



STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

August 20, 2010

Mr. Greg Adams
Arboretum Development LLC
6411 Sandwedge Ct.
Dubuque, Iowa 52002

Subject: Variance Request from Design Standards Sections 13.10.4
Felderman Subdivision
Dubuque, Iowa

Dear Mr. Adams:

After careful and thorough consideration, the Department has denied your August 10, 2010 request for a variance from Section 13.10.4 of the Iowa Wastewater Facilities Design Standards which requires that the valves for submersible pumps be located in a separate valve chamber.

The above variance is denied due to the fact that the justification presented does not substantially demonstrate that the project resulting from the proposed variance provides equivalent or improved effectiveness. The requested variance is not deemed to be necessary and appropriate pursuant to the Iowa Code Section 455B.181.

Pursuant to Iowa Code Section 455B.181, and 561 Iowa Administrative Code (IAC) 7.4(1), as adopted by reference by 567 IAC Chapter 7, a written notice of appeal to the Environmental Protection Commission may be filed within 30 days of receipt of this letter. The notice of appeal is required to be filed with the Director of the Department, and must identify the specific portion or portions of the variance denial that are being appealed and include a short and plain statement of the reasons for appeal. A contested case hearing will then be commenced pursuant to Iowa Code Chapter 17A, 561 IAC Chapter 7, and 567 IAC Chapter 7.

If you have any questions, please contact me at 515-242-6148 or martin.jacobs@dnr.iowa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne" followed by a stylized surname and a flourish.

Charles C. Corell, Chief
Water Quality Bureau

Cc: DNR Field Office #1
DNR File 6-31-26-0-01
Buesing & Associates Inc.
DNR Legal Services - Diana Hansen
City Clerk - Dubuque

VARIANCE REQUEST

Iowa Department of Natural Resources

1. Date:	August 20, 2010	14. Decision:	<i>Denied</i>
2. Reviewer/Engr.:	Marty Jacobs	Date:	<i>8/20/10</i>
3. Date Received:	August 11, 2010		
4. Facility Name:	City of Dubuque		
5. Facility Number:	6-31-26-0-01	15. Appealed:	
6. County Number:	31 (Dubuque)	Date:	
7. Program Area:	CP (Wastewater)		
8. Facility Type:	C01 (collection/transport)		
9. Subject Area:	327 (valve pit)		
10. Rule Reference:	567-64.2(9)a		
11. Design Std. Ref.:	13.10.4		
12. Consulting Engr.:	Buesing & Associates, Inc.		
13. Variance Rule:	567-64.2(9)c		

16. Description of Variance Request:

Arboretum Development, LLC is requesting variance from the Iowa Wastewater Facilities Design Standards Chapter 13 – Wastewater Pumping Stations and Force Mains – 13.10.4 (Valves) for the installation of a prefabricated submersible pump station with the gate and check valves located in the wet well with access from above rather than in a separate valve vault.

17. Applicant's/Consulting Engineer's Justification:

The variance requested is for the elimination of the valve chamber for this sewage lift station application. The station as designed is permanent and will be operated by the City of Dubuque as a part of their existing sewage collection system.

The proposed lift station is designed to serve a total of ten homes within the fourteen lot subdivision. These are the homes that cannot be served by the present gravity system of the City of Dubuque sewage collection system. For clarification, a copy of the overall plan for utilities for said subdivision is enclosed. Please be advised that the subdivision is set into the hillside between the Northwest Arterial to the south and the Dubuque Arboretum and Botanical Gardens to the north. Due to the location, contours and adjacent property uses, there will never be any additional homes connected to said station, thus it will always serve just the ten lots proposed by this subdivision. The proposed lift station is a small prefabricated station sized to with the capacity and head necessary to lift the sewage from these ten lots up to the existing City of Dubuque gravity system. The system is only slightly larger than what would be required for an individual home. The interior of the station is completely constructed at the factory and is shipped as one piece ready for placement at the site. Said prefabricated station includes all of the valving necessary for the installation in accordance with Section 13.5.2, except for the fact that said valving is located with the station itself. By locating all of the required valving within the station, you thereby eliminate the need for a separate valve chamber. In addition, the valves can be operated without entry into the lift station wet well, thus no confined space entry issues need to be addressed for the station. The valves are operated by a stainless steel L shaped handle accessible from the top of the station that allows the ball valves to be turned off and on.

The Engineer is aware of several other small lift station applications where the valve chamber has been eliminated. These are:

- Casey's In Newton, IA @ 3104 1st Avenue East. This station pumps wastewater from the station to the City of Newton's sewer collection system. It is our understanding that it was installed in the summer of 2006.
- Casey's in Merrill, IA @ 521 1st Street. This station lifts sewage from the Casey's and send it on to the City's sewer collection system. It was constructed during the summer of 2006.
- Harvestor Golf Course, Rhodes, IA. System was provided to the Central Iowa Rural Water Association and serves a part of the development. The lift station for this system was installed in the summer of 2004.
- Casey's in Gilbert, IA @ intersection of Highway 69 & County Road E23. Serves the station and

associated development at this corner. Gilbert is located approximately 1 mile west of this intersection. This station is being installed during this 2010 construction season.

18. Department's Justification:

Recommend variance **denial.**

While this request has been occasionally approved for small communities, it is usually denied for site in larger communities. The facilities that have been approved in small communities have had mixed results. None of the facilities given as an example above are housing developments.

19. Precedents Used:

Coralville – 5/27/30 (denied)

Iowa Falls – 1/2/91 (approved)

Lamoni – 10/18/94 (denied)

Mystic – 7/11/86 (denied)

20. Staff Reviewer:

Winton Lee

Date:

8-20-10

21. Supervisor:

Satyra Chennupati

Date:

8/20/10

22. Authorized by:

Wayne Breslin

Date:

8-20-10

Buesing & Associates Inc.
Consulting Engineers

1212 Locust St.
Dubuque, IA 52001
(563) 556-4389

August 10, 2010

Mr. Marty Jacobs, P.E.
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319-0034

Re: Variance Request Petition
Felderman Subdivision, City of Dubuque, IA
IDNR Project. No. S3010-0314

1. Arboretum Development LLC, c/o Greg Adams, 6411 Sandwedge Ct., Dubuque, IA 52002, (563) 588-3078, is the petitioner requesting a variance in accordance with 561 Iowa Administrative Code Chapter 10. The petition has been prepared by Buesing & Associates, Inc. c/o Kenneth L. Buesing, PE & LS.
2. The petitioner is proposing the installation of a small prefabricated sanitary sewer lift station at the above noted subdivision without a valve chamber. Said chamber is a requirement of the Iowa Wastewater Facility Wastewater Design Standards Chapter 13, Wastewater Pumping Stations and Force Mains as adopted March 19th, 1985. The specific section within Chapter 13 noting said requirement is Section 13.10.4 and it states:

Valves for submersible pumps required under Section 13.5.2 shall be located in a separate valve chamber.
3. The variance requested is for the elimination of the valve chamber for this sewage lift station application. The station as designed is permanent and will be operated by the City of Dubuque as a part of their existing sewage collection system.
4. The proposed lift station is designed to serve a total of ten homes within the fourteen lot subdivision. These are the homes that cannot be served by the present gravity system of the City of Dubuque sewage collection system. For clarification, a copy of the overall plan for utilities for said subdivision is enclosed. Please be advised that the subdivision is set into the hillside between the Northwest Arterial to the south and the Dubuque Arboretum and Botanical Gardens to the north. Due to the location, contours and adjacent property uses, there will never be any additional homes connected to said station, thus it will always serve just the ten lots proposed by this subdivision. The proposed lift station is a small prefabricated station sized to with the capacity and head necessary to lift the sewage from these ten lots up to the existing City of Dubuque gravity system. The system is only slightly larger than what would be required for an individual home. The interior of the station is completely constructed at the factory and is shipped as one piece ready for placement at the site. Said prefabricated station includes all of the valving necessary for the installation in accordance with Section 13.5.2, except for the fact that said valving is located with the station itself. By locating all of the required valving within the station, you thereby eliminate the need for a separate valve chamber. In addition, the valves can be operated without entry into the lift station wet well, thus no confined space entry issues need to be addressed for the station. The valves are operated by a stainless steel L shaped handle accessible from the top of the station that allows the ball valves to be turned off and on.
5. There have been no contacts between the petitioner and the Department.
6. The Engineer is aware of several other small lift station applications where the valve chamber has been eliminated. These are:
 - a. Casey's In Newton, IA @ 3104 1st Avenue East. This station pumps wastewater from the station to the City of Newton's sewer collection system. It is our understanding that it was installed in the summer of 2006.


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- b. Casey's in Merrill, IA @ 521 1st Street. This station lifts sewage from the Casey's and send it on to the City's sewer collection system. It was constructed during the summer of 2006.
 - c. Harvester Golf Course, Rhodes, IA. System was provided to the Central Iowa Rural Water Association and serves a part of the development. The lift station for this system was installed in the summer of 2004.
 - d. Casey's in Gilbert, IA @ intersection of Highway 69 & County Road E23. Serves the station and associated development at this corner. Gilbert is located approximately 1 mile west of this intersection. This station is being installed during this 2010 construction season.
7. I believe that the City of Dubuque would be the only other governmental agency with an interest in this case and their Engineering Department have reviewed the plans in the normal subdivision review process and have not expressed any concern. In addition, from your original letter, you wanted confirmation that the City was aware of and would take over the operation of the lift station upon the completion of the improvements. The August 4th letter from Jon Brown, Manager of WWTP operations should provide you with adequate information regarding same. Jon's address is City of Dubuque, Wastewater Operations, 50 West 13th Street, Dubuque, IA 52001 and phone number is 563-589-4176.
 8. The petitioner is not aware of any person or entity that would be adversely affected by the granting of the petition.
 9. Persons having the most knowledge regarding the relevant facts would most likely be the writer, Kenneth L. Buesing, PE & LS of Buesing & Associates, Inc. Other persons that are familiar with various aspects of the project are, Tom Larsen, Engineering Technician, Buesing & Associates, Inc., Jon Brown, Manager of WWTP Operations for the City of Dubuque, Ron Turner, RLS, City Engineering, City of Dubuque and Terry and/or Kit Alcorn, Quality Pump & Control, the provider of the sewage lift station.
 10. The persons identified in item 9 above, the author of this letter, and the petitioner would be available to answer any additional questions that may come up in the Department's review of the variance request. Should the Department feel that there needs to be something in writing authorizing them to receive a phone call from the Department regarding the project, please let us know and then we can go through the formal process of getting said written authorization.
 11. The Iowa licensed engineer who prepared this document will sign this petition letter along with the petitioner.
 12. Please be advised that we are not aware of anyone to whom we are required to serve notice of the pending petition. If there is anyone to whom this should be forwarded to, please contact the author immediately and we will provide the appropriate parties notice via certified mail, etc., as described in your July 21, 2010 letter.

Should there be any additional items that need to be addressed regarding this petition, please contact Ken Buesing, Buesing & Associates, Inc.


Respectively submitted,


Buesing & Associates Inc.
Kenneth L. Buesing, PE & LS


Arboretum Development, LLC
Greg Adams

I, Kenneth L. Buesing, a licensed engineer under the laws of the State of Iowa, here by certify that the report was prepared by me or under my direct supervision.

Buesing & Associates, Inc.


Kenneth L. Buesing, P. E. & L. S.
Iowa Registration No. 10272
Registration Renewal Date 12/31/10

10, Aug 2010
Date