

**ADDENDUM #2
June 20, 2025**

Middletown Junction Wellfield Development

6 PAGES TOTAL

This Addendum No. 2 is issued to make certain revisions, additions, and clarifications to the original Contract Documents and shall be incorporated into the bidding documents. This Addendum takes precedence over any and all information previously issued. No other revisions to the Contract Documents are to be inferred.

SPECIFICATIONS

SECTION 00 10 10 – INVITATION TO BIDDERS

DELETE the last sentence in the third paragraph and **REPLACE** with:

“The estimated contract value is \$3,700,000.”

SECTION 00 20 00 – GENERAL INSTRUCTIONS TO BIDDERS

DELETE the wording contained in Item 3 and **REPLACE** with:

“The Engineer’s opinion of probable construction cost for the base bid work is \$3,700,000.”

QUESTIONS

1. **Question:** 002000 says project is being funded by Owner’s reserve. 01600-1.03 indicates “Domestic Product Requirements” Please confirm Pipe, valves and fittings are to be domestic and what domestic policy applies. **Response:** *All water main piping and fittings shall be domestic, made in the United States of America.*
2. **Question:** Are all buried pipe joints to be restrained, per 02660-2.02.D.2, or just portions of piping as noted in profiles? **Response:** *Buried ductile iron pipe shall be restrained at the locations shown on the construction drawings. Not all pipe requires restrained.*
3. **Question:** After reviewing Addendum 1, I went to Section 02670 2.03D- and vent material is not mentioned. It details a suction pipe and strainer as would be installed on the bottom of a vertical turbine bowl assembly. Can you clarify what material (and coating if needed) you want for the vent pipes? Question 10 in Addendum No. 1 was answered with, “Refer to Specification 02670 2.03 D for vent material”. Based on the following from that paragraph, there is no mention of materials for the vent. Please clarify if this to be stainless or if threaded galvanized pipe is acceptable. Addendum 1 did not answer question 10 (referenced different spec). What material is the vent piping? **Response:** *Vent pipe shall be Schedule 40 galvanized steel with threaded connections, fittings, and couplings.*

4. **Question:** What is the overall scope for the generator? Does the existing diesel fuel in fuel tank need treated & reused or disposed of? How many gallons is the diesel tank? Will this generator need to be re-certified and/or pressure testing fuel tank at new site? State required? Startup service/load bank? How many hours of load bank testing?
Response: *The existing generator is in good working order and does not require special servicing or load bank testing. The fuel should be removed before transport and may be reused once the generator is relocated. The size of the fuel tank should be confirmed by the Contractor prior to removal.*

5. **Question:** Can you explain when/where allowance 1 will be used at? **Response:**
Allowance 1 – Clearing of Invasive Underbrush at Site in Areas directed by Owner may be used by the Owner to clear underbrush at areas on the County's property that are not associated with the access drive and well structures. This allowance item shall not be used for the tree clearing and grubbing of the areas shown on the construction drawings for the access drive and wells. This allowance item is meant to provide removal of underbrush and honeysuckle to allow for site monitoring and surveillance of the property.

6. **Question:** Do you have a make/model of the generator that need relocated? Also a weight? **Response:** *The generator weight used for design purposes was 25,000 lbs which included 5,000 lbs of fuel. The Generator is a Kohler Model 350REOZDD diesel engine, 350 kW, 438 KVA, 277/480 volts, 3 phase, 4 wire, 60 hertz, @ 0.8 P.F. Enclosed with this Addendum are manufacture cut sheets for the generator.*

7. **Question:** What is our access to the work across the river? Is there a weight limit on the existing bridge(probably too small for our EQ)? Do you have access from the drive at River Creek Lofts? No mention of access in the drawings/specs....or right of ways shown. **Response:** *The River Creek Loft property is an active construction site. Access shall be from Mason-Morrow-Millgrove Road and shall be from the existing construction entrance or from the private drive entrance. All work on the property shall be coordinated with the River Creek Loft property manager and construction manager. The existing pedestrian bridge shall not be used to convey any materials, vehicles, or equipment.*

THIS ADDENDUM MUST BE SIGNED AND ATTACHED TO YOUR BID.

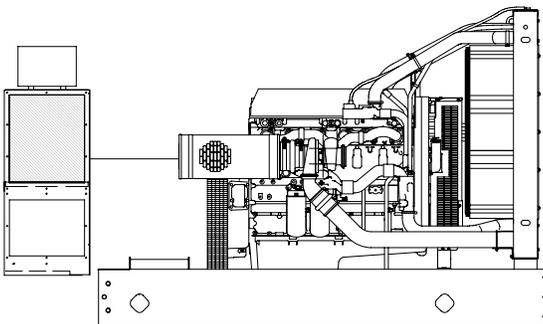
 Acknowledged by

 Date



Ratings Range

		60 Hz
Standby:	kW	305-365
	kVA	381-456
Prime:	kW	275-330
	kVA	344-413



Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set complies with ISO 8528-5, Class G3, requirements for transient performance.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to Tier 3 nonroad emissions regulations.
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.
- Alternator features:
 - The pilot-excited, permanent-magnet (PM) alternator provides superior short-circuit capability.
 - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
 - Controllers are available for all applications. See controller features inside.
 - The low coolant level shutdown prevents overheating (standard on radiator models only).
 - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.
 - An electronic, isochronous governor delivers precise frequency regulation.
 - Electronic engine controls manage the engine.

Generator Set Ratings

Alternator	Voltage	Ph	Hz	150°C	130°C	125°C	105°C
				Rise Standby Rating	Rise Standby Rating	Rise Prime Rating	Rise Prime Rating
				kW/kVA	kW/kVA	kW/kVA	kW/kVA
4M4019	120/208	3	60	355/444	350/438	325/406	325/406
	127/220	3	60	355/444	355/444	325/406	325/406
	139/240	3	60	355/444	355/444	325/406	325/406
	220/380	3	60	305/381	305/381	275/344	275/344
	240/416	3	60	355/444	350/438	325/406	325/406
4M4021	277/480	3	60	355/444	355/444	325/406	325/406
	120/208	3	60	360/450	360/450	325/406	325/406
	127/220	3	60	360/450	360/450	325/406	325/406
	139/240	3	60	360/450	360/450	325/406	325/406
	220/380	3	60	315/394	315/394	285/356	285/356
5M4027	240/416	3	60	360/450	360/450	325/406	325/406
	277/480	3	60	360/450	360/450	325/406	325/406
	120/208	3	60	365/456	365/456	330/413	330/413
	127/220	3	60	365/456	365/456	330/413	330/413
	139/240	3	60	360/450	360/450	325/406	325/406
4M4158	220/380	3	60	365/456	365/456	330/413	330/413
	220/380	3	60	365/456	365/456	330/413	330/413
	220/380	3	60	360/450	360/450	325/406	325/406
	240/416	3	60	360/450	360/450	325/406	325/406
	277/480	3	60	360/450	360/450	325/406	325/406
5M4162	220/380	3	60	360/450	360/450	325/406	325/406
4M4266	347/600	3	60	360/450	360/450	325/406	325/406
5M4272	347/600	3	60	365/456	365/456	330/413	330/413

RATINGS: All three-phase units are rated at 0.8 power factor. **Standby Ratings:** Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. **Prime Power Ratings:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. **GENERAL GUIDELINES FOR DERATION:** *Altitude:* Derate 1.5% per 305 m (1000 ft.) elevation above 183 m (600 ft.) up to a maximum elevation of 3660 m (12000 ft.). *Temperature:* Derate 1.0% per 5.5°C (10°F) temperature above 25°C (77°F). For radiator cooling system capacity, derate 1.4°C (2.5°F) per 305 m (1000 ft.) elevation above 183 m (600 ft.).

Alternator Specifications

Specifications	Alternator
Type	4-Pole, Rotating Field
Exciter type	Brushless, Permanent-Magnet, Pilot Exciter
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H, Synthetic, Nonhygroscopic
Temperature rise	130°C, 150°C Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Rotor balancing	125%
Voltage regulation, no-load to full-load (with 0.5% drift due to temp. variation)	3-Phase Sensing, ±0.25%
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V	4M4019 (12 lead) 1350
480 V	4M4021 (12 lead) 1325
480 V	5M4027 (12 lead) 1550
380 V	4M4158 (4 lead) 1118
380 V	5M4162 (4 lead) 2100
600 V	4M4266 (4 lead) 1300
600 V	5M4272 (4 lead) 1750

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and drip-proof construction.
- Superior voltage waveform from two-thirds pitch windings and skewed stator.
- Digital solid-state, volts-per-hertz voltage regulator with ±0.25% no-load to full-load regulation.
- Brushless alternator with brushless pilot exciter for excellent load response.

Application Data

Engine

Engine Specifications	
Manufacturer	Detroit Diesel
Engine: model, type	S60, 4-Cycle Turbocharged, Charge Air-Cooled
Cylinder arrangement	6, Inline
Displacement, L (cu. in.)	14.0 (855)
Bore and stroke, mm (in.)	133 x 168 (5.24 x 6.61)
Compression ratio	16.0:1
Piston speed, m/min. (ft./min.)	604 (1980)
Main bearings: quantity, type	7, Precision Half-Shell
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	410 (550)
Cylinder head material	Cast Iron
Crankshaft material	Forged Steel
Valve material:	
Intake	Iron-Based Seat
Exhaust	Nickel-Based Seat
Governor: type, make/model	DDEC Electronic Control
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.25%
Frequency	Fixed
Air cleaner type, all models	Dry

Exhaust

Exhaust System	
Exhaust flow at rated kW, m ³ /min. (cfm)	87.2 (3080)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	517 (963)
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)
Engine exhaust outlet size, mm (in.)	See ADV Drawing

Engine Electrical

Engine Electrical System		
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)		24
Ampere rating		40
Starter motor rated voltage (DC)		24
Battery, recommended cold cranking amps (CCA):		
Qty., CCA rating each		Two, 950
Battery voltage (DC)		12

Fuel

Fuel System	
Fuel supply line, min. ID, mm (in.)	13 (0.50)
Fuel return line, min. ID, mm (in.)	8 (0.31)
Max. lift, engine-driven fuel pump, m (ft.)	2.1 (6.8)
Max. fuel flow, Lph (gph)	335 (88.5)
Fuel prime pump	N/A
Fuel filter: quantity, type	2, Primary/Secondary
Recommended fuel	#2 Diesel

Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.)	30 (32)
Oil pan capacity with filter, L (qt.)	36 (38)
Oil filter: quantity, type	2, Cartridge
Oil cooler	Water-Cooled

Application Data

Cooling

Radiator System

Ambient temperature, °C (°F)	50 (122)
Engine jacket water capacity, L (gal.)	22.7 (6.0)
Radiator system capacity, including engine, L (gal.)	45.4 (12)
Engine jacket water flow, Lpm (gpm)	363 (96)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	131 (7445)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	86 (4900)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	965 (38)
Fan, kWm (HP)	22 (30)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)	0.125 (0.5)

Operation Requirements

Air Requirements

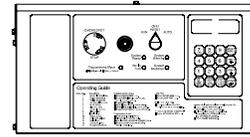
Radiator-cooled cooling air, m ³ /min. (scfm)*	561 (19800)
Combustion air, m ³ /min. (cfm)	33 (1160)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	88 (5024)
Alternator, kW (Btu/min.)	24 (1380)

* Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Fuel Consumption

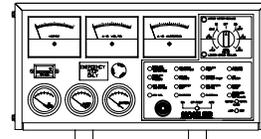
Diesel, Lph (gph) at % load	Standby Rating
100%	102.2 (27.0)
75%	81.0 (21.4)
50%	55.3 (14.6)
25%	29.5 (7.8)
Diesel, Lph (gph) at % load	Prime Rating
100%	92.7 (24.5)
75%	71.9 (19.0)
50%	49.2 (13.0)
25%	26.5 (7.0)

Controllers



Decision-Maker™ 550 Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Alternator safeguard circuit protection. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to G6-46 for additional controller features and accessories.



Decision-Maker™ 3+, 16-Light Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Microprocessor logic, AC meters, and engine gauge features. 12- or 24-volt engine electrical system capability. Remote start, prime power, and remote annunciation options. Refer to G6-30 for additional controller features and accessories.

Standard Features

- Alternator Protection (standard with 550 controller)
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Oil Drain Extension

Available Accessories

Enclosed Unit

- Sound Enclosure
- Weather Enclosure
- Weather Housing

Open Unit

- Exhaust Silencer, Hospital (kit: PA-354905)
- Exhaust Silencer, Critical (kit: PA-354880)
- Flexible Exhaust Connector, Stainless Steel

Cooling System

- Block Heater
- Radiator Duct Flange

Fuel System

- Flexible Fuel Lines
- Fuel Pressure Gauge
- Fuel/Water Separator with Prime Feature
- Hand Primer Pump
- Subbase Fuel Tanks
- Subbase Fuel Tank with Day Tank

Electrical System

- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater

Engine and Alternator

- Air Cleaner, Heavy Duty
- Air Cleaner Restriction Indicator
- Alternator Strip Heater
- Bus Bar Kits
- Crankcase Emission Canister
- Line Circuit Breaker (NEMA1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)
- Optional Alternators
- Rated Power Factor Testing
- Safeguard Breaker (not available with 550 controller)
- Skid End Caps

Paralleling System

- Reactive Droop Compensator
- Voltage Regulator Relocation Kit

Maintenance and Literature

- General Maintenance Literature Kit
- Maintenance Kit (includes air, oil, and fuel filters)
- NFPA 110 Literature
- Overhaul Literature Kit
- Production Literature Kit

Controller

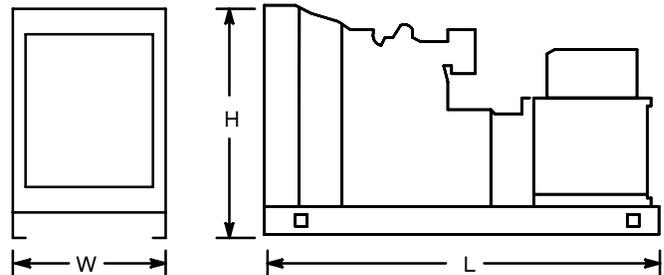
- Common Failure Relay Kit
- Communications Products and PC Software (550 controller only)
- Customer Connection Kit
- Dry Contact Kit (isolated alarm)
- Engine Prealarm Sender Kit
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel
- Remote Emergency Stop Kit
- Remote Mounting Cable
- Run Relay Kit

Miscellaneous Accessories

- _____
- _____
- _____
- _____
- _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.): 3680 x 1325 x 2008
 (144.9 x 52.2 x 79.0)
 Weight (radiator model), wet, kg (lb.): 3266 (7200)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

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