

Project: White Deer Run Reservoir
Project #: PW2017.010
Bid Number: #23002
Addendum #1
Date: March 24, 2023

Note: If your submitted question(s) have not been addressed in this Addendum No.1 a second addendum will be issued during the week of March 27th.

QUESTIONS RECEIVED

Question 1: Please advise as to whether this project falls under the provisions of the recently enacted Build America, Buy America Act (BABA). If so, will any of the provisions be waived. Please clarify.

Answer 1: This project will not be subject to the requirements of the Build America, Buy America Act (BABA).

Question 2: Please advise as to whether the Village of Vernon Hills will require a building permit for this project. If so, advise as to whether any associated fess will be waived, addressed directly by the owner, the Contractor's responsibility, or other.

Answer 2: The project will require a building permit from the Village of Vernon Hills. The Owner (Lake County Public Works) will apply for the building permit with the assistance/coordination from the Contractor. The Owner will pay any fees associated with the building permit. The Contractor will be responsible for scheduling any and all inspections required by the Village of Vernon Hills and/or any other Authority having jurisdiction (AHJ).

Question 3: Please advise as to whether the Owner has existing electrical facilities at the site. If so, advise as to whether it is acceptable for the Contractor to tie into the Owner's facilities for temporary power.

Answer 3: There is no electrical service currently at the site. The Owner will contact ComEd to establish the new service and will work with the Contractor on obtaining the new electrical service from ComEd. The Owner will pay any fees associated with the new electrical service. The Contractor will be responsible for scheduling any and all inspections required by ComEd and/or any other Authority having jurisdiction (AHJ).

Question 4: What type of valve should be quoted indicated as VB-4 on Sheet C103?

Answer 4: Valve VB-4 is a buried 4-inch gate valve with a valve box.

Question 5: Will EBAA Megalugs be an acceptable substitute for the Mueller Aquagrip restraint requirements on MT fittings?

Answer 5: EBBA Megalugs are an acceptable product.

Question 6: Will TR Flex be acceptable for restrained ductile iron pipe where necessary?

Answer 6: The use of TR Flex pipe will need to be review with the Owner/Engineer during the shop drawing phase and the proposed location for its use.

Question 7: Are you able to tell me if there is a domestic product requirement governing the WDR project bidding April 5, 2023 in Vernon, Hills, IL?

Answer 7: No domestic product requirement.

Question 8: Are you able to provide a specification governing gate valves both ductile and PVC?

Answer 8: Gates valves for both ductile iron and PVC water mains are to be resilient wedge gate vales as manufactured by Mueller or Waterous. See valve vault detail.

Question 9: Please confirm the detail for concrete sidewalk. The pavement legend on sheet C103 shows 5" pcc with 4" agg base course while the typical detail on sheet C104 shows 6" pcc with 6" agg base course.

Answer 9: The concrete sidewalk shall be 5-inch PCC with 4-inch aggregate base course, CA-6 GR 8 or 9.

Question 10: What are the classifications of the rooms in the pump building? This info is needed to know what type of electrical material to be installed in these areas? For example, Class 1 Division 1....

Answer 10: This is a potable water pumping station and is non-classified / non-hazardous area.

Question 11: Drawing E1.0 "Partial electrical site plan" shows notes 1&2 is a ComEd feed out to the road / power pole. Who installs this ComEd conduit? If this is in the electrical portion, what size is the conduit and how many conduits are there?

Answer 11: The contractor will install the conduit and wire to the service drop from ComEd. The plans indicate the conduit to be 3-inch diameter with 4 -400 MCM.

Question 12: Sheet C101: The site borders railroad tracks to the south. Please confirm that the Contractor is not responsible for any permits, insurance or coordination with the railroad?

Answer 12: No required permits, insurance or coordination with railroad are required.

Question 13: Sheet C103 and Detail 1 on Sheet RS103: Please confirm that there is some flexibility to lower the invert elevations of the under-floor tank inlet and outlet piping to ensure that the under-floor 90-degree bends are below the tank perimeter footing.

Answer 13: Yes there is flexibility to lower the piping between the isolation gate valve vault and reservoir.

Question 14: Sheet RS104, Detail 2: This detail shows the bottom of the tank exterior ladder approximately 10-foot above the finish grade elevation with a safety cage and anti-climb plate. Specification Section 12000, Page 18, Paragraph 2.10.A.6 notes that exterior ladder shall extend from final grade to the tank roof. Please confirm that the bottom of the tank exterior ladder shall be approximately 10-foot above finished grade.

Answer 14: The exterior ladder shall terminate at 10 feet above finish grade as per the drawing detail.

Question 15: Sheet RS105, Detail 4: Please confirm if aluminum is an acceptable material for the interior manway ladder as indicated in Specification Section 12000, Page 18, Paragraph 2.10.A.7.

Answer 15: Interior manway ladder shall be aluminum per the specifications.

Question 16: Sheet AE901, New East Elevation: This depicts the exterior of the tank matching the exterior of the pump station visually. Please confirm that this is to be achieved with a two-color exterior painting schedule for the tank and no masonry is required on the tank exterior.

Answer 16: Correct it is a two-color exterior painting schedule for the tank. No masonry is required on the tank exterior.

Question 17: Is a perimeter drain required for the reservoir?

Answer 17: A perimeter drain is not anticipated to the needed.

Question 18: Refer to Sheet C102, plan note, "Expose side of junction chamber, clean and patch concrete as necessary". Please clarify the scope of work associated with this task. Advise as to the limits of the required exposure work (width & depth). Provide a quantity of required patching (cubic foot or square foot). Provide details for the patching work & acceptable patching mortar materials. If the extent of the patching work is unknown, consider including the exposing work in the lump sum portion of the bid & then a stipulated quantity with a unit price.

Answer 18: The intent is to power wash the concrete surface that will be exposed after the regrading the installation of the new pavement up to the structure. Approximately 1 to 1.5 feet of soil is to be removed / graded for the new pavement.

TO THE CONTRACT DOCUMENTS

1. SUPPLEMENTARY CONDITIONS, Section SC6.03 – CONTRACTOR'S INSURANCE and SECTION SC6.05 – PROPERTY INSURANCE, amend as follows: Delete the entire section and replace with the attached Addendum No. 1 Section SC6.03 – CONTRACTOR'S INSURANCE and Section SC6.05 – PROPERTY INSURANCE.

TO THE SPECIFICATIONS

1. Section 11310 – HORIZONTAL SPLIT CASES PUMPS, Page 11310-10, Article 2.02.J.1.b(5) amend as follows:

“(5) Motor: 100 HP (max) 480 Volt, 3 Phase, 60 Hz”
2. Add the attached Specification Section 16000 – GENERAL ELECTRICAL Addendum #1 to the project specifications.
3. Section 16265 – VARIABLE FREQUENCY DRIVE UNITS, Page 16265-1, Article 1.01.A.1. amend as follows:

- "1. (4) 100 HP (max) high service pumps"
4. Section 16236 – STATIONARY STANDBY ENGINE GENERATOR SET, Page 16236-1, Article 2.01.A amend the first sentence as follows:
- "A. The generating set shall be rated for standby service with a minimum rating of 400 KW, 600 A, 3 Phase, 4-Wire, 277/480 Volts at 60 Hertz and shall BE CAPABLE OF SINGLE STEP LOAD PICKUP OF 100% nameplate kW and power factor with a maximum voltage dip of 20% as measured on an oscilloscope."
5. Section 16236 – STATIONARY STANDBY ENGINE GENERATOR SET, Page 16236-2, Article 2.01.B.1.a.1) amend as follows:
- "1) (2) – 100 HP (max), VFD Start"
6. Section 16236 – STATIONARY STANDBY ENGINE GENERATOR SET, Page 16236-2, Article 2.01.B.3.a.1) amend as follows:
- "1) (2) – 100 HP (max), VFD Start"
7. Section 12000 – PRESTRESSED CONCRETE TANK, Page 12000-14, Article 2.03; delete Paragraph B.
8. Section 12000 – PRESTRESSED CONCRETE TANK, Page 12000-32, Article 3.12A; delete the requirement for the AKKRO7T additive for the exterior dome roof coating.
9. Section 11310 – HORIZONTAL SPLIT CASES PUMPS, Page 11310-1, Article 1.02.A amend as follows:
- "1. Pumps shall be manufactured by Aurora (Pentair), Peerless Pump, Paco Pump, Patterson or approved equal."

TO THE DRAWINGS

1. See revisions to Sheet E1.0 as attached to this Addendum.

SC 6.03. - CONTRACTOR'S INSURANCE

Entirely delete Paragraphs 6.03.A through 6.03.J and substitute the following:

A. The CONTRACTOR shall maintain for the duration of the contract and any extension of it, including warranty period, insurance issued by a company or companies qualified to do business in the State of Illinois with an A.M. Best Rating of at least A- VIII and provide the County with a Certificate of Insurance 15 days before the start of the project, and thereafter annually for contracts/ projects that will last more than one year. Insurance in the following types and amounts is necessary:

1. **Comprehensive General Liability (CGL) Insurance** – CGL insurance in a broad form on an occurrence basis shall be maintained, to include, but not be limited to, coverage for property damage, bodily injury (including death), personal injury and advertising injury in the following coverage forms where exposure exists:
 - Premises and Operations
 - Independent Contractors
 - Products/Completed Operations – up to 2 years after each project completion
 - Liability assumed under an Insured Contract/Contractual Liability
 - Personal Injury and Advertising Injury

With limits of liability not less than:

\$ 1,000,000 Each Occurrence

\$ 1,000,000 Products-Completed Operations

\$ 1,000,000 Personal and Advertising injury limit

\$ 2,000,000 General Aggregate; the CGL policy shall be endorsed to provide that the General Aggregate limit applies separately to each of the contractor’s projects away from premises owned or rented to contractor.

2. **Automobile Liability Insurance** - Automobile Liability Insurance shall be maintained to respond to claims for damages because of bodily injury, death of a person, or property damage arising out of ownership, maintenance, or use of a motor vehicle. This policy shall be written to cover any auto whether owned, leased, hired, or borrowed.

The Contractor’s auto liability insurance, as required above, shall be written with limits of insurance not less than the following:

\$ 1,000,000 Combined single Limit (Each Accident)

3. **Excess/ Umbrella Liability Insurance** - the Contractor’s Excess/ Umbrella liability insurance shall be written with the umbrella follow form and outline the underlying coverage.

\$2,000,000 per occurrence and \$2,000,000 aggregate
Excess/Umbrella Liability shall be in excess of General, Auto and Employers Liabilities

4. **Workers Compensation (Coverage A) and Employers Liability (Coverage B)** - Workers Compensation Insurance covering all liability of the Contractor arising under the Worker's Compensation Act and Worker's Occupational Disease Act at limits in accordance with the laws of the State of Illinois. Employers' Liability Insurance shall be maintained to respond to claims for damages because of bodily injury, occupational sickness, or disease or death of the Contractor's employees, with limits listed below:

Employers Liability

- a) Each Accident \$1,000,000
- b) Disease-Policy Limit \$1,000,000
- c) Disease-Each Employee \$1,000,000

Such Insurance shall contain a waiver of subrogation in favor of Lake County.

5. **Contractor's Pollution Liability** - the Contractor's pollution liability insurance, in connection with an agreement, shall be written with limits of insurance not less than the following:
\$ 1,000,000 per occurrence limit
6. **Installation Floater / Builders Risk** - Contractor's builders risk / installation floater should cover materials during transit to the project site, while stored on-site and during installation until the project has been completed or put to its intended use. Limit would be determined by the hard construction values of the project including materials, the cost of change orders and overhead and profit.
7. **Professional Liability – Errors and Omissions** - the Contractor's Architect/ Engineer/Consultants for the plans of the project shall be written with limits of insurance not less than the following:
\$ 1,000,000 per claim per policy year
Coverage shall be provided for up to three (3) years after project completion. Policy is to be on a primary basis if other professional liability is carried.

B. CONTRACTOR agrees that with respect to the above required insurance:

- 1. The CGL policy shall be endorsed for the general aggregate to apply on a "per Project" basis;
- 2. To provide separate endorsements and to name as additional insureds with respect to the General Liability Insurance, Auto Liability Insurance and Excess/Umbrella Liability Insurance:
 - a. Lake County, its officers, agents and employees, all members of Boards, Commissions, Committees, Trustees and Organizations of the County, all volunteers and members of volunteer organizations and other non-paid personnel, including college and high school interns, while acting on behalf of the County
 - b. Lake County's Consulting Engineer: Christopher Burke Engineering and HMG Engineers, Inc.
 - c. HGC White Deer Run LLC.
 - d. Heritage Golf Group
 - e. Village of Vernon Hills
- 3. To provide thirty (30) days' notice, in writing by endorsement, of cancellation or material change to the required insurance.

4. The Contractor's insurance shall be primary & non-contributory over Lake County's insurance in the event of a claim.
5. A waiver of subrogation in favor of Lake County including its agents, officers, employees, and volunteers shall be included on General Liability, Auto Liability, Excess/Umbrella Liability Insurance and Workers Compensation.
6. Lake County shall be provided with Certificates of Insurance evidencing the above required insurance and the appropriate corresponding ISO form endorsements, prior to commencement of this Contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least thirty (30) days prior to the expiration or cancellation of any such policies. No manuscript endorsements will be accepted. Any hard copies of said Notices and Certificates of Insurance and Endorsements shall be provided to:

Lake County
Purchasing Division
18 N. County St, 9th Floor
Waukegan, IL 60085
Attention: RuthAnne Hall, Lake County Purchasing Agent

7. **Electronic copies of Notices, Certificates of Insurance and Endorsements can be emailed to Purchasing@lakecountyil.gov in place of hard copies.**

C. **Failure to Comply:** In the event the CONTRACTOR fails to obtain or maintain any insurance coverage required under this agreement, Lake County may purchase such insurance coverage and charge the expense thereof to the CONTRACTOR.

SC 6.05. - PROPERTY INSURANCE

Entirely delete paragraphs 6.05.A through 6.05.F.

SECTION 16000

ELECTRICAL - GENERAL

PART 1 GENERAL

1.01 NOTICE

- A. The General Conditions, Special Conditions and all other herein bound documents are part of these specifications and of the Contract. Submission of Proposal implies that the bidder is fully conversant with all requirements of all above-mentioned documents.

1.02 SUMMARY

- A. The work in this section consists of furnishing all material, accessories, equipment, tools, transportation services, labor and performing all operations required to completely execute the Electrical Work for this project, all as indicated on the drawings, approved shop drawings, and as herein specified, provide all Electrical Work in this section in place complete.
- B. Included in this section is all Electrical Work for underground cables, conduits, wiring and appurtenances relative to installation of the equipment as shown on the drawings and herein specified.

1.03 REFERENCES

- A. All equipment, apparatus, and systems shall be fabricated and installed in complete accordance with the following applicable regulations, standards and codes:
1. ASTM American Society of Testing Materials
 2. IEEE Institute of Electrical and Electronic Engineers
 3. NBFU National Bureau of Fire Underwriters
 4. NEC National Electric Code
 5. NEMA National Electric Manufacturers Association

6. UL Underwriters Laboratories, Inc.
 7. IEPA Illinois Environmental Protection Agency
 8. OSHA Occupational Safety and Health Act
 9. State Department of Public Safety
 10. Local Utility Company
- B. Reference to Standards shall mean and intend the latest edition adopted, published and revised at the time of invitation to submit proposals.
- C. Give all required notices when inspections are required by State or Local authorities.

1.04 SYSTEM DESCRIPTION

- A. Electric service shall be extended from ComEd transformers to the Booster Pump Station. A new emergency generator and transfer switch will be installed for the Booster Pump Station. The work will include but not limited to the following; MCC, power distribution panels, lighting panels, booster pumps, valve operators, control valve, flow meters, instruments, interior and exterior lights and other building appurtenances. A facility wide control system shall be installed see Division 13.

1.05 SUBMITTALS

- A. Follow procedures as outlined in Section 01000.
- B. Shop Drawings: Where required, submit for Engineer's acceptance, three (3) sets of complete shop drawings, including equipment brochures and data sheets, catalog sheets and all other pertinent data covering Electrical Work for this project.
- C. Materials List:
1. Within 15 days after award of Contract, and before any electrical materials are delivered to the job site, submit to the Engineer a complete list of all materials and equipment proposed to be furnished and installed under this section.

2. This shall in no way be construed as permitting substitution except as provided by these Specifications.

1.06 CLOSEOUT SUBMITTALS

- A. Follow procedures as outlined in Section 01700.
- B. Record Drawings:
 1. During progress of the work, maintain an accurate record of the installation of the electrical system, locating each circuit precisely by dimension.
 2. Upon completion of the electrical installation, transfer all record data to blue line prints of the original drawings.

1.07 QUALITY ASSURANCE

- A. All work included in this contract shall comply with all Federal and State Laws, rules and regulations. The Contractor shall pay for and furnish to Engineer, all required certificates of inspection and approval as required.
- B. Obtain and pay for all permits required for the execution of the work under this contract, and arrange for all tests and inspections of the work required by the authorities having jurisdiction, and pay for all costs thereof. Deliver certificates of all such permits and inspections to the Engineer.

1.08 FIELD MEASUREMENTS

- A. It shall be the responsibility of the Contractor to examine the drawings and specifications and visit the site and become familiar with the conditions and limitations applying to the Electrical Work. By the act of having submitted a bid, the Contractor will be deemed to have made such an examination and to have made allowance, therefore, in his contract.
- B. The information given herein and on the drawings is as exact as could be secured, but its extreme accuracy is not guaranteed. The Contractor must, therefore, examine the location carefully and verify all

measurements, distances, levels, etc., before starting work. If any discrepancies occur between drawings and actual conditions, the Contractor shall notify the Engineer before starting the work.

1.09 COORDINATION

- A. The contractor shall coordinate construction and installation work with other construction trades in order to complete the specified work. If a condition arises that reveals a conflict between necessary construction and installation requirements, the onsite project representative shall be informed and if possible a field modification may be worked out. Prior to putting the modification into effect, the Engineer shall be informed of the situation so that it may be reviewed and accepted.

1.10 DELIVERY, STORAGE AND HANDLING

- A. Protection: Use all means necessary to protect the work and materials of this section before, during and after installation and to protect the work and materials of all other trades.
- B. Failure on the part of the Contractor to comply with the above to the entire satisfaction of the Engineer shall be sufficient cause for the rejection of the particular piece of apparatus in question.
- C. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Engineer and at no additional cost to the Owner.

PART 2 PRODUCTS

2.01 MATERIALS

- A. The work in this section further consists of furnishing all materials, accessories, equipment, tools, transportation services, labor and performing all operations required to completely execute the Electrical work for this project as shown on the Plans and described in the Specifications. The Contractor will be required to determine the actual quantities and items involved. The General Contractor is

responsible for furnishing and installing a complete and working system including all connections and terminations.

PART 3 EXECUTION - NOT USED

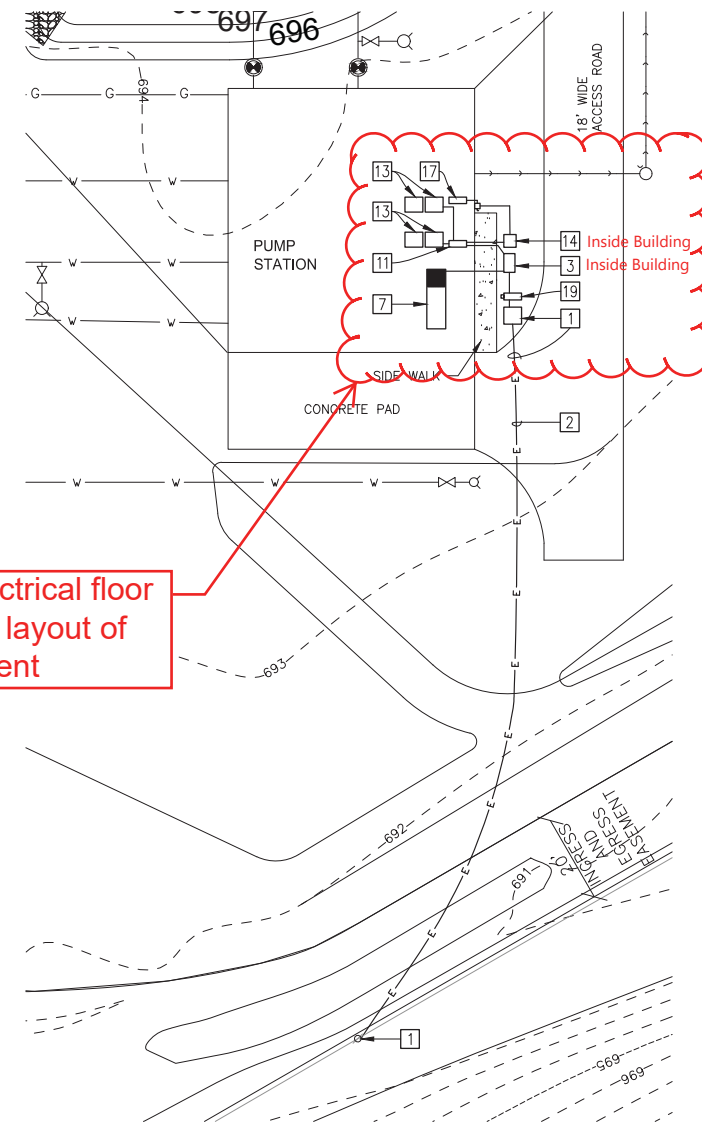
END OF SECTION

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TRANSFORMER SCHEDULE										
MARK	KVA	PHASE	PRIMARY	SECONDARY	MAX. DIM. HxWxD	FULL CAP. TAPS	K FACTOR	°C RISE	WEIGHT	ENCLOSURE
T-1	112.5	3Ø	480V	120/208V	44x32x27	6 2.5% 2+, 4-	K4	115°	925	NEAM 3

TRANSFER SWITCH SCHEDULE												
DESIGNATIONS	LOAD	UNIT TYPE (NOTE 1)	VOLTS	RATINGS					CLOSING AND WITHSTAND		ENCLOSURE TYPE	NOTES
				CURRENT AMPS MINIMUM	MAIN CB AMPS	PH	POLES	AMPS (NOTE 4)	CYCLES			
ATS-1	MDP	SERVICE RATED AUTOMATIC TRANSFER	277/480	1000A 600A	1200 A GFCI	3	3	40K	3	NEMA 3	1 - 6	

NOTES:
 1. DELAYED TRANSITION SWITCH ACTION.
 2. PROTECTED BY MOLDED CASE CIRCUIT BREAKER, BOTH SOURCES.
 3. CLOSING AND WITHSTAND CURRENT RATINGS ARE MINIMUM SYMMETRICAL AMPERES. RATINGS MAY BE ATTAINED BY USING ATS MANUFACTURERS CLOSING AND WITHSTANDING RATINGS.
 4. PROVIDE ENGINE STARTUP AND SHUTDOWN CONTACTS.
 5. PROVIDE INTEGRAL TVSS (240KA) WITH SURGE COUNTER.
 6. MCB IS TO BE GFCI TYPE, PROVIDE CERTIFICATION OF TEST AS PER NEC.

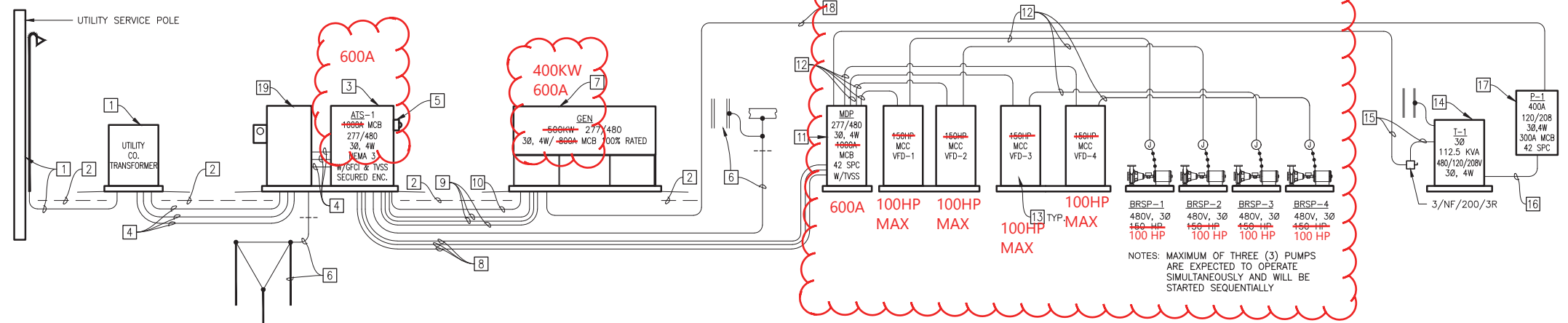


See electrical floor plan for layout of equipment

- KEYED NOTES FOR 5/E3.0:
- UTILITY COMPANY COMED SERVICE OVER HEAD DROP AND TRANSFORMER.
 - PROVIDE LOCATABLE WARNING TAPE OVER UNDERGROUND ELECTRIC.
 - PROVIDE TRANSFER SWITCH AS SCHEDULED.
 - PROVIDE 4-400 MCM IN 3" CONDUIT.
 - PROVIDE EMERGENCY STOP SWITCH.
 - PROVIDE 2/0 GROUNDING CONDUCTORS IN 1" CONDUIT CONNECTED TO METALLIC WATER PIPING AND THREE ELECTRODE (5/8"x10' LONG CLAD WITH EXOTHERMIC WELDED CONNECTIONS) GROUNDING FIELD.
 - PROVIDE NATURAL GAS GENERATOR AS SPECIFIED.
 - PROVIDE 4-400 MCM & 2/0 GROUND IN 3" CONDUIT.
 - PROVIDE 4-400 MCM & 2/0 GROUND IN 3" CONDUIT.
 - PROVIDE ALL POWER AND CONTROL WIRING BETWEEN GENERATOR AND TRANSFER SWITCH.
 - PROVIDE MAIN DISTRIBUTION, MDP, PANEL AS SHOWN AND SPECIFIED.
 - PROVIDE 4-3/0 & #6 GRD. LUTZE DRIVE FLEX CABLE IN 2" CONDUIT.
 - PROVIDE MCC VFD AS SPECIFIED.
 - PROVIDE DRY TYPE TRANSFORMER AS SHOWN AND SCHEDULED.
 - PROVIDE 3-4/0 & #6 GROUND IN 2" CONDUIT.
 - PROVIDE 4-350 MCM & #4 GND. IN 3" CONDUIT.
 - PROVIDE PANEL P-1 AS SHOWN AND SPECIFIED.
 - PROVIDE ALL POWER WIRING TO GENERATOR AS REQUIRED.
 - PROVIDE 1000A, 277/480V CT/ METERING ALUMINUM ENCLOSURE AS PER UTILITY COMPANY REQUIREMENTS.

NOTES: ALL CONDUCTOR SIZING IS BASED ON N.E.C. TABLES FOR COPPER CONDUCTORS AT 75°C (167°F).

Addendum No. 1 Edits



NOTES: MAXIMUM OF THREE (3) PUMPS ARE EXPECTED TO OPERATE SIMULTANEOUSLY AND WILL BE STARTED SEQUENTIALLY

Sheet Title: Single Line Electrical Riser Diagram
 Project Title: White Deer Run Reservoir
 Lake County Public Works

ASATURIAN
 EATON
 and Associates Inc.
 ENGINEERING and LAND SURVEYING
 1440 Old West Main, P.O. Box 369, Carbondale, IL 62903

JOB NO: 3943
 DRAWN BY: KR
 DATE: 10-07-21
 REVISIONS:

E1.0
 SHEET 1 OF 1