

Warner Engineering Associates Inc.

102 S. Saunders Ave. • Mt. Pleasant, IA 52641



October 23, 2002

Mr. Roy Ney
Iowa Department of Natural Resources
Water Supply Section
401 SW 7th St., Suite M
Des Moines, IA 50309-4611

RE: Mt. Pleasant Municipal Utilities - Proposed Re-lining & Casing Extension
Well #4

Dear Roy:

Enclosed with this letter please find two copies of a drawing and a Construction Permit Application for the above referenced project.

If you have any questions concerning these documents, please contact me immediately. The MPMU is anxious to proceed with this improvement to their well. We appreciate you giving this a priority in your review work.

Sincerely,

WARNER ENGINEERING ASSOCIATES, INC.

James L. Warner, P.E., NSPE
Project Engineer

JIW/krm

Enclosures

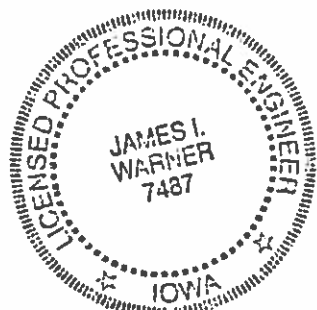
Cc: Lori Glanzman, MPMU

SPECIFICATIONS:

The Contractor shall remove the permanent pumping equipment and store it for later reinstallation. The Contractor shall televise and videotape the well from top to bottom to verify sufficient room for the proposed 12" casing.

The Contractor shall clean the 16" existing casing so grout will adhere and build a temporary bridge at a depth of approximately 1200 feet. The Contractor shall furnish and place 1200 feet of 12 inch inside diameter, 0.375 inch thick new A53 Grade B steel casing and grout the annular space between the 16" and 12" with neat cement grout.

After the grout has set the Contractor shall drill out the bridge, clean the hole to the concrete plug that was placed at depth of 1885 feet, and test pump the well. The test pumping results shall be reviewed with the Owner and Engineer. Upon approval of the test pump results, the Contractor shall disinfect and reinstall the permanent pump equipment.



10/24/02
This sheet

PROPOSED RE-LINING & CASING EXTENSION

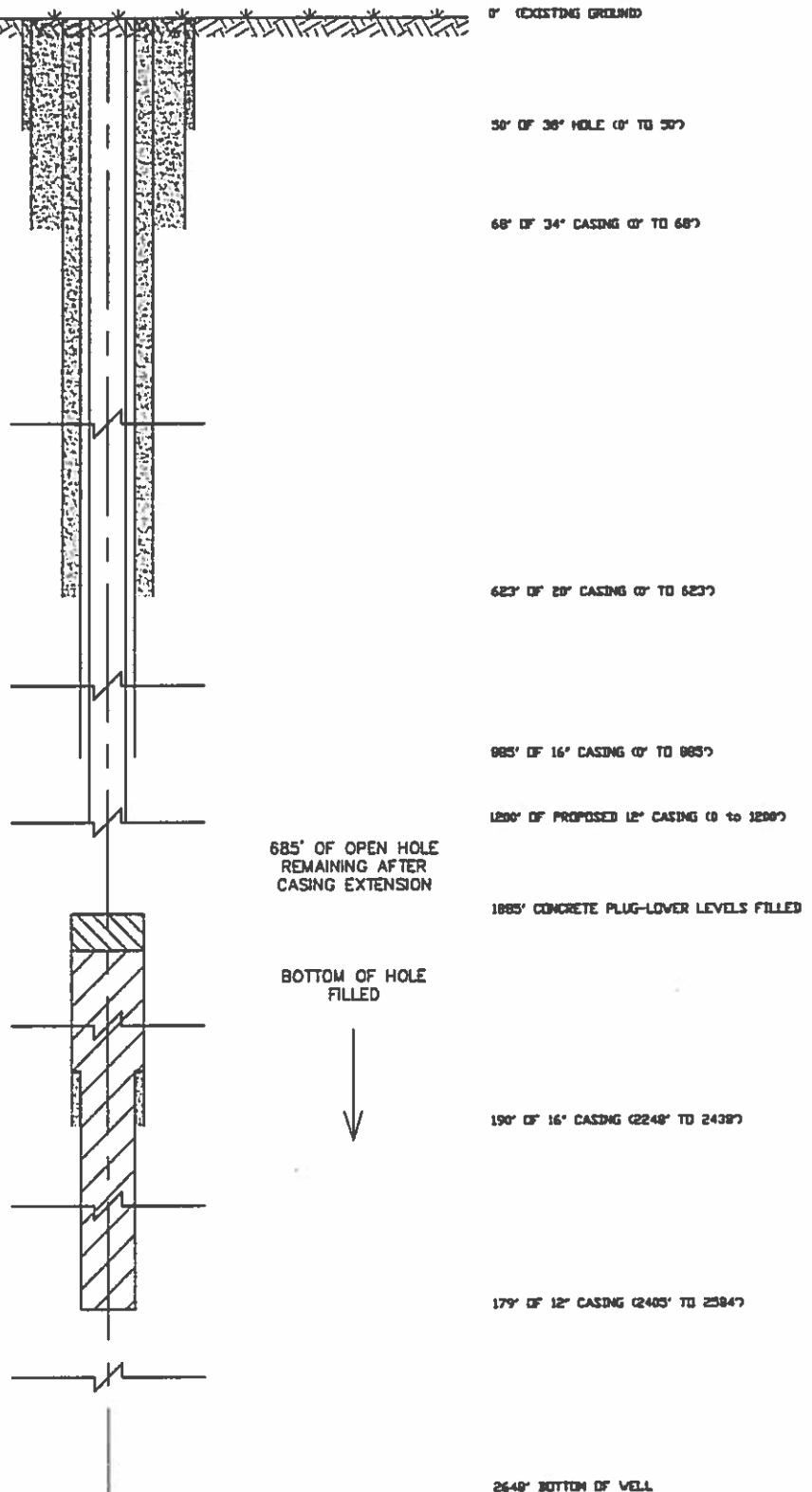
MOUNT PLEASANT MUNICIPAL UTILITIES
WELL #4

WARNER ENGINEERING ASSOCIATES INC.

ENGINEERING
102 S. Saunders Ave.
Mt. Pleasant, IA 52641
PROJECT ENGINEER
JAMES I. WARNER
IOWA LICENSE #7487



SURVEYING
PH: (319) 385-4180
FAX: (319) 385-4401
PROJECT LAND SURVEYOR
WILLIAM L. PERRY
IOWA LICENSE #5145



**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

**SCHEDULE-1a, General Information
Page 1 of 2**

APPLICANT		ENGINEER	
Owner	Mt. Pleasant Municipal Utilities	Firm	Warner Engineering Associates, Inc.
Address	509 North Adams Mt. Pleasant, IA 52641	Address	102 S. Saunders Ave. Mt. Pleasant, IA 52641
Representative	Telephone	Project Officer	Telephone
Lori Glanzman, General Manager	(319) 385-2121	James I. Warner, P.E.	(319) 385-4180

PLEASE RESPOND TO ALL QUESTIONS

DNR Use Only

1. Project Identification: Proposed Re-Lining & Casing Extension of Well #4

Project Number:

Facility Number:

2. Estimated Completion Date: December 2002

YES NO

3. Has an engineering report or information previously been submitted for this project?

☐ ☒

If Yes =>

Project Identity

Date Submitted

4. Does the project, as submitted, follow the recommendations and conclusions of the preliminary report?

☐ ☐

If No => provide design basis and technical information justifying all changes.

5. Are there two complete sets of plans and specifications accompanying this application?

☒ ☐

Two complete sets of plans and specifications are not required to be submitted for minor water main extensions within the meaning of §455B.183.3 Code of Iowa and Design Standard 1.3 and 1.4.

6. Are approved standard specifications a part of this application?

☐ ☒

If Yes =>

Approved Standard Specifications of (municipality or firm)
Warner Engineering Associates Inc.

Date Approved
April 11, 1996

7. Except for those projects submitted in accordance with Section 43.3(4), does each set of plans and specifications or engineering report accompanying this application contain an "Engineer's Certificate," executed in conformance with §542B.16, Code of Iowa?

☒ ☐

8. Is this a joint water supply and wastewater project?

☐ ☒

If Yes => A construction permit application for the wastewater project should be submitted separately to the Wastewater Permits Section.

9. Does the project involve water withdrawal, storage, or change in natural stream conditions?

☐ ☒

If Yes => Complete and attach, Application for Permit to Withdraw Water (DNR Form 16)

10. Is the applicant the supplier of the water?

☒ ☐

If No => A Water Supply Service Agreement (DNR Form 53) executed by the supplier of the water must accompany this application.

APPLICANT

CERTIFICATION

ENGINEER *(see Schedule 1b)

I certify that I am the authorized representative of the owner and state that the project identified above is approved by the owner.

I certify that all aspects of design included in this application meets the requirements of all applicable state or federal laws and regulations, or that an explanation and justification for any proposed variation from such standards is attached. or that a variance has already been granted by the Iowa Department of Natural Resources. I am familiar with the information contained in this application, and to the best of my knowledge, such information is complete and accurate.

Mount Pleasant Municipal Utilities

Signature

Date

Signature

Date

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

SCHEDULE-1a General Information

Page 2 of 2

SCHEDULE	TITLE	Included in Project	Attached	Previously Submitted	Date Previously Submitted
1b	Certification of Project Design		<input checked="" type="checkbox"/>		
2a	Water Mains – General	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2b	Water Mains – Specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3a	Water Systems - Preliminary Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3b	Source Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3c	Water Quality Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	Site Approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5a	Well Construction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5b	Well Appurtenances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5c	Well Profile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5d	Surface Water Supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6a	Distribution Water Storage Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6b	Distribution Pumping Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	Schematic Flow Diagram	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	Aeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	Clarification/Sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	Suspended Solids Contact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11	Cation Exchange Softening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12	Filters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13a	Chemical Addition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13b	Dry Chemical Addition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13c	Gas Chlorination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13d	Fluoridation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13e	Sampling and Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14	Pumping Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15	Process Water Storage Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16a	Wastewater General	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16b	Waste Treatment Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16c	Filtration and Mechanical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16d	Discharge to Sewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Identify any components included in this project which are not included in the above list of schedules (i.e. Reverse Osmosis) and provide design data of these components on separate sheets.

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

SCHEDULE-1b, Certification of Project Design

Date prepared October 23, 2002		Project Identity Proposed Re-Lining & Casing Extension of Well #4	DNR Use Only
			Project No.
Date Revised			Permit No.

ENGINEER's Certification

*I hereby certify that all aspects of design included in the plans and specifications for the project identified above meet the requirements of all applicable state and federal laws and regulations, or that an explanation and justification for any proposed variation from such standard is attached, or that a variance has already been granted by the Iowa Department of Natural Resources.

*a. This certification is the ENGINEER's professional opinion, having applied his knowledge and a standard of care normally exercised by members of the same profession currently practicing under similar circumstances.

b. "Applicable" State and Federal laws and regulations are limited to the following:

(1) Recommended Standards for Water Works of the Great Lakes Upper Mississippi River Basin Association of Sanitary Engineers; and

(2) Chapters 41 and 43 of the Iowa Administrative Code.

Signature 	Printed or Typed Name James I. Warner	Iowa P.E. Regis No. 7487	Date 10/23/02
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INSTRUCTIONS

This schedule is to be completed and submitted with the initial application for a construction permit AND is also required whenever a modification is made to the initial application.

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

SCHEDULE-5a, Well Construction

Date Prepared <i>October 23, '02</i>	Project Identity <i>Mount Pleasant Municipal Utilities Proposed Re-Lining & Casing Extension - Well #4</i>	DNR Use Only
Date Revised		Project No.
		Permit No.

1. Well Number 4
2. Casing Pipe and Well Screen Materials:

Casing Material (Designate Alternates)	ASTM or API Std.	Weight/ft. (lbs)	Thickness (inches)	Outside Diameter (inches)	Length (feet)
<i>Steel</i>	<i>A53</i>	<i>49.56</i>	<i>0.375</i>	<i>12.75</i>	<i>1200</i>

Screen Material (Designate Alternates)	Type of Screen	Size Screen Opening	Total Screen Open Area (sq. inches)	Outside Diameter (inches)	Length (feet)
<i>NONE</i>					

3. For the following, reference the applied DNR, AWWA, GLUMRB, or ASTM design standard source and number (i.e. DNR 3.7.2a), and the page of the plans or specifications where the description can be found.

Construction Details	Applied Design Standard Source and Number	Page No.
Protection of Well During Construction	<i>N/A</i>	
Casing Welds	<i>full circumference</i>	
Casing Centralizes	<i>N/A</i>	
Gravel Pack	<i>N/A</i>	
Radial Collectors	<i>N/A</i>	
Packers	<i>N/A</i>	
Grouting	<i>Neat Cement Grout</i>	
Plumbness & Alignment Test (Wells over 100')	<i>N/A</i>	
Well Development	<i>N/A</i>	
Yield Drawdown Tests	<i>Required upon completion of casing</i>	
Observation Wells	<i>N/A</i>	
Water Quality Analysis	<i>N/A</i>	
Disinfection	<i>Required Prior to Startup</i>	
Abandonment of Well	<i>N/A</i>	

4. Method of drilling, if specified: N/A
5. Geological samples and well construction log specified to be forwarded to the Iowa Geological Survey Bureau?
☐ Yes ☒ No (spec. page no. _____)
6. Well construction log, yield and drawdown test results, and water quality sample results are specified to be forwarded to the Department: ☐ Yes ☒ No (spec. page no. _____)