

**REQUEST FOR PROPOSAL
FOR
MECHANICAL & ELECTRICAL DESIGN SERVICES
FOR
NW 26TH STREET BOOSTER STATION**



***BOARD OF WATER WORKS TRUSTEES
OF THE CITY OF DES MOINES, IOWA***

JUNE 10, 2019

PREPARED BY:

*DES MOINES WATER WORKS
2201 GEORGE FLAGG PARKWAY
DES MOINES, IOWA 50321*

REQUEST FOR PROPOSAL
FOR
NW 26th Street Booster Station

TABLE OF CONTENTS

I. GENERAL CONSIDERATIONS.....	1
A. INTRODUCTION.....	1
B. BACKGROUND.....	1
C. ANTICIPATED GENERAL SCOPE OF SERVICES.....	1
D. SUBMITTAL OF PROPOSAL.....	2
E. EVALUATION OF PROPOSALS.....	2
II. PROFESSIONAL SERVICES REQUIREMENTS.....	3
A. SCOPE OF SERVICES.....	3
B. DETAILED STUDY SCOPE OF SERVICE.....	3
C. DELIVERABLES.....	4
D. DES MOINES WATER WORKS' RESPONSIBILITIES.....	4
III. PROPOSAL FORMAT AND CONTENT REQUIREMENTS.....	5
A. PROJECT MANAGER AND KEY STAFF EXPERIENCE.....	5
B. FIRM EXPERIENCE.....	5
C. PROJECT FAMILIARITY AND APPROACH.....	5
D. HOURLY RATES AND LUMP SUM PRICE.....	6
E. PROFESSIONAL SERVICES AGREEMENT.....	6
IV. ADDITIONAL TERMS AND CONDITIONS.....	7
A. METHOD OF COMPENSATION.....	7
B. COST FOR RESPONDING TO THIS RFP.....	7
C. PROPOSALS NOT CONFIDENTIAL.....	7
D. REJECTION OF PROPOSALS.....	8
E. DISPOSITION OF PROPOSALS.....	8
F. ENTIRE REQUEST FOR PROPOSAL.....	8
G. RIGHT TO USE.....	8
H. SUPERIOR ENERGY PERFORMANCE.....	8
I. INSURANCE AND INDEMNITY REQUIREMENTS.....	8

EXHIBITS

EXHIBIT 1 – BUILDING PRELIMINARY LAYOUT

I. GENERAL CONSIDERATIONS

A. INTRODUCTION

The Board of Water Works Trustees of the City of Des Moines, Iowa (DMWW) is requesting proposals from qualified consulting engineering firms licensed in the state of Iowa, to team with DMWW staff in development of plans and specification for the NW 26th Street Booster Station. Requested design services include complete electrical, process control, and mechanical to include Heating, Ventilation, Air Conditioning, and plumbing.

Whenever the following terms are used in this RFP, the intent and meaning shall be interpreted as follows:

- The “Consultant” shall mean the Proposer selected by the selection committee who successfully executes a Professional Services Agreement with DMWW for completing the Scope of Work described in this RFP.
- The “Proposer” shall mean the engineering/architectural firm that has submitted a proposal in response to this RFP.
- The “Selection Committee” shall mean a group appointed by DMWW to review proposals and make recommendation for selection of Consultant.

B. BACKGROUND

Des Moines Water Works is an independently operated municipal utility providing drinking water to more than 500,000 customers in the Des Moines and surrounding metropolitan area. Over 20 central Iowa cities, rural water districts, and other entities located in Polk, Warren, Madison, and Dallas counties are served by DMWW.

Des Moines Water Works provides most of the water to Polk City and unincorporated areas of Polk County west of Ankeny through the existing Polk City Booster Station. In 2017 a joint water system study was completed with Ankeny, Polk City, and Des Moines Water Works. This study indicated the need for expanding the pumping capacity of the Polk City Booster Station. Due to limitations in the existing station a new booster station was proposed at the site of the existing station, 2567 NW 72th Place, Ankeny, Iowa 50021. The new booster station will house four to five pumps with horsepower between 15 and 150 hp using VFD control. The new booster station will be an above ground building constructed to look like a small single-family home. An emergency generator will be in the building to hide it from the public. The building includes potable water piping and fixtures along with floor drains, but no restroom is planned.

C. ANTICIPATED GENERAL SCOPE OF ENGINEERING SERVICES

The selected firm will be expected to prepare a single Professional Services Agreement to include the following general scope of service:

1. Electrical Design Services
2. Mechanical Design Services to include HVAC and plumbing work
3. Development of instrumentation and controls drawings, specifications, and panel requirements

Proposers are encouraged to visit the site and discuss the project with DMWW staff; however, DMWW asks that appointments be made in advance for such visits.

D. SUBMITTAL OF PROPOSAL

Proposals must meet all the requirements described in this RFP to be considered.

One (1) copy of the proposal must be submitted electronically in Adobe Acrobat (.pdf) format to Nathan W. Casey at ncasey@dmww.com.

Hard copies of proposals can either be mailed or delivered to:

Des Moines Water Works
Attn: Nathan W. Casey, P.E.
Engineering Department
2201 George Flagg Parkway
Des Moines, IA 50321-1190

Proposals must be received by 3:00 p.m., June 26, 2019. Proposals received after this time will not be considered.

E. EVALUATION OF PROPOSALS

Each proposal will be evaluated and awarded up to 100 points by the selection committee. Each proposal will be ranked based on the information submitted in the proposal according to the following evaluation criteria:

<u>Criteria</u>	<u>Maximum Points</u>
Project Manager and Key Staff Experience	20
Firm Experience	20
Project Familiarity and Approach	25
Plan Schedule	15
Professional Service Fees	<u>20</u>
Total =	100

The proposals will require at a minimum seven (7) calendar days for evaluation. After that time, the selection committee may, at its option, interview some or all of the Proposers. If the selection committee deems interviews are necessary, all Proposers will be notified of the interview schedule.

Final selection of the engineering firm will be made by the selection committee. DMWW reserves the right to reject any or all proposals, waive irregularities and/or informalities, and in general, award a contract in any manner deemed to be in the best interest of DMWW.

The selection committee shall be made up of DMWW staff members.

II. PROFESSIONAL SERVICES REQUIREMENTS

A. SCOPE OF SERVICES

The general scope of services shall include electrical, mechanical, and control services for the NW 26th Street Booster Station.

B. DETAILED STUDY SCOPE OF SERVICES

The intent of this project is to construct a new water booster station building with booster pump equipment to provide water to the residents of Polk City and unincorporated areas of Polk County. The project includes site work, construction of a new building to house pumping equipment, installation of pumping equipment and piping, along with required electrical and mechanical work. The building will be designed to blend in with the neighborhood to hide its purpose. Consultant to assist with design of heating, ventilation, air conditioning, plumbing, electrical power, lighting, and security. Consultant to also provide assistance with required instrumentation, control, and communication equipment.

Part 1 – Preliminary Design

- Task 1.1: Design kick-off meeting and data collection.
 - 1.1.1 Review goals and objectives.
 - 1.1.2 Establish schedule.
 - 1.1.3 Identify final deliverables.
 - 1.1.4 Participate in meetings with Owner as required.
 - 1.1.5 Coordinate with electrical utility to establish requirements for the electrical utility connection and standby generator.
- Task 1.2: Work with Owner to determine building features and systems including: heating, ventilation, air conditioning, plumbing, electrical power, lighting, and security.
- Task 1.3: Work with Owner on general arrangement of equipment designed by Consultant.
- Task 1.4: Work with owner to identify required instrumentation, control, and communication equipment needed to operate station and communicate with Owner's SCADA system. Assist Owner in development of controls description.
- Task 1.5: Provide design for standby power generation.
- Task 1.6: Provide design for variable frequency drives associated with pumping systems.
- Task 1.7: Prepare preliminary design drawings and cost estimates for review by owner.

Part 2 – Final Design

- Task 2.1: Prepare complete final Construction Drawings based on preliminary design decisions, using Owner's title block format for combination with Owner prepared Drawings. Consultants standards and symbology for mechanical, electrical, plumbing, and control can be used.

Task 2.2: Prepare complete Technical Specifications based on decisions made with owner during preliminary design using Owner's standard format for combination with Owner prepared Specifications. Technical specifications to be complete for all features designed by consultant and be coordinated with Owners technical specifications.

Task 2.3: Assist Owner with permitting of all facilities associated with Consultant's design.

Part 3 – Bidding

Task 3.1: Attend pre-bid meeting.

Task 3.2: Assist Owner in preparation of Addenda as appropriate to clarify, or correct Bidding Documents.

Task 3.3: Respond to Contractors questions on work provided by Consultant.

C. DELIVERABLES

The following are the required Deliverables for this Project:

1. Complete electrical design Drawings and Specifications.
2. Complete HAVC design Drawings and Specifications.
3. Complete plumbing design Drawings and Specifications.
4. Complete communication and instrumentation Drawings and Specifications, including P&ID.

Drawings to be complete and supplied to the Owner in MicroStation. Signed and certified Drawings to be submitted to the Owner on paper and in PDF format.

D. DES MOINES WATER WORKS' RESPONSIBILITIES

DMWW will perform the following design services:

1. Prepare contract and bidding documents.
2. Prepare existing site plan, including grading plan, structure siting, and piping routing for existing site.
3. Prepare proposed site plan, including grading plan, structure siting, and pipe routing for proposed facilities.
4. Prepare hydraulic design of the facility including process piping, valves, and pumps for booster station.
5. Prepare structural and architectural design for booster station building.
6. Provide timely feedback to Consultant on preliminary designs.

III. PROPOSAL FORMAT AND CONTENT REQUIREMENTS

The proposal shall be organized into the following five sections and contain the material noted. The proposal shall be written as succinctly and clearly as possible to describe the required elements. The number of pages of the proposal shall be limited to 20 pages excluding the Professional Services Agreement terms and conditions.

A. PROJECT MANAGER AND KEY STAFF EXPERIENCE

This section will be used by the selection committee to evaluate the experience and technical competence of the project team members that will work on the project. Items of specific interest include the capabilities of the project team members, the extent of project manager and key staff involvement, and the experience and extent of sub-consultant involvement.

Proposers shall provide the following information in this section:

1. A Project Team Chart that identifies the project manager and key staff that will work on the project, their specific project responsibilities, and years of experience.
2. Assurances shall be supplied that personnel identified on the Project Team Chart will be working on the project and that, if needed, replacements for any of these team members will be subject to review and approval by DMWW.
3. Resumes of key staff that will work on the project including qualifications relating to design, construction, and analysis of water utility electrical, mechanical, and controls design.

B. FIRM EXPERIENCE

This section will be used by the selection committee to evaluate the experience and technical competence of each Proposer. Of specific interest is the Proposer's experience with publicly-owned water systems of comparable size and type.

Proposers shall provide the following information in this section:

1. A description of the firm that provides general background about the organization, ownership, longevity, staff size, and services. Include the name of the firm, address and phone number, name and title of the responsible engineer who will work on the project, the office location where the majority of day-to-day work will be done and addresses and experience of any sub-consultants that will be used to complete the design of the project.
2. Describe the qualifications of the firm as it relates to water system electrical, mechanical, and controls design. Include representative project examples that identify the owner name, the project scope, and the size and type of the facilities.
3. Contact information for owners of at least three projects that could serve as references.

C. PROJECT FAMILIARITY AND APPROACH

This section will be used by the selection committee to evaluate the Proposer's understanding of the project requirements, scope of services presented in this RFP, and approach to provide those services.

Proposers shall provide the following information in this section:

1. A Project Understanding and Approach Summary to demonstrate the Proposer's familiarity with the project needs and scope of services desired.
2. A preliminary Table of Contents identifying major report sections.
3. A Project Schedule that identifies the specific tasks/objectives, the time required to complete tasks/objectives, the inter-relationships between tasks/objectives, and the key events during the project. The Project Schedule shall include, at a minimum, a summary of the completion dates for the following tasks/objectives:

<u>Task/Objective</u>	<u>Completion Date</u>
Execute Professional Services Agreement for design services.	July 2019
Site visit and commencement of data collection.	July 2019
Schedule for submittal of preliminary design.	August 2019
Submit draft final design.	September 2018
Submit design	September 2019

D. PROFESSIONAL SERVICE FEES

This section will be used by the selection committee to evaluate the work hours and associated costs required to provide the scope of services.

Proposers shall provide a Level of Effort Summary showing the average hourly rate by labor classification and provide a detailed breakdown of work hours and labor costs for each task listed in the Scope of Services.

Proposers shall also provide a total not to exceed lump sum fee.

E. PROFESSIONAL SERVICES AGREEMENT

The proposal must include a proposed form of Professional Services Agreement. The terms of the Professional Services Agreement will be included in the evaluation criteria of the proposal, and at a minimum should provide for the following:

1. An undertaking to perform the work in accordance with good and sound engineering or architectural practices and standards.
2. A warranty that all work shall be in accordance with good sound engineering or architectural practices and standards.
3. Indemnity and insurance provisions must be consistent with Section IV-I, Insurance and Indemnity Requirements.
4. Exclusions and limitations consistent with proposal.
5. Other customary terms consistent with its proposal.

IV. ADDITIONAL TERMS AND CONDITIONS

A. METHOD OF COMPENSATION

DMWW will provide compensation for the professional services identified in the “Professional Services Requirements” section of this RFP on an hourly basis with a not-to-exceed lump sum cost. Only proposals that include hourly rates for the Proposer’s project team members and a not-to-exceed lump sum price for professional services will be considered.

B. COST FOR RESPONDING TO THIS RFP

This RFP does not obligate DMWW, or other entities, to award a contract, to pay the costs incurred in preparing any proposal, or to procure the services described herein. Proposals are submitted at the sole cost and expense of the Proposers. DMWW shall incur no liability or obligation to Proposers except pursuant to a written contract for services, duly executed by the Proposer and an authorized signatory for DMWW.

C. PROPOSALS NOT CONFIDENTIAL

Under Chapter 22 of the Iowa Code, “Examination of Public Records”, all records of a governmental body are presumed to be public records, open to inspection by members of the public. Section 22.7 of the Iowa Code sets forth the number of exceptions to that general rule, establishing several categories of “confidential records”. Under this provision, confidential records are to be kept confidential, “unless otherwise ordered by a court, by the lawful custodian of the records, or by another person duly authorized to release such information”. Among the public records that are considered confidential under the provision of the Iowa Code are the following:

3. Trade secrets which are recognized and protected as such by law.
6. Reports to governmental agencies which, if released, would give advantage to competitors and serve no public purpose.

Under Chapter 22 of the Iowa Code, DMWW, as custodian of the proposal submitted in response to a Request for Proposals, may, but is not required to, keep portions of such proposals confidential under exceptions 3 and 6, noted above. If a responding Proposer determines that a portion or portions of its proposal constitute a trade secret, or should otherwise be kept confidential to avoid giving advantage to competitors, a confidentiality request may be submitted with the proposal identifying which portion or portions of the proposal should be kept confidential and why. The burden will be on each individual Proposer to make such confidentiality request and to justify application of a confidentiality exception to its proposal. DMWW will not under any circumstances consider the entire proposal to be a confidential record.

If a request is thereafter made by a member of the public to examine a proposal including the portion or portions thereof for which a confidentiality request has been made, DMWW will so notify the Proposer and will keep confidential that portion of the proposal covered by the confidentiality request, pending action by the Proposer requesting confidentiality to defend its request. In that notification, the Proposer requesting confidentiality will be given not more than five (5) calendar days within which to file suit in Polk County District Court seeking the entry of a declaratory order and/or injunction to protect and keep confidential such portion of its proposal. Absent such action by a Proposer requesting confidentiality, and absent the entry of a court order declaring such portion or portions of the proposal confidential, the entire proposal will be released for public examination. Proposer shall be responsible for all costs

relating to a declaratory judgment or injunctive action, including the payment of any damages assessed and attorney fees and litigation expenses awarded.

D. REJECTION OF PROPOSALS

The selection committee reserves the right to reject any or all proposals in whole or in part received in response to the RFP. DMWW will not pay for any information requested in the RFP, nor is it liable for any cost incurred by a Proposer in responding to the RFP.

E. DISPOSITION OF PROPOSALS

All proposals submitted in response to the RFP become the property of DMWW and will not be returned to the Proposers.

F. ENTIRE REQUEST FOR PROPOSAL

This Request for Proposal, and any addenda to it, and any attachments, constitute the entire RFP.

G. RIGHT TO USE

DMWW shall own and have unlimited rights to copy and use all data and reports provided by Consultant. DMWW shall own all copyrights to the work products that are provided by Consultant under the Professional Services Agreement. All work provided to DMWW shall be considered work for hire under the United States Copyright Act and, at all stages of development, shall be and remain the sole and exclusive property of DMWW.

H. SUPERIOR ENERGY PERFORMANCE

DMWW evaluates energy performance improvement opportunities, and operational control in the design of new, modified, and renovated facilities, equipment, systems, and processes that can have a significant impact on our energy performance.

I. INSURANCE AND INDEMNITY REQUIREMENTS

1. General

The Consultant shall purchase and maintain insurance to protect the Consultant and DMWW throughout the duration of the Professional Services Agreement. All certificates of insurance shall be written by companies which hold an AM Best A-VII rating or higher and are licensed to do business in the state of Iowa. The selected companies must be satisfactory to DMWW.

Each certificate of insurance shall state that thirty (30) days written notice will be given to DMWW before the policy is canceled. All certificates of insurance shall be delivered to DMWW prior to start of work.

2. Required Coverage

The Consultant shall purchase and maintain insurance which will protect the Consultant from the following type of claims:

- a. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;
- b. Claims for damages because of bodily injury, sickness or disease, or death of any

- person other than his employees;
- c. Claims for damages, insured by usual personal injury liability coverage, which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Consultant, or (2) by any other person;
- d. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- e. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle; and,
- f. Claims under workers' compensation, disability benefit, and other similar employee benefit acts.
- g. Claims arising out of the Consultant and any sub-consultant's professional services provided as part of the Professional Services Agreement.

Protection shall be provided whether the claim results from operations of the Consultant, his subcontractors, employees of any of them, or anyone for whose acts any of them may be liable.

3. Limits of Liability

Policies for the insurance required for worker's compensation, disability benefit, and other similar employee benefit acts shall be written for the limits of liability specified as follows:

- a. General Liability (including contractual, independent contractors, broad form property damage, personal injury underground explosion and collapse hazards):
 - i. Listing Owner as Additional Insured on a primary and non-contributory basis.
 - ii. \$1,000,000 Per Occurrence.
 - iii. \$2,000,000 Aggregate Per Project, endorsement to be included.
- b. Automobile Liability (including all owned, non-owned, and hired automobiles):
 - i. Listing Owner as Additional Insured.
 - ii. \$1,000,000 Combined Single Limit.
- c. Workers' Compensation Coverage B – Statutory Benefits:
\$100,000/\$500,000/\$100,000.
- d. Umbrella Liability (applying directly in excess of above liability coverages):
\$1,000,000 Aggregate; \$1,000,000 Per Occurrence.
- e. Professional Liability: \$2,000,000 each claim and aggregate.

4. Consultant's Liability Insurance

Consultant's liability insurance shall provide broad form coverage, with usual and customary exclusions, and shall include at a minimum full coverage for Consultant's indemnity obligations as provided herein and shall be in a form satisfactory to DMWW.

Additional Insured Endorsement shall apply to all liability policies except Workers' Compensation insurance.

Additional insured endorsement shall be provided with the certificate of insurance naming DMWW, their employees, and their representatives as additional insured.

5. Consultant's Insurance for Other Losses

The Consultant shall maintain insurance to cover all loss or damage to any tools, machinery, equipment, or motor vehicles, used for the work of the Professional Services Agreement, by the Consultant, his subcontractors, material men or employees of any of them.

6. Notification in Event of Liability or Damage

The Consultant shall immediately notify DMWW in writing, upon the occurrence of any event covered by this Section III-G. This notice shall describe the event, give the cause, as far as it can be determined, provide an estimate of loss or damage, list the witnesses, if any, and state the amount of any claim.

7. Cancellation and Material Changes Endorsement

Thirty (30) days advance written notice of cancellation, non-renewal, and ten (10) days written notice of non-payment of premium shall be sent to:

Des Moines Water Works
Attn: Nathan W. Casey, P.E.
Engineering Department
2201 George Flagg Parkway
Des Moines, Iowa 50321-1190

This endorsement supersedes the standard cancellation statement on the certificate of insurance to which this endorsement is attached.

8. Proof of Insurance

The Consultant shall provide to DMWW a Certificate(s) of Insurance evidencing all required insurance coverage above utilizing the latest version of the ACORD form.

9. Waiver of Subrogation

Waiver of subrogation by Consultant's carriers is required.

10. Indemnity Provisions

The following provisions are required in the Professional Services Agreement:

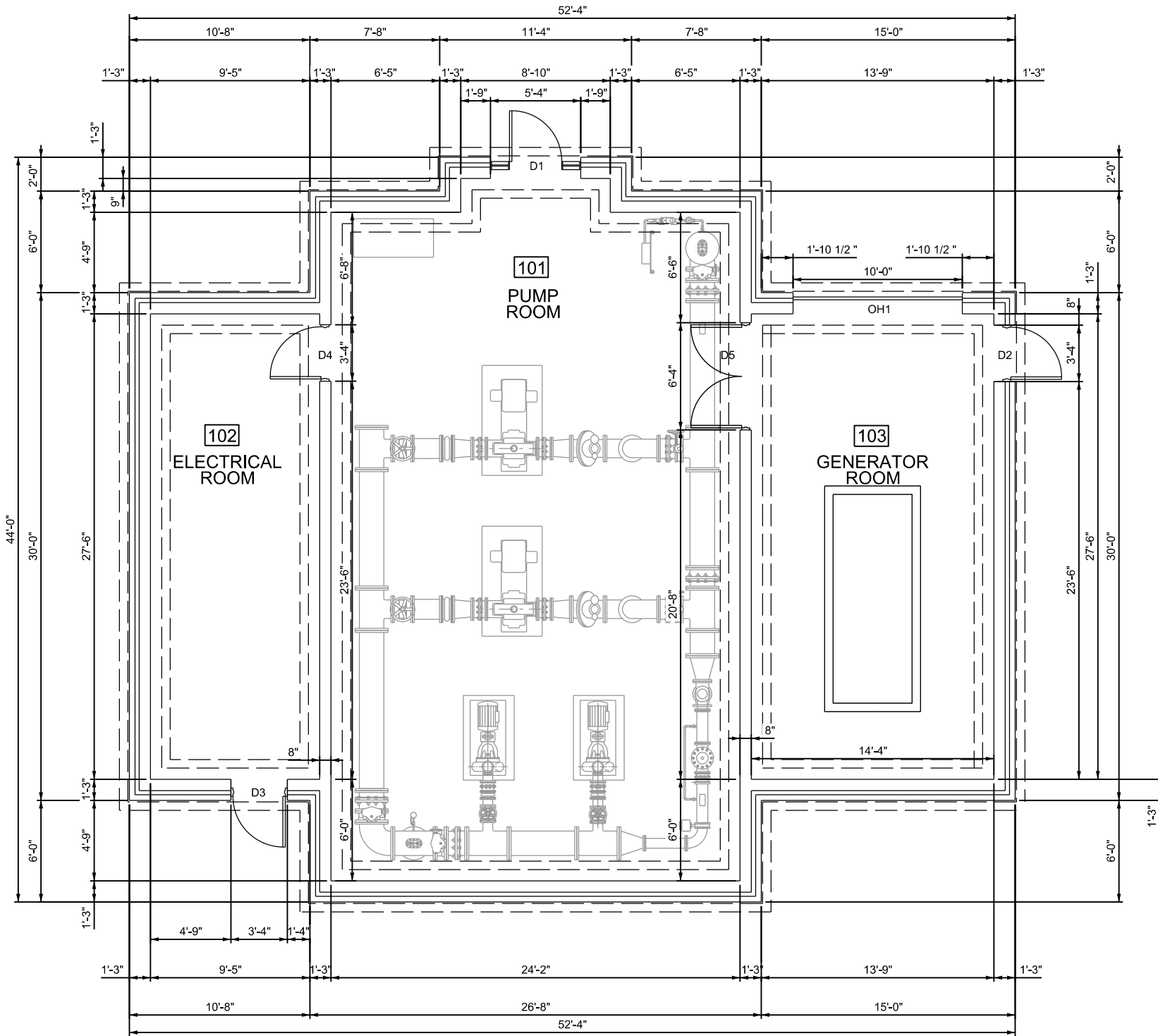
- a. To the fullest extent permitted by law, Consultant will agree to indemnify, and hold harmless the DMWW against damages, liabilities, and costs, including any and all outlay and expense connected therewith, and for any damages which may be asserted, claimed or recovered against or from the DMWW by reason of personal injury, including bodily injury or death, and property damages, including loss of use thereof, which arises out of or results from Consultant's negligent acts, errors or omissions which are connected with the work and/or services provided by Consultant to the DMWW pursuant to the provisions of this contract. It is the intention of the parties that the DMWW shall not be liable or in any way responsible for injury, damage, liability, loss or expense incurred by Consultant, its officers, employees, subcontractors, and others affiliated with Consultant due to accidents, mishaps, misconduct, negligence or injuries either in person or property resulting from the work performed by, or the negligent acts, errors or omissions of Consultant.
- b. Consultant will indemnify DMWW for any and all damage or injuries which may result to any person or property by reason of Consultant's negligent acts, errors or omissions in connection with the work and/or services provided by Consultant to the DMWW pursuant to this contract and agrees to indemnify the DMWW for all damages caused to the DMWW premises resulting from the negligent acts, errors, or omissions of Consultant.

- c. Consultant represents that its activities pursuant to the provisions of this contract will be performed and supervised by adequately trained and qualified personnel, and Consultant will observe, and cause its officers, employees, subcontractors, sub-consultants, and others affiliated with Consultant to observe all applicable safety rules.
- d. The requirements of any party to this agreement to indemnify another party shall not include the obligation to indemnify, hold harmless, or defend any other party to the agreement, including the indemnitee's employees, consultants, agents, or others for whom the indemnitee is responsible, against liability, claims, damages, losses or expenses, including attorney fees, to the extent caused by or resulting from the negligent act or omission of the indemnitee or of the indemnitee's employees, consultants, agents, or others for whom the indemnitee is responsible. This limitation does not apply to an insurer's obligation to its insureds under any insurance policy or agreement, or any obligation of strict liability otherwise imposed by law.
- e. For purposes of this paragraph, the term "Consultant" means and includes the Consultant, its officers, agents, employees, subcontractors, and others affiliated with Consultant, and the term "DMWW" means and includes the Water Works, its trustees, employees, volunteers, and others working on behalf of the DMWW.

END OF REQUEST FOR PROPOSALS.

EXHIBIT 1

BUILDING PRELIMINARY LAYOUT



PLAN VIEW
SCALE: 1/8" = 1'-0"

BUILDING - CODE SUMMARY									
ROOM NUMBER	ROOM NAME	AREA	OCCUPANCY	# EXISTS REQUIRED	# EXISTS PROVIDED	ACCESSORY OR INCIDENTAL USE	PANIC HARDWARE	OCCUPANCY LOAD FACTOR	OCCUPANT LOAD
101	PUMP ROOM	966 SF	F-2	2	3	PRIMARY	D1 YES D4 NO	100	10
102	ELECTRICAL ROOM	275 SF	F-2	1	2	PRIMARY	D3 YES D4 NO	100	3
103	GENERATOR ROOM	395 SF	F-2	1	2	PRIMARY	D2 YES D5 NO	100	4
TOTAL		1636 SF							14

ELEVATION SCHEDULE			
PLAN MARK	DESCRIPTION OF LOCATION	PLAN ELEVATION	NAVD (88) ELEVATION
T/ FTG	TOP OF FOOTING	-2' - 6"	960.50
T/ FDW	TOP OF FOUNDATION WALL	1' - 0"	962.00
FIN FLR	TOP OF FINISHED FLOOR AT GRID LOCATIONS	0' - 0"	963.00
T/ SW	TOP OF STEEL WALL	6' - 6"	965.50
T/ OHDO	TOP OF OVERHEAD DOOR OPENING	0' - 0"	973.00
T/ BRG-E	TOP OF PRECAST PLANK BEARING ON EAST WALL	14' - 2"	978.17
T/ BRG-W	TOP OF PRECAST PLANK BEARING ON WEST WALL	14' - 8"	977.67
T/ BRG-LOW	TOP OF PRECAST PLANK BEARING LOW	14' - 0"	977.00
T/ P/C	TOP OF PRECAST CONCRETE WALL	18' - 0"	981.00

BUILDING DESIGN PARAMETERS	
BUILDING CODE - 2015 INTERNATIONAL BUILDING CODE	
DESIGN LOADS	
WIND LOAD (Ultimate, Category IV)	120 psf EXPOSURE C
ROOF LOADS:	
SNOW LOAD	0 psf + Drift loads
DEAD LOAD (Self + Supplements)	10 psf
CRANE RAIL LOADING TO ROOF	CONCENTRATED IN SINGLE LOCATION 4,500 lbs
FLOOR LOADS:	
LIVE LOAD - MAXIMUM	300 psf
ELEVATION DATUM REFERENCE	
FINISH FLOOR ELEVATION: 963.00' (NAVD88) = Plan Elevation 0'-0"	

GENERAL INFORMATION

PROJECT LOCATION: 2567 NW 72ND PLACE
ANKENY, IA 50021
(EAST OF NW 26TH STREET)
CIVIL STRUCTURAL ENGINEER: DES MOINES WATER WORKS
2201 GEORGE FLAGG PARKWAY
DES MOINES, IOWA 50321
MECHANICAL ELECTRICAL: STANLEY CONSULTANTS
225 IOWA AVENUE
MUSCATINE, IOWA

PROJECT DESCRIPTION

CONSTRUCTION OF A BRICK AND BLOCK WALLS WITH FRAMED SLOPED ROOF. BUILDING TO HOUSE PUMPS AND EQUIPMENT FOR WATER UTILITY SERVICE TO THE CITIES OF CUMMING, NORWALK, AND WEST DES MOINES.

APPLICABLE CODES - WARREN COUNTY

2015 - INTERNATIONAL BUILDING CODE
2015 - INTERNATIONAL MECHANICAL CODE
2015 - UNIFORM PLUMBING CODE
2014 - NATIONAL ELECTRICAL CODE
2015 - INTERNATIONAL FIRE CODE

CHAPTER 3 USE AND OCCUPANCY

SECTION 306.3 GROUP F-2 LOW HAZARD FACTORY INDUSTRIAL

CHAPTER 5 HEIGHTS AND AREAS

TABLE 504.3 ALLOWABLE HEIGHT:
OCCUPANCY F-2 TYPE V-B, IS 40 FEET
CONCLUSION 15 FOOT HEIGHT IS ACCEPTABLE

TABLE 504.4 ALLOWABLE STORIES:
OCCUPANCY F-2 TYPE V-B IS 2.
CONCLUSION: 1 IS ACCEPTABLE

TABLE 506.2 ALLOWABLE AREA:
OCCUPANCY F-2 TYPE V-B IS 13,000.
CONCLUSION: 1,636 SF IS ACCEPTABLE

CHAPTER 6 TYPE OF CONSTRUCTION

TABLE 601 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:
BUILDING TYPE V-B: NO FIRE RATINGS REQUIRED ON THE BUILDING ELEMENTS

TABLE 602 FIRE RESISTANCE RATINGS FOR EXTERIOR WALLS:
OCCUPANCY F-2 TYPE V-B OVER 30 FT IS 0 HOUR

CHAPTER 7 FIRE AND SMOKE PROTECTION

SECTION 705.5 FIRE-RESISTANCE RATINGS:
EXTERIOR WALLS SHALL BE FIRE RESISTIVE RATED IN ACCORDANCE WITH TABLE 601 AND 602. THE FIRE RATING OF THE BUILDING WALLS EXCEED THE REQUIRED RATING OF 0 HOUR REQUIRED BY 601 AND 602.

TABLE 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE. FOR GREATER THAN 30 FEET SEPARATION NO LIMIT.

FIRE PROTECTION FEATURES
FIRE ALARM: PROVIDED

CHAPTER 10 MEANS OF EGRESS

SECTION 1004 SEE TABLE
TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY
MAXIMUM COMMON PATH OF TRAVEL DISTANCE 75 FEET
ONE EXIT IS ACCEPTABLE

SECTION 1008 MEANS OF EGRESS ILLUMINATION
MEANS OF EGRESS ILLUMINATION PROVIDED WITH EMERGENCY POWER

CHAPTER 11 ACCESSIBILITY

1103.2.9 SPACES FREQUENTED ONLY BY SERVICE PERSONAL FOR MAINTENANCE, REPAIR OR OCCASIONAL MONITORING OF EQUIPMENT ARE NOT REQUIRED TO COMPLY WITH THIS CHAPTER.

CHAPTER 16 STRUCTURAL DESIGN

STRUCTURAL DESIGN CRITERIA - REFERENCE SHEET S1 - DESIGN PARAMETERS

CHAPTER 17 SPECIAL INSPECTION AND TESTS

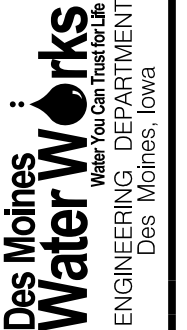
SECTION 1704.2.3 SPECIAL INSPECTION REQUIRED FOR THE FOLLOWING
NONE

SECTION 1704.6 STRUCTURAL OBSERVATIONS ARE REQUIRED FOR THIS PROJECT

REVISIONS

NO. DATE

DRAWN BY: XXX
DESIGNED BY: XXX
CHECKED BY: XXX
BID DATE: XXX-XX-XXXX

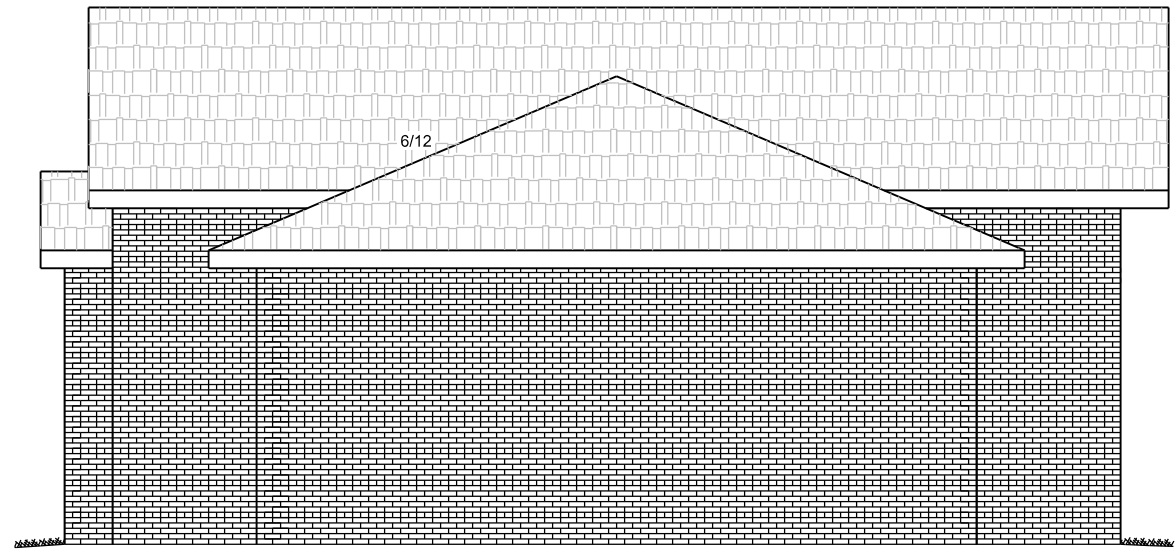


NW 26TH STREET BOOSTER STATION
PRELIMINARY FLOOR PLAN
PROJECT NUMBER: 578-763-9010

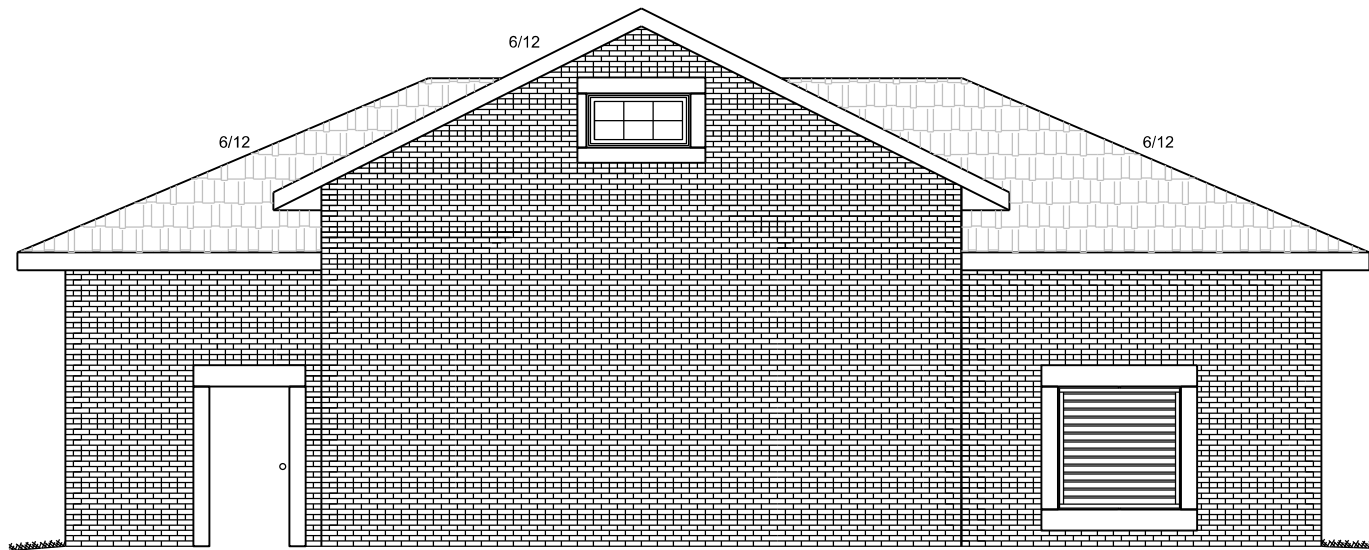
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SHEET
A1
OF XX
PRELIMINARY
CONSTRUCTION
AS BUILT



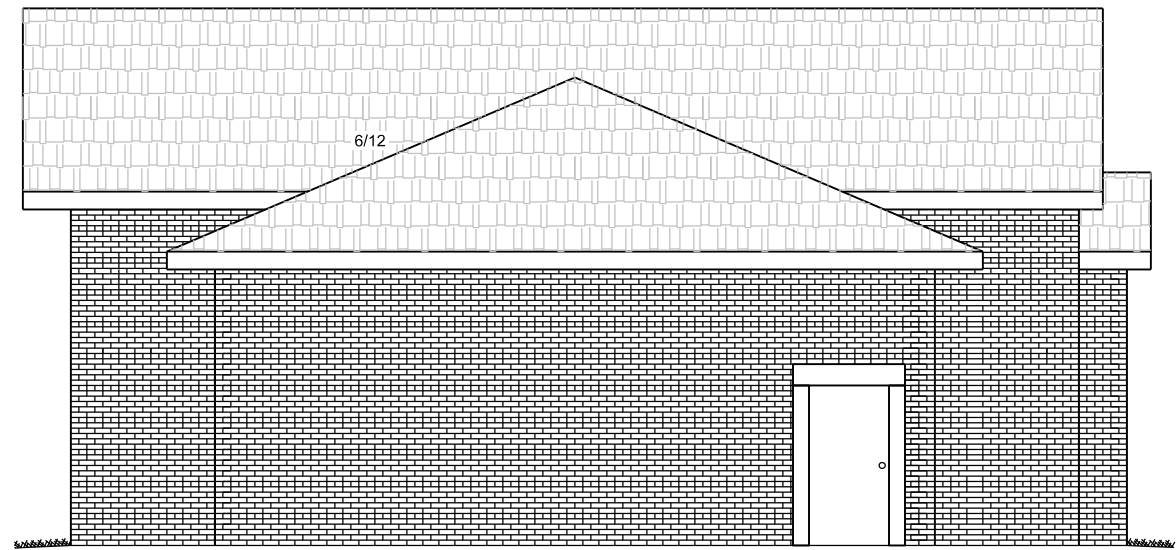
WEST ELEVATION
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SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



EAST ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"

NO.	DATE	REVISIONS

Des Moines :
Water Works
Water You Can Trust for Life
ENGINEERING DEPARTMENT
Des Moines, Iowa

NW 26TH STREET BOOSTER STATION
ELEVATIONS
PRELIMINARY
PROJECT NUMBER: 578-763-9010

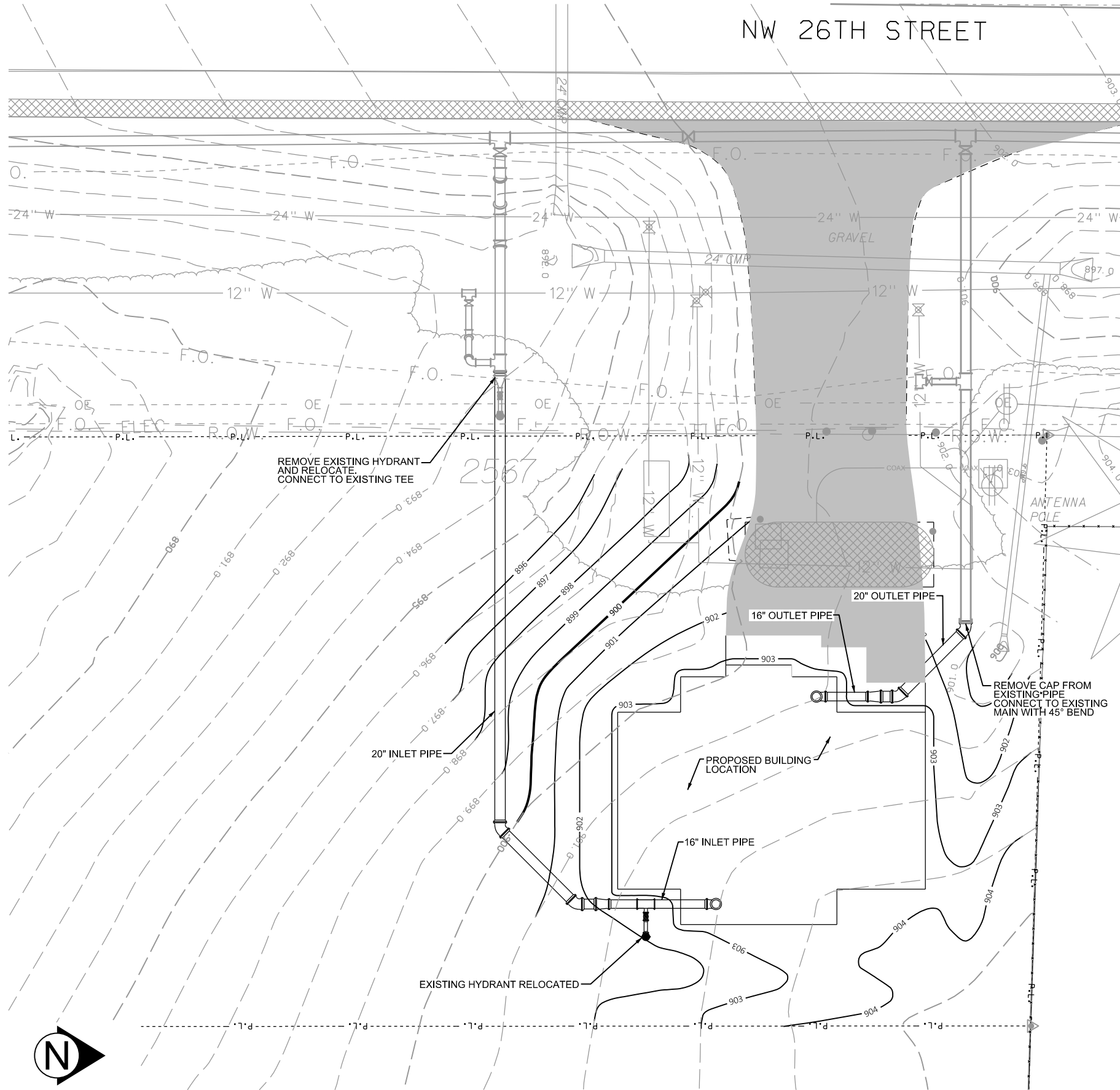
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OF XX	
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AS BUILT	<input type="checkbox"/>

6/11/2019

U:\Projects in Design\B Plant Design\B0XXX_polk city booster station\PC Booster station_sht.dgn

SP3

NW 26TH STREET



NO.	DATE	REVISIONS

Des Moines
Water Works
 Water You Can Trust for Life
 ENGINEERING DEPARTMENT
 Des Moines, Iowa

NW 26TH STREET BOOSTER STATION
 SITE PIPING PLAN
PRELIMINARY

FILE NUMBER	A-XXXX-W
SHEET	SP3
OF XX	
PRELIMINARY	<input checked="" type="checkbox"/>
CONSTRUCTION	<input type="checkbox"/>
AS BUILT	<input type="checkbox"/>

PROJECT NUMBER: 578-763-9010