment system from a public water supply well. This chapter does not differentiate between deep and shallow wells. A septic tank is defined as a closed part of the system. Finally, Chapter 49 of the regulations, a chapter that can be enforced by local county health departments, requires a 50 foot separation distance from wells. The chapter 64 regulation is perhaps least specific with respect to septic tanks, although the four sets of criteria present considerable ambiguity. We believe, public health and welfare will be adequately protected if a variance is granted.

17. Department's Justification

It is recommended that a variance be granted for the lesser separation distance based upon the engineer's justification and the provisions of Chapter 43 of this department's rules which requires a minimum separation of only 100 feet between deep public wells and concrete vaults & septic tanks.

18. Precedents Used *Site separation variances previously approved for the cities of Albia, Bronson, Chillicothe, Eddyville, Fort Dodge, Ogden, Ossian, Washington and West Chester. Variances also approved for the Meadow Lawn Nursing Center, Northridge Mall, Riverview Estates, Troy Mills S. P., Beachland Inn MHP and Westside Apartments.*

19. Staff Reviewer	: <i>Paul Evans</i>	Date: <i>10/30/96</i>
20. Supervisor	: <i>[Signature]</i>	Date: <i>10/30/96</i>
21. Authorized by	: <i>David H. Albrecht</i>	Date: <i>10/31/96</i>



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Michael A. Jansen, PE, SE
Ronald A. Balmer, PE, SE, AIA
John M. Tranmer, LS
Robert C. Fay, PE
Kenneth A. Holte, PE

October 24, 1996

Mr. Fred Evans
Iowa Department of Natural Resources
Wallace State Office Building
900 East Grand Avenue
Des Moines, IA 50319

Re: The Meadows Golf Course, Dubuque, IA
Construction Permit Application
IIW Project No. 96902-00

Dear Mr. Evans,

Enclosed please find the drawing detailing the interconnecting piping for the dosing tanks at the Meadows Golf Course in response to your request.

At this time we also formally request a variance for the separation distance of the septic tanks and dosing tanks with respect to the well to serve the clubhouse. These tanks are presently sited about 375 feet from the well. The reasons to justify this variance request are:

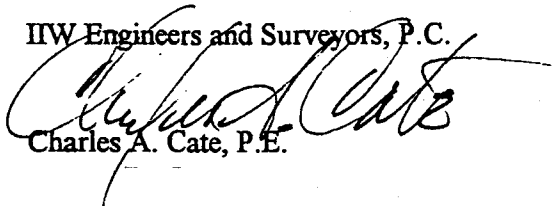
1. The well is a deep well - please see the enclosed October 10, 1996 letter from field office #1.
2. The well is located topographically uphill from the septic tanks at a site elevation of 502. The elevation of the ground at the septic tanks is 485. The difference is 17 feet in elevation. The site continues to slope toward the irrigation pond and drainageway in a direction opposite the direction to the well.
3. The clubhouse footings and foundations lie directly between the well and the septic tanks. The footings and foundations are approximately 15 to 25 feet from the septic tanks.
4. Environmental Protection Chapter 64 regulations require a four hundred foot separation distance from treatment or lagoon water surface to public deep wells. However, Chapter 43, Table A of the water regulations allows a deep well to be sited within 100 feet of concrete vaults and septic tanks. Chapter 69 of the Environmental Protection regulations pertaining to on-site wastewater treatment systems requires a separation distance of 200 feet from the closed portion of an on-site wastewater treatment system from a public water supply well. This chapter does not differentiate between deep and shallow wells. A septic tank is defined as a closed part of the system. Finally, Chapter 49 of the regulations, a chapter that can be enforced by local county health departments, requires a 50 foot separation distance from wells. The chapter 64 regulation is perhaps least specific with

respect to septic tanks, although the four sets of criteria present considerable ambiguity.
We believe, public health and welfare will be adequately protected if a variance is granted.

If you require additional information, please do not hesitate to contact us.

Sincerely,

IIW Engineers and Surveyors, P.C.

A handwritten signature in dark ink, appearing to read "Charles A. Cate", is written over the typed name.

Charles A. Cate, P.E.

cc:

Jim Boyer, The Meadows

Ron Stellick, IDNR Region 1



96902

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

Field Office #1
817 West Fayette - Manchester, Iowa 52057
Phone : 319/927-2640

October 10, 1996

The Meadows
15730 Asbury Road
Dubuque, IA 52002

ATTENTION: Jim Boyer, General Manager

RE: Well Depth Determination
System No. 3126207

I have received additional geological information from Paul Van Dorpe of this Department's Geological Survey Bureau. With the information provided by Mr. Van Dorpe I have made the determination that the Club House well is a "deep" well.

I have enclosed a copy of the separation distances for "deep" wells with this letter. A copy of this letter will be sent to Charles Cate of IIW Engineers for his use in designing your wastewater system. The "deep" well determination will allow more flexibility in the planning of the wastewater system for your water supply.

Thank you for your cooperation. If you have further questions about this well determination, please contact this Field Office.

Sincerely,

ENVIRONMENTAL PROTECTION DIVISION

Mike Wade
Environmental Specialist

c: WS - Dubuque County/The Meadows
Water Supply Section - DNR - Des Moines
Charles Cate, IIW Engineers, 4155 Pennsylvania Ave., Dubuque, IA 52002

400' radius from clubhouse well

North
1" = 50'

THE MEADOWS
SAND FILTER SYSTEM
GENERAL LAYOUT

REVISED 10/2/96

ASPHALT GOLF CART
PATH

490

480

30' X 117'
SAND FILTER

CLEAN OUT

DOSING
TANK

DOSING
TANK
W/ STATION
SEPTIC TANK 1,500 GAL.

SEPTIC TANK 1,500 GAL.
SEPTIC TANK/GREASE TRAP
1,000 GAL.

30'

4" RC

CLUBHOUSE

ELEV. 464.75

2" RC DRAINAGE
PIPING-PLACE BY
DIRECTIONAL BORING

GR.

W.L. 465.00

IRRIGATION POND

GR.

480

450

POINT OF
DISCHARGE