

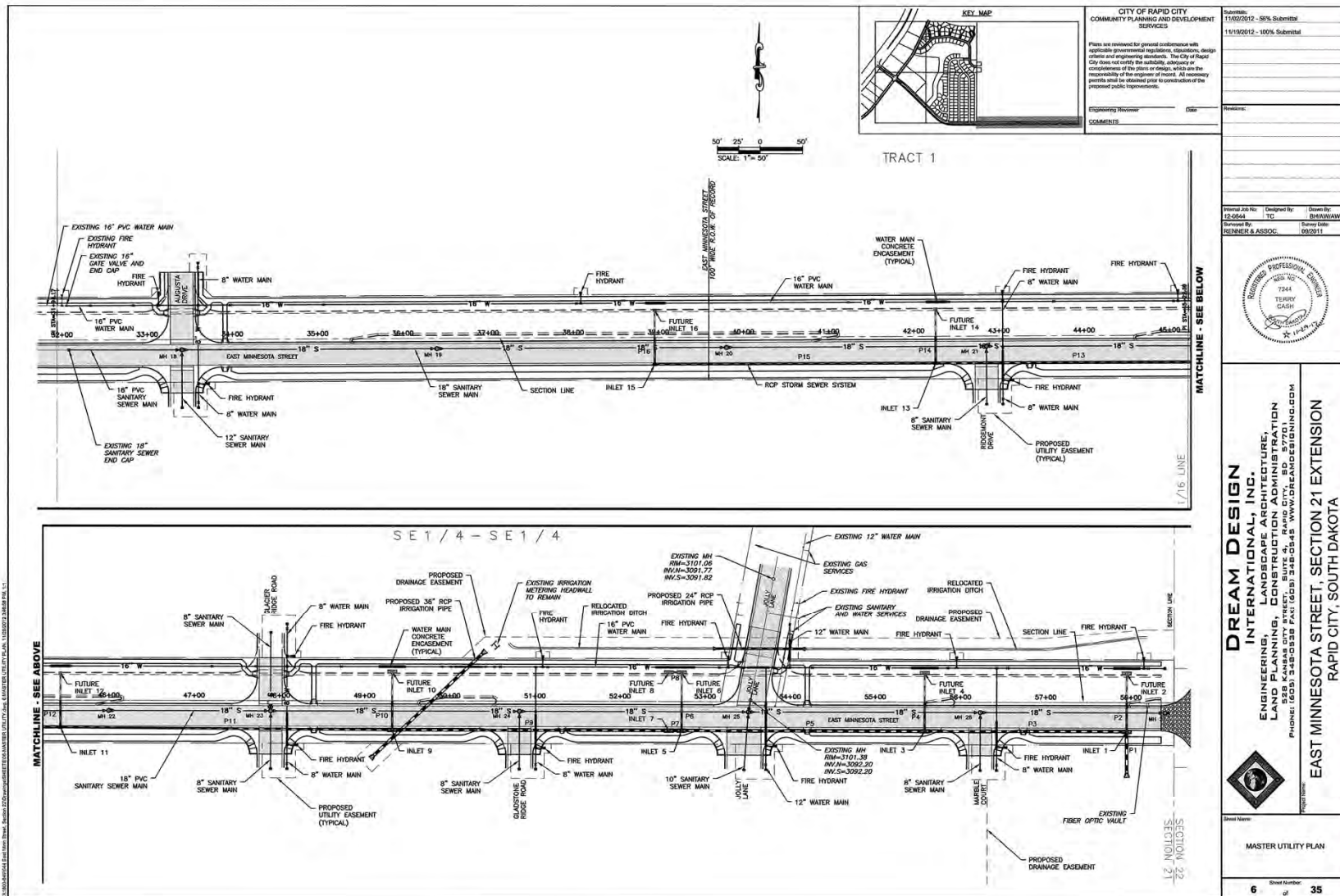


DREAM DESIGN
INTERNATIONAL, INC.

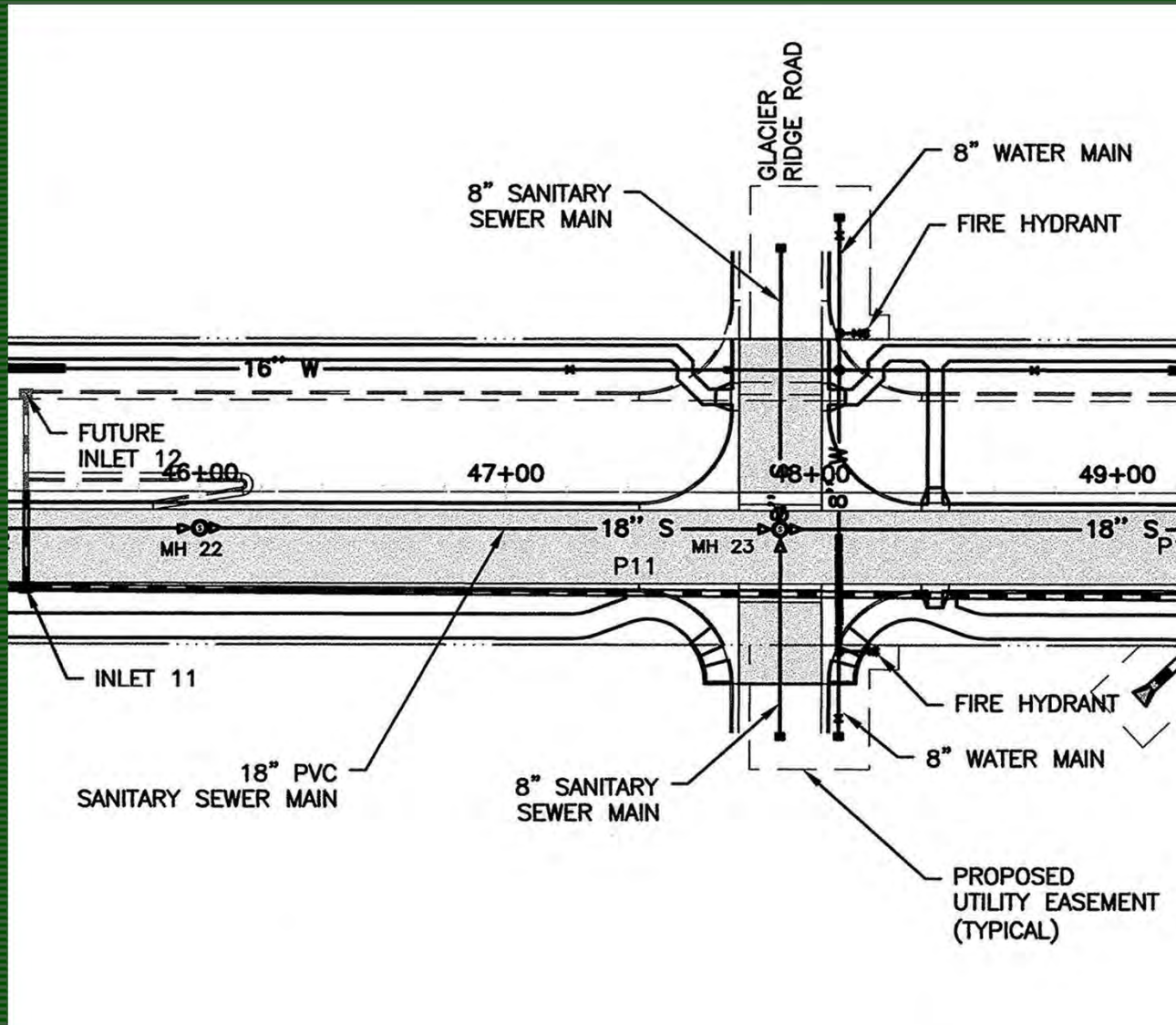
MINNESOTA STREET MANHOLE EXCEPTION

Hani Shafai, PE

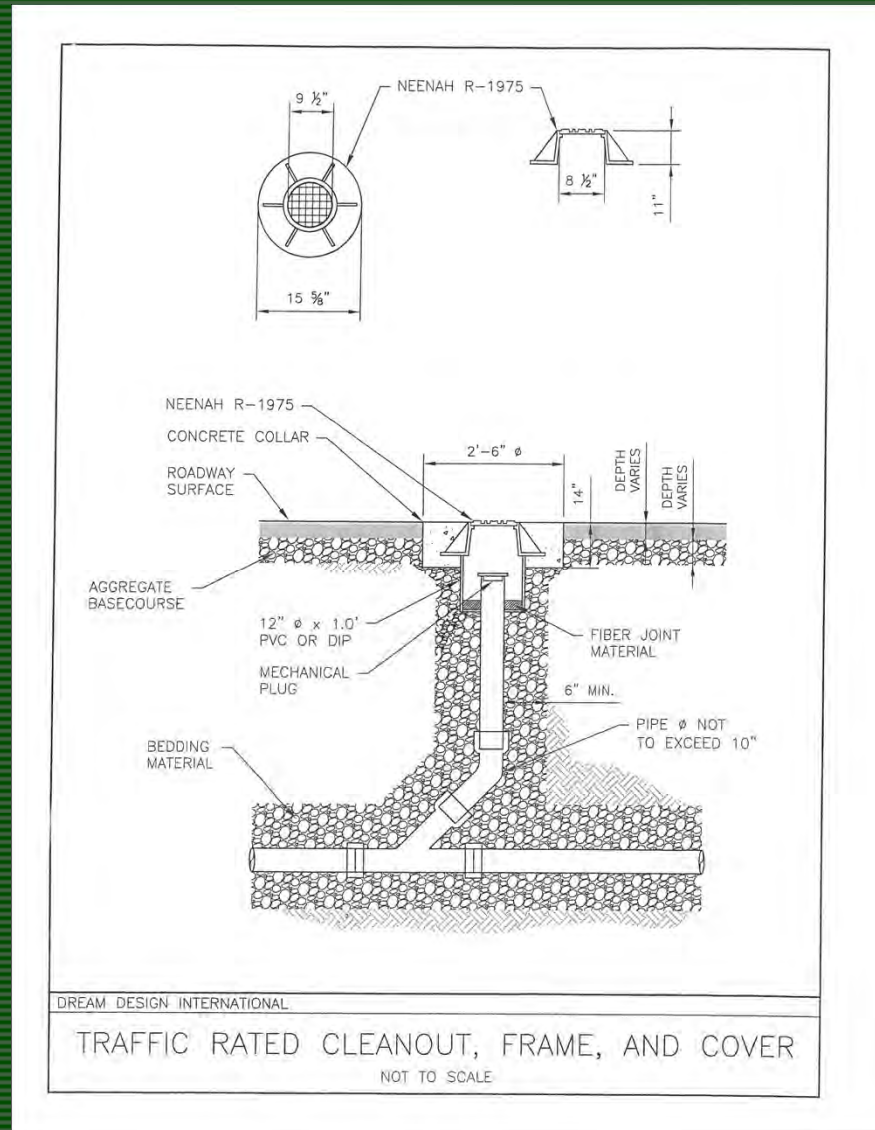
Minnesota Street Utility Plan



Typical Intersection with Minnesota Street



Typical Proposed Street Cleanout



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

PROJECT 12-0644 Minnesota Street, Section 21 Extension

DATE: _____ SUBMITTED BY: Dream Design International, Inc.

PIN #: _____ 528 Kansas City St. Suite 4, RC SD 57701

LEGAL DESCRIPTION: Proposed E. Minnola Street from Elks Crossing to the east Section Line of Section 16 and 21; Located in the S1/2 of the S1/2 of SE1/4 of Section 16, also in the N1/2 of the N1/2 of the NE1/4 of Section 21, all located in T1N, R8E, BHM, Rapid City, Pennington County, South Dakota

EXCEPTION REQUESTED: SECTION 3.6.1 STD / CRITERIA / REG Criteria

DESCRIPTION OF REQUEST: Allow the use of clean-outs on sanitary sewer stubs greater than 2 feet in length. We propose including in the plans and/or specs the attached note and clean-out detail.

JUSTIFICATION: City staff's concern for the constructability and maintenance of sewer stubs can be addressed by making the testing criteria more demanding for the installed pipe stub and installing a traffic rated clean-out for maintenance. See the attached note and detail which if approved will be included in the plans.

SUPPORTING DOCUMENTATION: Yes No

PROPERTY OWNER'S SIGNATURE**: [Signature] DATE: 12/28/12

**Or Agent, if previously designated by the Owner in writing.

FOR STAFF ONLY

STAFF COMMENTS: Utilizing temporary termination cleanouts in lieu of manholes does not eliminate the potential to create deflections and misalignments of the sewer when extended in the future. Operations staff has noted continued problems with terminating and extending sewer mains in this fashion.

STAFF RECOMMENDATION: Deny Sewer main stubs shall be terminated at manholes as required by IDCM Section 3.6.1

REVIEWED BY: [Signature] DATE: 1-7-13

AUTHORIZATION:

[Signature] APPROVED DENIED **RECEIVED**

GROWTH MANAGEMENT DIRECTOR DATE 1/7/2013 **DEC 28 2012**

[Signature] APPROVED DENIED **ENGINEERING SERVICES**

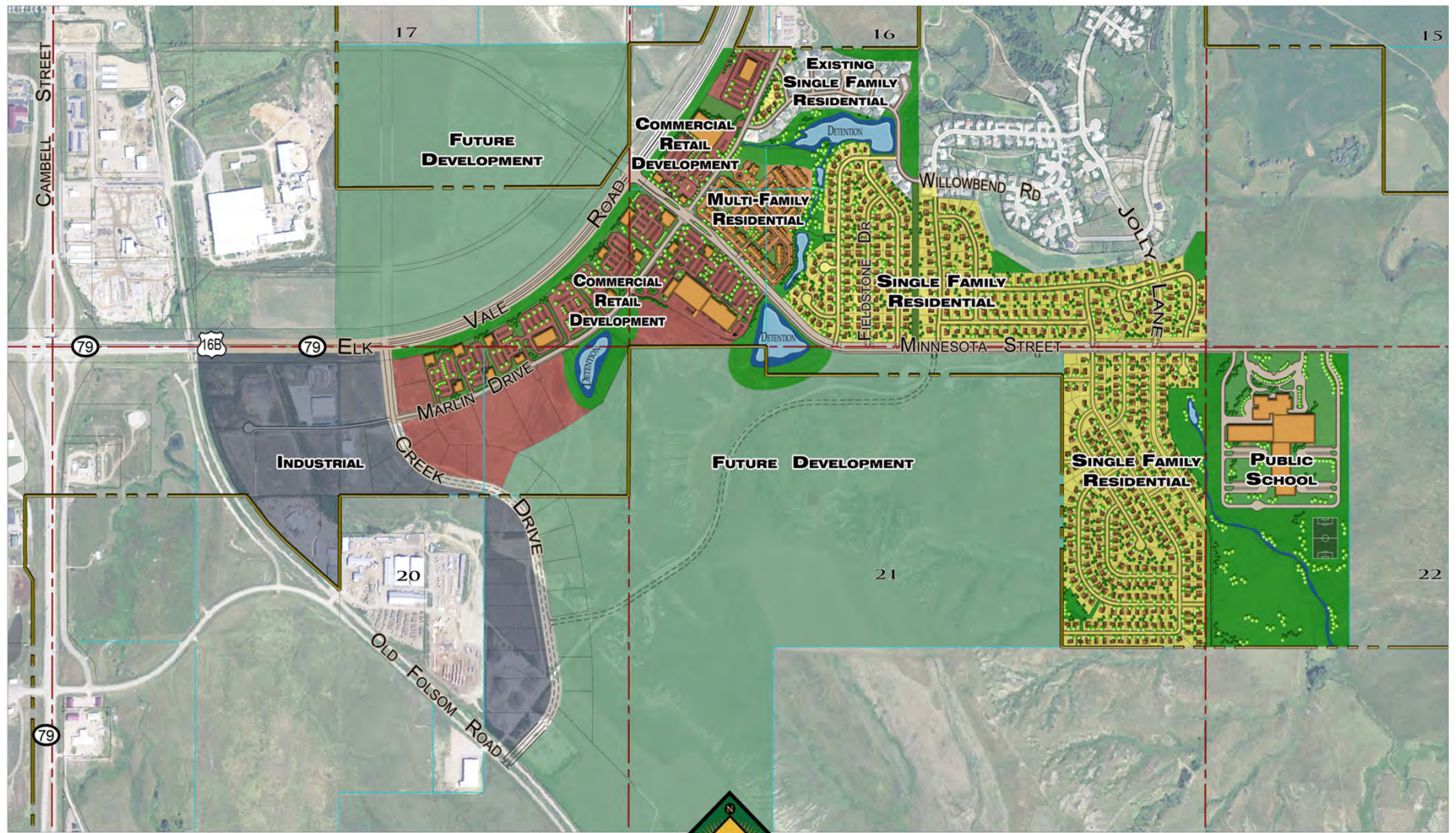
PUBLIC WORKS DIRECTOR* DATE 1-7-13

FILE #: 13EX001

Revised 11/06/07

ASSOCIATED FILE#: 10P6055

*Public Works Director's signature is not required for Lot Length to Width Exceptions, Ordinance No. 5232.

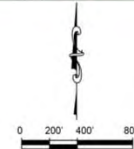


MASTER · PLAN

COMMERCIAL · RESIDENTIAL



DREAM DESIGN
INTERNATIONAL, INC.



PRELIMINARY
For Review Only

Master Plan Property is located in the
S 1/2 of Sections 16 & 17 and the N 1/2 of Sections 20 and 21, T1N, R8E

December, 2012

Minnesota Street Proposed Phase 3



City of Rapid City



INFRASTRUCTURE
DESIGN CRITERIA

2012 EDITION

3.6 Construction Phasing

3.6.1


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.

3.6.2

Water distribution systems shall extend across all proposed street intersections located in adjacent and subsequent phases.

3.6.3

Construction phasing which terminates mains in mid-block will be required to meet Section 3.7, Provisions for Future Extension.



Recommended Design Criteria Manual
Wastewater Collection and Treatment Facilities
South Dakota Department of Environment and Natural Resources

Prepared By: Staff Engineer
Reviewed By: Facilities Management Engineers

Division of Environmental Services
Joe Foss Building
Pierre, South Dakota 57501
Phone: (605) 773-3351

March 1991

G. Manholes

1. *Location* - Unless necessary, manholes should not be located in drainageways. If any flooding over manholes is anticipated; they shall be provided with watertight covers. Manholes shall be installed at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet for sewers 15 inches or less, and 500 feet for sewers 18 inches to 30 inches, except that distances up to 600 feet may be approved in cases where adequate cleaning equipment for such spacing is provided. Greater spacing may be permitted in larger sewers and in those carrying a settled effluent. The distance between manholes for sewers less than 15 inches in diameter may be increased to 450 feet if justification is provided by the consultant.
2. *Cleanouts* - Cleanouts may be used only for special conditions and shall not be substituted for manholes nor installed at the end of laterals greater than 150 feet in length. Cleanouts shall be provided on all service lines in accordance with State Plumbing Code. The cleanout shall be constructed using a 45 degrees bend directed downstream on vertical riser pipe to the surface. Size of the cleanout shall be the same as the pipe size.
3. *Drop Type* - A drop pipe shall be provided either inside or outside for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert should be filleted to prevent solids deposition.



Recommended Standards for Wastewater Facilities

2004 Edition

Policies for the Design, Review, and Approval of Plans and Specifications for Wastewater Collection and Treatment Facilities

A Report of the Wastewater Committee of the
Great Lakes--Upper Mississippi River Board
of State and Provincial Public Health and Environmental Managers

MEMBER STATES AND PROVINCE
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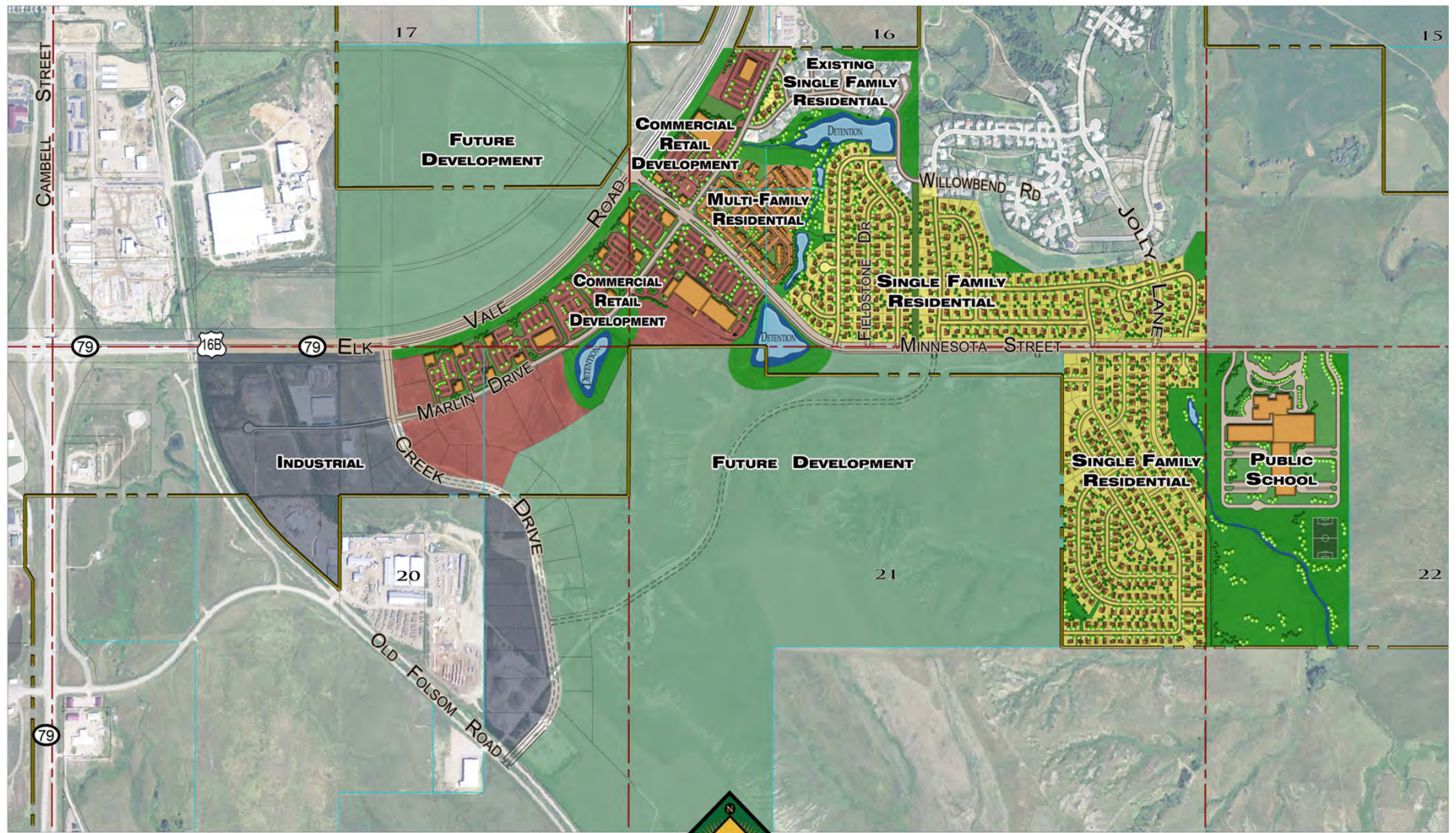
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Public Health and Environmental Managers

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34. MANHOLES

34.1 Location

Manholes shall be installed: at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet (120 m) for sewers 15 inches (375 mm) or less, and 500 feet (150 m) for sewers 18 inches (450 mm) to 30 inches (750 mm), except that distances up to 600 feet (185 m) may be approved in cases where adequate modern cleaning equipment for such spacing is provided. Greater spacing may be permitted in larger sewers. Cleanouts may be used only for special conditions and shall not be substituted for manholes nor installed at the end of laterals greater than 150 feet (45 m) in length.

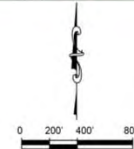


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