

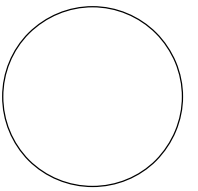
R-6W

R-5W

LEE CO. SKUNK RIVER DES MOINES

PROJECT LOCATION

CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



PROJECT LOCATION MAP

GEODE BOOSTER PUMP BUILDING
GEODE STATE PARK

HENRY COUNTY

NO.	BY	REVISION

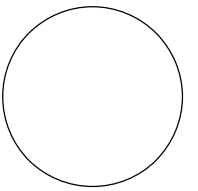
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21-06-44-01

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SHEET NO:



CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



BOOSTER PUMP BUILDING

GEODE BOOSTER PUMP BUILDING

GEODE STATE PARK

HENRY COUNTY

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NOTES

GENERAL:

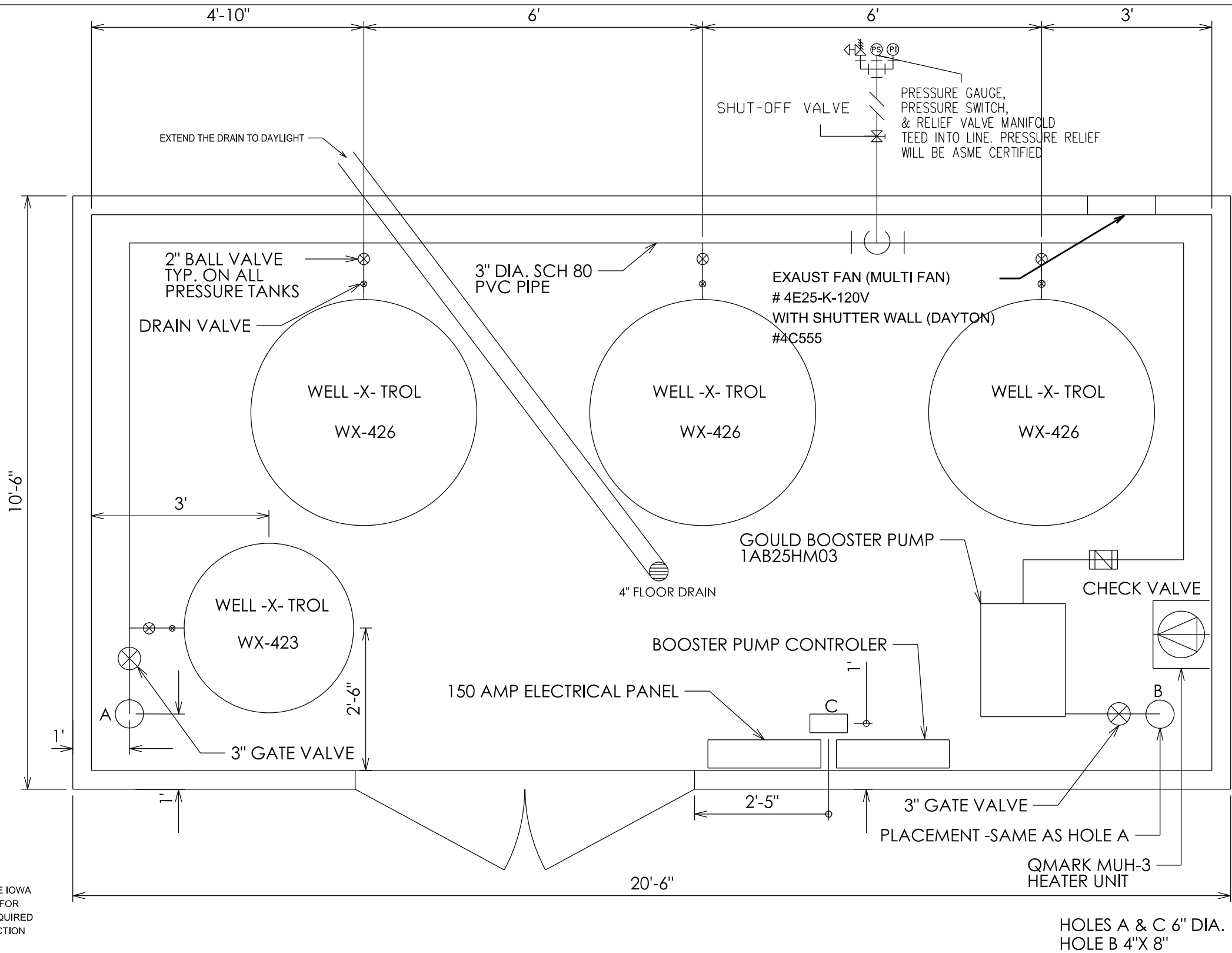
1. THE GENERAL LOCATION OF THE PUMP BUILDING SHALL BE, AS SHOWN ON THE PLANS. THE EXACT LOCATION WILL BE STAKED BY THE DNR INSPECTOR.
2. FINISHED FLOOR ELEVATION FOR THE BUILDING SHALL BE AS SHOWN ON THE PLANS OR AS DETERMINED BY THE DNR INSPECTOR.
3. REGRADE THE AREA SURROUNDING THE BUILDING AS NECESSARY AND AS DIRECTED BY THE DNR CONSTRUCTION INSPECTOR.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN ON THE DRAWINGS AT THE JOB SITE AND SHALL NOTIFY IN WRITING THE DNR INSPECTOR OF ANY OMISSIONS, DISCREPANCIES AND/OR CONFLICT BEFORE PROCEEDING WITH ANY CONSTRUCTION.
5. DO NOT SCALE DRAWINGS, DIMENSIONS WILL GOVERN.
6. THE CONTRACTOR SHALL SECURE ALL REQUIRED BUILDING AND ELECTRICAL PERMITS AND SHALL PERFORM ALL WORK TO CONFORM WITH APPLICABLE BUILDING CODES.
7. THE PREFABRICATED BUILDING PROPOSED FOR THE SITE IS A 10'-6" X 20'-6" HUFFCUTT UTILITY BUILDING MANUFACTURED BY HUFFCUTT CONCRETE INC. CHIPPEWA FALLS, WI.
8. THE PRE-CAST FLOOR SLAB SHALL BE INSTALLED ON TRENCH FOOTING, AS FULLY DESCRIBE IN PROJECTS SPECIFICATIONS.

MECHANICAL:

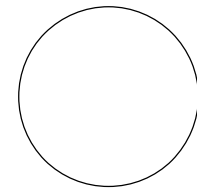
1. THIS DRAWING IS INTENDED TO SHOW ONLY THE BASIC COMPONENTS AND NOT AN ACTUAL LAYOUT OF THE SYSTEM. IN ADDITION, THE CONTRACTOR SHALL FURNISH AND INSTALL THE VARIOUS SHUT-OFF VALVES, CHECK VALVE, DRAIN-DOWN VALVES, BOOSTER PUMP ETC. TO PROVIDE A COMPLETE FUNCTIONING SYSTEM IN ACCORDANCE WITH THE CURRENT INDUSTRY PRACTICE AND ALL APPLICABLE CODES.
2. PRESSURE TANK AND ACCESSORIES ETC. SHALL BE INSTALLED IN ACCORDANCE WITH THE WRITTEN INSTRUCTIONS FURNISHED BY THE MANUFACTURERS.
3. THE PRESSURE TANKS SHALL HAVE A SHUTOFF VALVE INSTALLED ON THE INLET/OUTLET PIPE.
4. THE PRESSURE TANK TO CUT IN AT 40 PSI AND CUT OUT AT 65 PSI.
5. PROVIDE A UNISTRUT SUPPORT SYSTEM FOR ALL PIPING, APPROX. 2'-0" ABOVE THE BUILDING FLOOR
6. PIPING SHALL BE FABRICATED WITH UNIONS TO ALLOW DISCONNECTING INDIVIDUAL COMPONENTS OF THE SYSTEM.
7. ALL BURRIED PIPING SHALL HAVE THRUST BLOCKS AT VERTICAL RISERS.
8. THE CONTRACTOR SHALL SUBMIT 3 COPIES OF SHOP DRAWINGS FOR SUCH ITEMS AS PRESSURE TANKS, PRESSURE GAUGES, PRESSURE SWITHES, RELIEF VALVES, DRAIN VALVES, ETC. FOR APPROVAL BEFORE PLACING ORDER WITH SUPPLIER.

ELECTRICAL:

1. ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE IOWA STATE BUILDING CODE AND THE N.E.C. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS AND ARRANGING FOR ELECTRICAL INSPECTION AS REQUIRED BY THE STATE OF IOWA ELECTRICAL INSPECTION PROGRAM. SEE SPECS. SECTION 16000. PARAGRAPH 3.06.
2. ELECTRICAL POWER AND MAIN DISCONNECT: ENTRANCE PANEL SHALL BE 150A, 120/240 V. PROVIDE 1-20A LIGHTING, 1-20A EXHAUST FAN CIRCUIT, 1-20A CIRCUIT FOR TWO CONVENIENCE OUT-LETS, 1-20A HEATER CIRCUIT 1-40A BOOSTER PUMP CIRCUIT AND REST OF THE SLOTS WILL BE LEFT OPEN FOR FUTURE UPGRADE. ALL WIRING SHALL BE COPPER, FURNISH AND INSTALL CONDUIT THROUGH THE FLOOR FOR BURRIED SERVICE TO BRING IN POWER FROM NEAREST POWER SOURCE.
3. FURNISH AND INSTALL TWO LITHONIA LIGHTING SB-4-32-MVOLT-1/4-GEB10IS FLUORESCENT FIXTURES WITH F32-T8 SP41 LAMPS FOR INTERIOR LIGHTING.
4. FURNISH AND INSTALL EXTERIOR NIGHT LIGHT KENALL 5150 WITH PHOTO-ELECTRIC CONTROL PROVIDE SEPARATE CIRCUIT FOR LIGHTING SO THAT PHOTO CONTROL CAN BE OVER-RIDDEN BY TIMER AT SERVICE PANEL. PROVIDE ADJUSTABLE TIMER.
5. FURNISH AND INSTALL EXHAUST FAN (MULTIFAN) #4E25-K-120V AND SHUTTER WALL (DAYTON) #4C555



CONSULTANT:



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MECHANICAL LAYOUT
 GEODE BOOSTER PUMP BUILDING
 GEODE STATE PARK
 HENRY COUNTY

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:
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ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	Mobilization	Lump Sum	1
2	Cleaning & Grubbing	Lump Sum	1
3	10'-6" X 20'-6" Pre-Cast Huffercut Building Or Equal (Installed), Including grading.	Lump Sum	1
4	48" Deep and 12" Wide Trench Footing For the Building As Described In The Specs.	Lump Sum	1
5	18" Deep Class "A" Crushed Stone Under The Building	Tons	20
6	Electrical Service To The Building	Lump Sum	1
7	Complete Electrical System For The Building With Pump Wiring, Heater, Light, Fan etc.	Lump Sum	1
8	Complete Mechanical System For The Building, Booster Pump, Manifold, Pressure Tanks, Valves, Pressure Switch, Gauges, Connections To The Existing Line, etc	Lump Sum	1
9	Access Path To The Building With Class "A" Crushed Rock	Tons	6
10	Disinfection Of The Distribution Network Including The Plumbing In The Building	Lump Sum	1
11	Site Restoration	Lump Sum	1

ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
6	The approximate distance from transformer to building is about 500 ft.
11	Site restoration will include seeding & mulching.

GENERAL NOTES

Verify actual locations and elevations with DNR Engineer.

All work shall conform to and be performed in accordance with all applicable codes and ordinances.

The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to bidding and the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specification, special provisions and contract.

The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the DNR Engineer of any discrepancies, omissions, and/or conflicts prior to proceeding with the work.

It shall be the contractor’s responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the DNR Engineer.

The contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of the DNR Engineer.

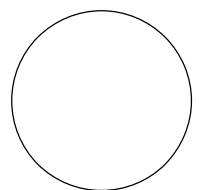
Where utilities and fixtures are shown as Existing on the plans or encountered within the construction area, it shall be the responsibility of the contractor to notify the DNR Engineer of those utilities prior to the beginning of any construction. The contractor shall be afforded access to these facilities for necessary modification of services. Underground facilities, structures and utilities have been plotted from available surveys and records and therefore their locations must be considered approximate only. It is possible there may be others, the existence of which is presently not known or shown. It is the contractor’s responsibility to determine their existence and exact location and to avoid damage thereto. No claims for additional compensation will be allowed to the contractor for any interference or delay caused by such work.

The contractor shall shape graded area to maintain surface drainage. All elevations are to finish grade.

The contractor is expected to have materials, equipment, and labor available on a daily basis to install and maintain erosion control features on the project. This may involve seeding, silt fence, rock ditch checks, silt basins or silt dikes.

All construction will comply with SUDAS.

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QUANTITIES AND GENERAL INFORMATION

GEODE BOOSTER PUMP BUILDING
GEODE STATE PARK
HENRY COUNTY

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