



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

May 17, 2013

Honorable Mayor Curtis Thornhill
City of Onslow
P.O. Box 25
Onslow, IA 52321

RE: City of Onslow Sanitary Sewer and Lift Station Improvements works
DNR Project No. S2011-0300

Subject: Variance Request from 567 IAC 64.2(9) a and Design Standards Section Chapter 12.5.1

Dear Mayor Thornhill:

After careful and thorough consideration, the Department has approved your 04/19/2013 request for a variance from Iowa Administrative Code Subrule 64.2.9 (a) and Chapter 12.5.1 of the Iowa Wastewater Facilities Design Standards, which require: *No public gravity sewer shall be less than eight inch in the diameter.*

Based on the documentation presented by your Engineer, it is the determination of this Department that satisfactory justification has been presented to warrant the granting of a variance for replacement of existing 4-inch pipes with 6-inch dia pipe. The requested variance is deemed to be reasonable and necessary pursuant to the Iowa Code section 455B.181.

The facts presented for the project present unique circumstances and the variance is therefore justified to provide the narrowest exception possible to the provisions of the rule in accordance with Rule 561 IAC 10.5. The validity of this variance approval shall last for a period of one year from the date of the construction permit in accordance with Rule 567 IAC 10.5.

This decision is based on our review of justification presented to support the request. Our concurrence with the request is based on the Department's finding that the resulting project will provide substantially equivalent effectiveness as would be provided by technical compliance with the design standard on this issue.

Please feel free to call me at 515-281-8367 or email me at Dinbandhu.gupta@dnr.iowa.gov if you have any further questions.

Sincerely,

A handwritten signature in blue ink that reads "Shelli Grapp".

Shelli Grapp
Water Quality Bureau Chief

Cc: TeKippe Engineering, Manchester Office, IA
DNR FO # 1
DNR Sewage File 6-53-58-0-01

VARIANCE REQUEST
Iowa Department of Natural Resources

1. Date: May 9, 2013
2. Reviewer/Engr.: Din Gupta
3. Date Received: 04/30/2013
4. Facility Name: City of Onslow
5. Facility Number: 6-5358001
6. County Number: 53
7. Program Area: CP (Wastewater)
8. Facility Type: C01
9. Subject Area: 305, minimum sewer size
10. Rule Reference: 507-64.2(9) a
11. Design Std. Ref.: 12.5.1
12. Consulting Engr.: Fehr Graham
13. Variance Rule: 507-64.2(9) c

14. Decision: *Approved*
Date: *5-17-13*

15. Appealed:
Date:

16. Description of Variance Request:

The City requests a variance from the Design Standards which requires "a minimum sewer diameter of 8-inch for all public sanitary sewer with exception of 6-inch sewer to allow rehabilitation (CIPP lining) of existing 6 inch underneath a highway and then extension of that main by replacing an existing four inch diameter main with a new six inch diameter.

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

A maximum of six houses will be connected to the main in the question in the future. No other development is possible. Requiring an eight inch main will add \$ 30, 000 to the project and will not provide any benefits to the city or users for the reasons as follows here: 1. A six inch has adequate capacity. The estimated peak hour wet weather flow is 5 gpm and the estimated instantaneous peak flow is 30 gpm. The Design capacity of 6-inch main at 75% depth is 260 gpm. 2) Cleaning and maintenance is able to performed on a six inch diameter main as easily on an eight inch diameter main.

The consulting Engineer described the 6-inch diameter main has adequate capacity for current and future flows, the same level of protection to the public health, safety, and welfare will be provided if a waiver is granted compared to the level provided if an eight inch diameter is installed. In the event a waiver is not granted, the line 44 of 6-inch replacement will be dropped from the project.

18. Department's Justification:

Recommend **approval**.

The 6-inch main has adequate capacity to handle the current flows of existing users and future flows for additional 6 houses. The 6-inch main has 1 % slope which would provide minimum scouring velocity. As per the City statement, there has been no documented evidence of problems in the existing 4-inch lines. The City has also submitted an assurance letter of their ability to provide additional cleaning and maintenance resulting from the 6-inch sewers. Based upon the description and justification provided by the Engineer, the Department recommends approval of this variance.

19. Precedents Used:

Previous small community school projects: Unsewer Communities - Kinross, Harper, Keswick, Plano, Conroy, City of Promise city

20. Staff Reviewer:



Date:

5/15/2013

*LWB
5/15/13*

21. Supervisor:	<i>Jatya Champati</i>	Date:	<i>5/15/13</i>
22. Authorized by:	<i>Shelli Gapp</i>	Date:	<i>5-16-13</i>