

## **CITY OF RAPID CITY**

RAPID CITY, SOUTH DAKOTA 57701

# Public Works Department **Engineering Services Division**

300 Sixth Street

Telephone: (605) 394-4154 FAX: (605) 355-3083

Web: www.rcgov.org

TO:

**Public Works Committee** 

FROM:

Ted T. Johnson, P.E.

Engineering Project Manager Public Works Department

DATE:

January 17, 2013

RE:

Request for Exception to utilize sewer main termination cleanouts.

East Minnesota Street, Section 21 Extension

Section 21, T1N, R8E, Rapid City, Pennington County, South Dakota

A request was received on December 28, 2012, to waive the requirements of the City of Rapid City Infrastructure Design Criteria Manual (IDCM) Section 3.6.1 and allow the use interim sanitary sewer termination cleanouts in lieu of terminating sanitary sewer main extensions at a manhole for the East Minnesota Street – Section 21 Extension project. The proposed project includes the installation of street paving, curb and gutter, water, sanitary sewer, storm drainage and related improvements for a portion of East Minnesota Street near the southern limits of the Elks Country Estates Subdivision. East Minnesota Street is classified as a principal arterial street and sanitary sewer mains are being stubbed out to the limits of the street right-of-way for future street and utility improvements.

Section 3.6.1 of the Rapid City Infrastructure Design Criteria Manual states:

"Sewer systems shall terminate at the nearest upstream manhole located in adjacent and subsequent phases; if the sewer has the potential to be extended, a two foot (2') stub shall be provided on the upstream side of the last manhole."

The intent of this exception request is to install 8 and 12-inch sanitary sewer main stubs ranging from 68 to 80 feet in length and to temporarily terminate the stubs with a traffic rated sewer cleanout until the stubs are extended at some suture date. Previous installations of long sewer stubs that were temporarily terminated with a cap or cleanout; and subsequent extension of future mains have resulted in misalignments, deflections



Request for Exception
East Minnesota Street – Section 21 Extension
S21, T1N, R7E
January 17, 2013
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and sags/high points at the connection points which creates testing, operations and long term maintenance issues. Temporary sewer main terminations with cleanouts and construction testing criteria as proposed, does not assure the future extension will not result in misalignment, pipe deflection or sags at the point of connection. Operations Staff has also noted that consistent horizontal and vertical alignment between project phases is extremely difficult for contractors to meet, and are opposed to this request to use temporary termination cleanouts.

Per IDCM requirements, the proposed extension of sewer mains shall terminate in a manhole. The proposed sewer extensions could be terminated in manholes at the ends of the sewer stubs as shown on the plans or the mains could be extended further to the next appropriate manhole location.

Staff Recommendation: Staff recommends that the request to allow interim termination cleanouts in lieu of terminating sanitary sewer extensions at a manhole in accordance with IDCM Section 3.6.1 be denied.

ENGINEERING
LANDSCAPE ARCHITECTURE
LAND PLANNING

DREAM DESIGN
— INTERNATIONAL, INC.

CONSTRUCTION OBSERVATION
REAL ESTATE DEVELOPMENT
PROPERTY MANAGEMENT

January 11, 2013

Public Works Department City of Rapid City 300 Sixth Street Rapid City, SD 57701

RE: Request for Exception 13EX001, Minnesota Street, Section 21 Extension Project

Dear Public Works Director:

In accordance with Rapid City Municipal Codes 12.04.190 and 16.04.060, Dream Design International, Inc., acting on behalf of the project owner, would like to appeal the decision to deny the Request for Exception 13EX001.

Upon review of the Request for Exception application and subsequent response letter prepared by Rapid City Staff, dated January 7, 2013, it is believed that the request for exception is justified and that its denial will cause unnecessary harm to the project owner. Attached to this letter is a copy of the Request for Exception 13EX001 and the above-referenced response letter dated January 7, 2013.

We thank you for your help and consideration, and please contact us if you need any additional information.

Sincerely,

DREAM DESIGN INTERNATIONAL, INC.

Kyle Treloar, EIT

RECEIVED

JAN 1 5 2013

ENGINEERING SERVICES

# REQUEST FOR EXCEPTION TO RAPID CITY DESIGN STANDARD / CRITERIA / REGULATIONS

PROJECT 1	2-0644 Minnesota Str	eet, Section 21	Extension	
DATE:	SUBMITTED BY: Dream Design Into			
PIN #:		528 Kansas City St. Suite 4, RC SD 57701		
LEGAL DESC	RIPTION: Proposed E. Minne	sota Street from Elks Cro	ssing to the east Section Line	of Section 16 and 21;
Located in the S1/2	of the S1/2 of SE1/4 of Section 10	6, also in the N1/2 of the	N1/2 of the NE1/4 of Section	21, all located in
T1N, R8E, BHM, F	Rapid City, Pennington County,	South Dakota		
EXCEPTION R	REQUESTED: SECTION	3.6.1 st	D / CRITERIA / REG	Criteria
DESCRIPTION	OF REQUEST: Allow the	ne use of clean-out	s on sanitary sewer stu	ubs greater than
2 feet in length. W	e propose including in the plan	s and/or specs the atta	ached note and clean-out d	etail.
HICTICATIO	Ohr City stoffs assessment to the	opportunite bility and m	pointanence of source at the	oon bo addressed
JUSTIFICATIO	ing criteria more demanding for		naintenance of sewer stubs	
	e the attached note and detail wh			
STAFF COMM	ENTS: Utilizing tempor	FOR STAFF ONLY		
. /	Openations staff has a	100		
	MENDATION: Deny	Scher mai	is stubi shall be	terminated
at manholes	as required by			
REVIEWED BY	: The Ilm		DATE: /- クー/3	3
AUTHORIZATI  BETT  GROWTH MAN		□ APPROVED	☑ DENIED	
AMM. PUBLIC WORK	MM (S DIRECTOR*		7-7-13 DATE	ENGLITERISC CENTICES
	7.7.7		E	Povised 11/06/07

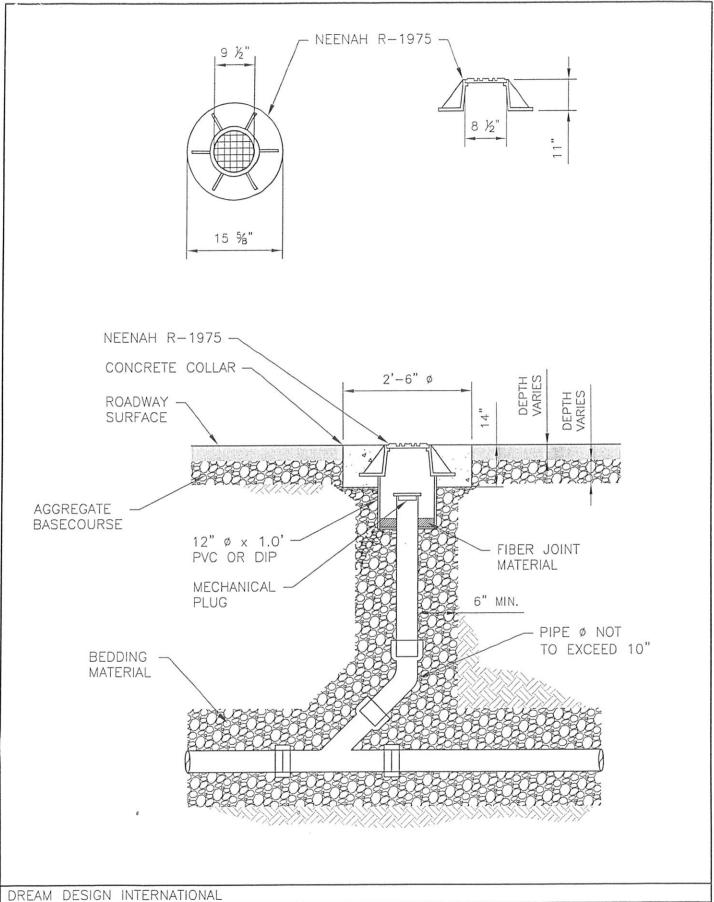
Revised 11/06/07

ASSOCIATED FILE#: 10 PLOSS

\*Public Works Director's signature is not required for Lot Length to Width Exceptions, Ordinance No. 5232. Proposed plan note addressing sewer stubs greater than 2 feet.

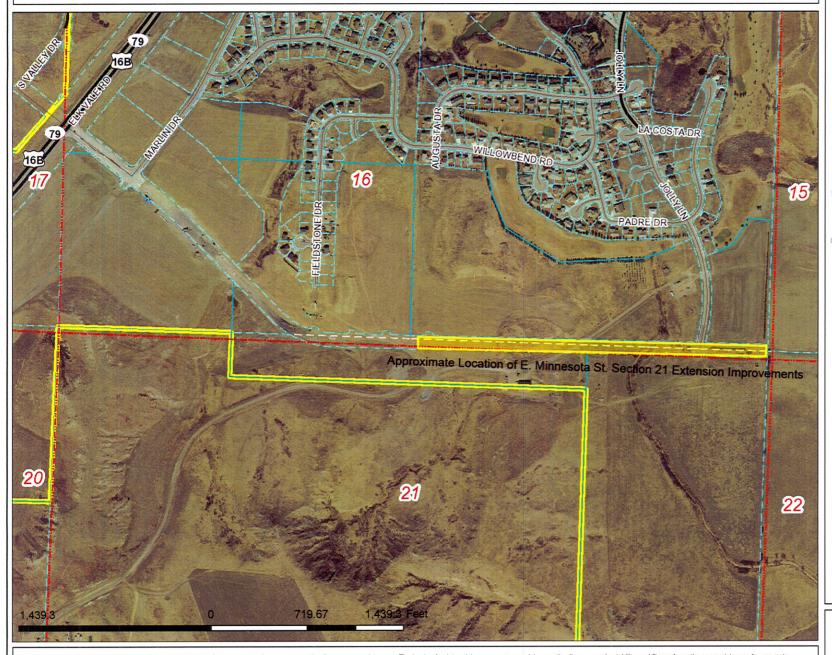
Sanitary Sewer Stubs W/Clean-outs:

All Sanitary Sewer stubs shall be mandrel, lamp and camera tested per the Rapid City Standard Specifications for the full length of the pipe. Invert elevation and horizontal location of stub end shall be confirmed in writing by a licensed surveyor after pipe installation but before clean-out installation. Testing of the sewer stub shall be completed and accepted prior to installation and backfilling of the clean-out. The contractor shall complete all tests as a condition of Project acceptance by the City. The Contractor shall correct, at his own expense, any defects discovered because of lamping, survey and/or televising the pipe.



TRAFFIC RATED CLEANOUT, FRAME, AND COVER NOT TO SCALE

## RapidMap Rapid City-Pennington County GIS



DISCLAIMER: This map is provided 'as is' without warranty of any representation to accuracy, timeliness, or completeness. The burden for determining accuracy, completeness, timeliness, merchantability, and fitness for or the appropriateness for use rests solely on the user. Rapid City and Pennington County make no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The user acknowledges and accepts the limitations of the map, including the fact that the data used to create the map is dynamic and is in the constant state of maintenance, correction, and update. This documents does not represent a legal survey of the land. There are no restrictions on the distribution of printed Rapid City/Pennington County maps, other than the City of Rapid City copyright/credit notice must be legible on the print. The user agrees to recognize and honor in perpetuity the copyrights and other proprietary claims for the map(s) established or

### Legend

- Driveway
- Paved Alley

- Airport Runway Not yet coded

### Township/Section Lines

### Tax Parcels

Lot Lines <all other value

Lot Line

Parcel Line

□ County Line



Scale: 1: 8,636

Map Notes:



## CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701

# Public Works Department Engineering Services Division

300 Sixth Street

Telephone: (605) 394-4154 FAX: (605) 355-3083 Web: www.rcgov.org

January 7, 2013

Mr. Steve Zandstra Zandstra Construction P.O. Box 1940 Rapid City, SD 57709

Re: Request for Exception to utilize sewer main termination cleanouts.

East Minnesota Street, Section 21 Extension

Section 21, T1N, R8E, Rapid City, Pennington County, South Dakota

Dear Mr. Zandstra,

The Request for Exception to Section 3.6.1 of the City of Rapid City Infrastructure Design Criteria Manual to utilize traffic rated sewer cleanouts to terminate sanitary sewer mains for the referenced project is denied.

Section 3.6.1 of the Rapid City Infrastructure Design Criteria Manual states "Sewer systems shall terminate at the nearest upstream manhole located in adjacent and subsequent phases; if the sewer has the potential to be extended, a two foot (2') stub shall be provided on the upstream side of the last manhole." The intent of this exception request is to install 8 and 12 inch sewer stubs ranging from 68 to 80 feet in length and to terminate the stubs with a traffic rated sewer cleanout. Previous installations of long sewer stubs that are temporarily terminated with a cap or cleanout; and subsequent extension of future mains have resulted in misalignment and deflections at the connection points which creates testing, operations and long term maintenance issues. Sewer terminations with proposed cleanouts and testing criteria, does not assure the future extension will not result in misalignment, pipe deflection or sags at the point of connection. Operations Staff has also noted that consistent horizontal and vertical alignment between project phases is extremely difficult for contractors to meet, and are opposed to this request to use temporary termination cleanouts.



Steve Zandstra January 7, 2013 Page 2

Per IDCM requirements, the proposed extension of sewer mains shall terminate in a manhole. The proposed sewer extensions may be terminated in manholes at the locations shown on the plans or the mains may be extended further to the next appropriate manhole location.

The denial of this exception request may be appealed to the City Council by requesting it be placed on the next Public Works Committee agenda. Please contact the Public Works Engineering Department if you desire to appeal. The City Council has final approval of exception requests.

Sincerely,

City of Rapid City

Ted Johnson Project Manager

Encl: As noted.

Cc: Files