

ADDENDUM NO. 1

**CITY OF BELEN
WASTEWATER TREATMENT PLANT
BLOWER ADDITION
IFB NO. 2013-02**

TO: All Bidders

RE: City of Belen Wastewater Treatment Blower Addition

The following Addendum shall be incorporated into the Contract Documents for the referenced project.

A. DRAWINGS

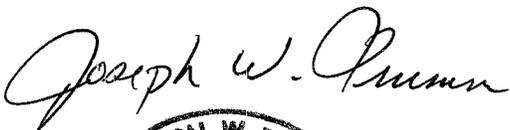
1. Sheet E-101; A revised Sheet E-101 is attached herein, replacing the original sheet.

B. All other provisions of the Contract Documents shall remain unchanged. This addendum is hereby made a part of the Contract Documents to the same extent as those contained in the original documents and all itemized listings thereof.

C. Each Bidder shall acknowledge receipt of this Addendum on the Bid Proposal form in the space provided.

TRUMM ENGINEERING

Joe Trumm, P.E.



4-15-13



REV. NO.	REV. DATE	DESCRIPTION
1	11/29/2012	ADDENDUM #1
2	01/03/2013	RE-BID
3	03/27/2013	RE-BID #2
4	04/15/2013	ADDENDUM #1

PROJECT NUMBER: 1226
 DESIGNED BY: HDN/RVM
 DRAWN BY: MEF/GAJ
 CHECKED BY: JCE
 PROJ. ENG.: NORMAN D. ESTANISLAO
 DATE: DECEMBER 20, 2012

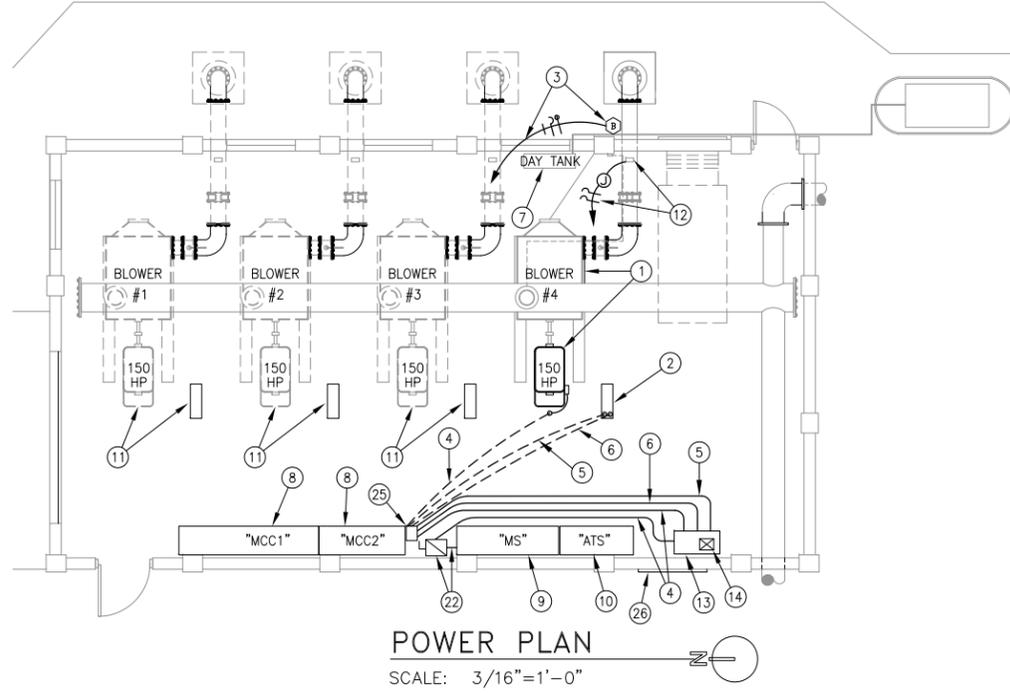
BLOWER ADDITION
 POWER PLAN
 WASTEWATER TREATMENT PLANT - BLOWER ADDITION
 CITY OF BELEN
 GRANT COUNTY, NEW MEXICO
 NOTICE OF EXTENDED PAYMENT PROVISION: THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

GENERAL NOTES

- ALL WIRING SHALL BE COPPER, #12 AWG MINIMUM.
- THE SCOPE OF WORK FOR THIS PROJECT INCLUDES THE INSTALLATION OF AN ADDITIONAL BLOWER SYSTEM (BLOWER #4) IN THE EXISTING BLOWER BUILDING. BLOWER #4 HAS A 150 HP, 480V, 3-PHASE BLOWER MOTOR. EXISTING CONDUIT STUB-OUTS WERE PROVIDED AS PART OF THE ORIGINAL CONSTRUCTION IN ANTICIPATION OF THE FUTURE INSTALLATION OF THIS BLOWER #4 SYSTEM. CONTRACTOR SHALL INSTALL BLOWER MOTOR #4 IN SIMILAR FASHION TO EXISTING BLOWER MOTORS. PROVIDE A NEW, STAND-ALONE MOTOR STARTER IN BLOWER BUILDING AS INDICATED, FIELD VERIFY EXACT LOCATION. "MCC2" WAS ORIGINALLY DESIGNED TO ACCEPT A MOTOR CONTROL CENTER EXPANSION SECTION, (MODEL 4 TYPE, WHICH IS NO LONGER MANUFACTURED) TO FEED BLOWER MOTOR #4. PROVIDE ALL POWER, CONTROL AND GROUND FAULT SYSTEM CONNECTIONS REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM. CONNECT NEW MOTOR STARTER TO SWITCHBOARD "MS" AS INDICATED, FIELD COORDINATE EXACT CONDUIT ROUTING. (THE CONTRACTOR IS GIVEN THE OPTION TO LOCATE AND INSTALL A VINTAGE SQ D MODEL 4 EXPANSION UNIT WITH APPROPRIATE STARTER PER ORIGINAL DESIGN). COORDINATE POWER OUTAGE REQUIRED TO PROVIDE POWER TAP TO MAIN SWITCHBOARD "MS" 5 DAYS IN ADVANCE WITH OWNER.
- EXISTING AS-BUILT RECORD ELECTRICAL DRAWINGS WILL BE MADE AVAILABLE TO THE CONTRACTOR TO ASSIST IN ENSURING THE INSTALLATION OF BLOWER #4 MATCHES THE QUALITY AND FUNCTION OF EXISTING BLOWERS #1, #2 AND #3.
- THE ORIGINAL GRAPHIC PANEL SYSTEM AT THIS FACILITY IS NON-FUNCTIONAL AND WILL NOT BE REPAIRED OR CONNECTED TO AS PART OF THIS WORK. ANY CONTROLS EQUIPMENT INSTALLED IN EXISTING BLOWERS #1, #2 AND #3 STARTER CUBICLES REQUIRED FOR THE DEFUNCT GRAPHIC SYSTEM ONLY SHALL BE OMITTED IN THE NEW STARTER CUBICLE FOR NEW BLOWER #4.
- THE EXISTING DIESEL FUEL TANK SHALL BE RELOCATED TO LOCATION SHOWN ON THIS DRAWING, EXTEND AND RECONNECT ALL CONTROLS WIRING AT REQUIRED FOR COMPLETELY OPERATIONAL SYSTEMS AS BEFORE.
- ELECTRICAL INFORMATION (SCHEMATICS, ETC.) FROM THE FACTORY WILL BE REQUIRED TO ENSURE PROPER WIRE SIZES FOR THE BLOWER AND RELATED EQUIPMENT.

KEYED NOTES

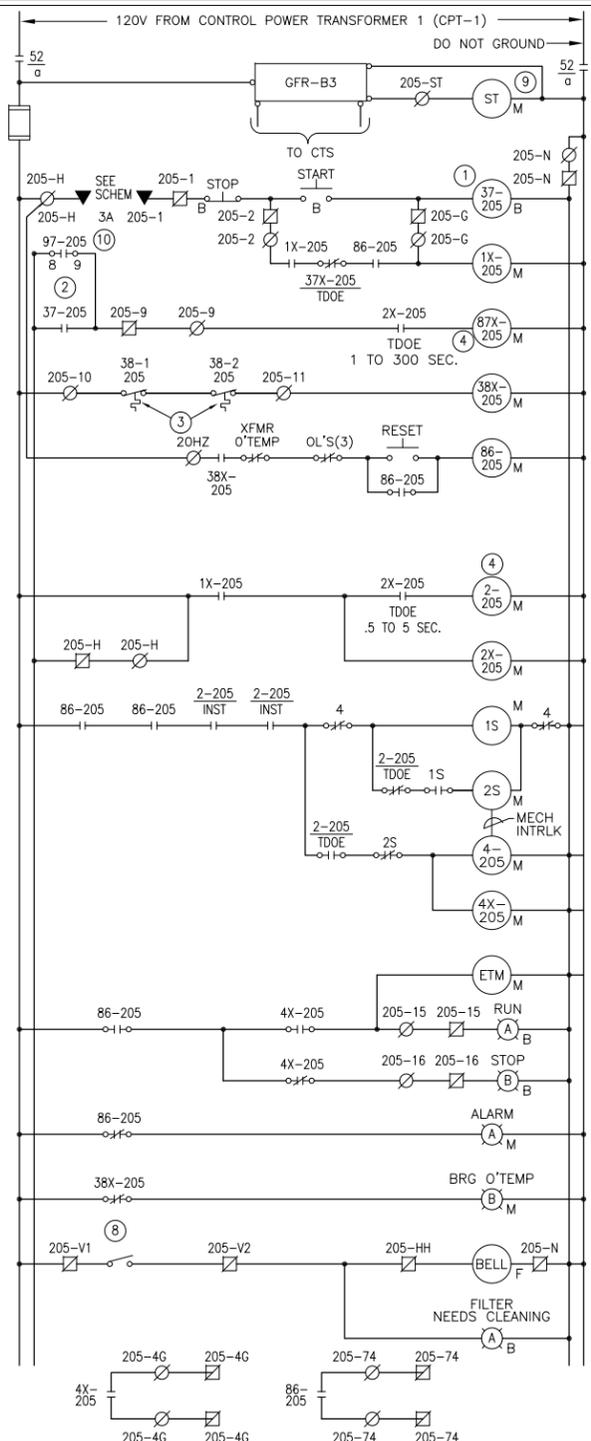
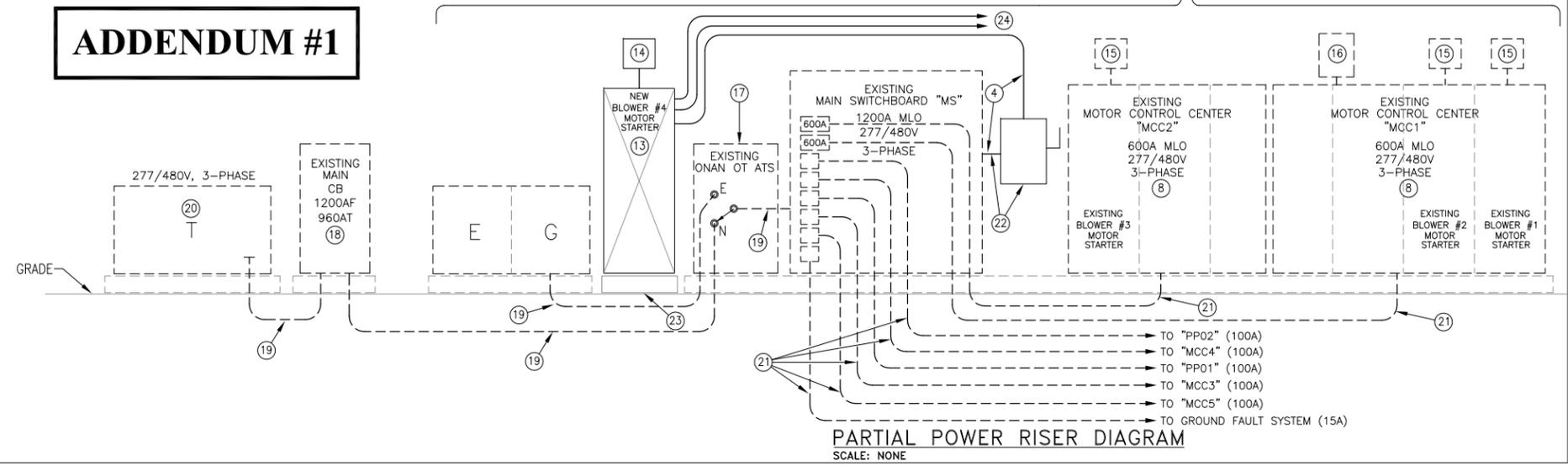
- NEW BLOWER #4, WITH 150 HP, 180 FLA, 480V, 3-PHASE MOTOR.
- NEW BLOWER CONTROL PANEL 4 FOR BLOWER #4. FABRICATE CONTROL PANEL TO MATCH EXISTING IN FUNCTION AND DISPLAY.
- NEW BELL FOR BLOWER #4 FILTER. EXTEND CONTROL WIRING TO CONTROL PANEL 4.
- #4/0 THW AND #2 E.G.R. IN 2.5" CONDUIT. CONNECT TO NEW 150 HP MOTOR AND STAND-ALONE NEMA SIZE 5 RVNR MOTOR STARTER AS INDICATED.
- #2 1/2 THW IN 1/2" CONDUIT. CONNECT TO MOTOR STARTER CONTROLS AS REQUIRED, REFER TO BLOWER NO. 4 (MOTOR 205) SCHEMATIC. ALL EXPOSED CONDUIT TO BE IMC MINIMUM.
- #12 THW IN 1" CONDUIT. CONNECT TO MOTOR STARTER CONTROLS AS REQUIRED, REFER TO BLOWER NO. 4 (MOTOR 205) SCHEMATIC. ALL EXPOSED CONDUIT TO BE IMC MINIMUM.
- RELOCATED DAY TANK EQUIPMENT. EXTEND AND REUSE EXISTING CONDUIT AND WIRING, RECONNECT AS REQUIRED FOR COMPLETE OPERATION AS BEFORE.
- EXISTING SQUARE D MODEL 4 MOTOR CONTROL CENTER TO REMAIN.
- EXISTING SQUARE D POWER-STYLE MAIN SWITCHBOARD TO REMAIN.
- EXISTING AUTOMATIC TRANSFER SWITCH TO REMAIN.
- EXISTING BLOWER MOTOR AND ASSOCIATED CONTROL PANEL TO REMAIN.
- VACUUM SENSOR TO DETECT VACUUM IN PIPE BETWEEN BLOWER INLET BVF AND ITS FILTER. EXTEND CONTROL WIRING TO CONTROL PANEL #4.
- PROVIDE NEW STAND-ALONE MOTOR STARTER FOR NEW 150 HP BLOWER #4 MOTOR. MOTOR STARTER SHALL BE NEMA SIZE 5 RVNR WITH AUTOTRANSFORMER GE MODEL #CR331CM411 OR APPROVED EQUAL, COMPLETE WITH HEATERS AND ALL CONTROLS, GROUND FAULT SENSING SYSTEM, 1-PHASE PROTECTION, AND ACCESSORIES REQUIRED TO MATCH THE EXISTING STARTER UNIT FUNCTIONS FOR EXISTING BLOWERS #1, #2 AND #3. REFER TO "MCC2" MOTOR CONTROL CENTER SCHEDULE. (NOTE: CONTRACTOR HAS OPTION TO INSTALL VINTAGE SQUARE D MODEL 4 MCC EXPANSION UNIT WITH COMPARABLE MOTOR STARTER, IF ONE CAN BE FOUND, AS MODEL 4 UNITS ARE NO LONGER MANUFACTURED AND MODEL 5 UNITS ARE TOO WIDE TO FIT IN AVAILABLE SPACE).
- PROVIDE NEW 30 KVAR, 480V, 3-PHASE CAPACITOR BANK AND CONNECT TO NEW MOTOR STARTER AS REQUIRED, MATCH EXISTING CAPACITOR BANK CONNECTIONS FOR BLOWER STARTERS #1, #2 AND #3.
- EXISTING 30 KVAR CAPACITOR BANK TO REMAIN.
- EXISTING 25 KVA DRY-TYPE TRANSFORMER WITH 120/240V, 1-PHASE SECONDARY TO REMAIN.
- EXISTING AUTOMATIC TRANSFER SWITCH (ATS) TO REMAIN.
- EXISTING PLANT MAIN CIRCUIT BREAKER TO REMAIN. VERIFY TRIP SETTING IS ADEQUATE TO ACCOMMODATE ADDITIONAL LOAD OF 180A.
- EXISTING 1140A SERVICE FEEDER TO REMAIN (PARALLEL (3) 3.5" CONDUITS EACH WITH 4 #500KCMIL AND 1 #3/0 E.G.R.).
- EXISTING PNM-OWNED SERVICE TRANSFORMER WITH 277/480V SECONDARY TO REMAIN.
- EXISTING FEEDER TO REMAIN.
- 400A, 480V, 3P+GB, FUSIBLE, HD, NEMA 1 DISCONNECT SWITCH. EXTEND 225A FEEDER TO SWITCHBOARD "MS" AND CONNECT TO MAIN BUSS, PROVIDE LUGS AS REQUIRED. ENSURE REQUIREMENTS OF 10-FOOT TAP RULE (NEC 240.21(B)(1)) ARE MET. FUSE SWITCH WITH 225A BUSS FR5-R FUSES.
- PROVIDE 6" THICK CONCRETE MAINTENANCE PAD. PROVIDE GRAY EPOXY POLYAMIDE COATING TO MATCH EXISTING FLOOR COATING
- EXTEND POWER AND CONTROLS TO BLOWER MOTOR #4. INTERCEPT AND EXTEND EXISTING CONDUIT STUB-OUTS AS SHOWN ON POWER PLAN.
- INTERCEPT AND EXTEND EXISTING POWER AND CONTROL CONDUITS STUBBED-OUT AT THIS LOCATION (2.5", 1/2", AND 1" CONDUITS). PROVIDE PULL-BOXES AS REQUIRED.
- 1/2" STEEL SHEET COVER ON LOUVERED OPENING. SCREWS AT 6" O.C. PAINT TO MATCH EXISTING EXTERIOR METAL. CAULK CONTINUOUS AROUND PERIMETER.



"MCC2" MOTOR CONTROL CENTER SCHEDULE																						
DESIGNATION: "MCC2" (EXISTING)		MODEL: SQUARE D MODEL 4		ENCLOSURE: NEMA 1		600A MAIN BUSS																
LOCATION: BLOWER BUILDING		DEVICE FAMILY: BOLT-ON		MOUNTING: SURFACE		300A VERTICAL BUSS																
FED FROM: MAIN PANEL "MS"		VOLTAGE: 277/480V, 3-PHASE, 4-WIRE		OVERCURRENT DEVICES AIC: 18,000		MCC AIC: 22,000																
UNIT NO.	MOTOR REF. NO.	UNIT NAMEPLATE		HP	FLA	STARTER	CB/MCP/SW	AUX. MS CONTACTS		CONTROL IN FIELD												
		FIRST LINE	SECOND LINE			SIZE	TYPE	OTHER DEVICES	FRAME	TRIP	STOP PB	START PB	HOA	RED	GREEN	AMBER	ETM	N.O.	N.C.			
1A	201	BLOWER NO. 3	STARTER	150	180	5	RVNR	BLUE PILOT	400A MCP	2000	-	-	-	-	-	-	-	1	1	2	1	BEARING OTEMP; BLOWER CONTROL PNL
2AL		PANEL BOARD LRP1	TRANSFORMER FEEDER						60A SW	60 2P												
2AR		PANEL BOARD LRP2	TRANSFORMER FEEDER						60A SW	60 2P												
2C		PANEL BOARD LRP2																				
2D			NO ENGRAVING																			
3A	202	SPRAY PUMP	STARTER	7.5	1				7A MCP	43	-	-	-	1	1	1	-	-	-	2	1	OFFON
3B	203	CLARIFIER NO. 2	STARTER	0.5	1				3A MCP	16	-	-	-	1	1	1	-	-	-	2	1	OFFON, OTORG CONTACTS WITH TEST & RESET PB
3C	204	CHLORINATION	BOOSTER PUMP 2 STARTER	5	1			OFFREMOTE	7A MCP	43	-	-	-	1	1	1	-	-	-	2	1	OFFON
3D			NO ENGRAVING																			
3E			INCOMING LINE																			
*4A	205	BLOWER NO. 4	STARTER	150	180	5	RVNR	BLUE PILOT	400A MCP	2000												BEARING OTEMP; BLOWER CONTROL PNL

NOTES:
 1.) EXISTING MOTOR CONTROL CENTER. NEW EQUIPMENT DENOTED BY BOLD TEXT.
 2.) IF POSSIBLE TO LOCATE VINTAGE SQ D GEAR: USE MCC2 EXPANSION PROVISIONS TO INSTALL MODEL 4 SECTION TO MCC2 TO ALLOW INSTALLATION OF BLOWER #4 STARTER.
 3.) IF STAND-ALONE MOTOR STARTER IS USED FOR BLOWER #4 MOTOR, STARTER SHALL HAVE SAME FUNCTIONALITY AS UNIT 4A NOTED ABOVE.

ADDENDUM #1



KEYED NOTES (BLOWER NO. 4 SCHEMATIC)

- METER RELAY SUPPLIED BY BLOWER MFR. SHALL BE CALIBRATED IN AMPS AND STANDARD CUBIC FEET PER MINUTE OF AIR FLOW. CONNECTIONS SHOWN HERE ARE FOR 120V CONTROL POWER TO METER ELECTRONICS.
- CONTACT OF METER RELAY. CONTACT SHALL CLOSE FOR "LOW SURGE" AND OPEN FOR NORMAL MOTOR LOADING & ON POWER LOSS CONTACT SHALL BE SET IN THE FIELD BY FACTORY REP. OF AERATION SYSTEM SUPPLIER.
- BEARING TEMP. SENSORS, PART OF BLOWER BEARINGS, ARE SUPPLIED BY BLOWER MANUFACTURER. CONTACT SHALL OPEN ON EXCESSIVE BEARING TEMP.
- TIME DELAY SHALL BE AS RECOMMENDED BY AERATION SYSTEM SUPPLIER.
- DELETED.
- DELETED.
- DELETED.
- VACUUM OPERATED SWITCH ON INLET PIPE.
- SHUNT TRIP ON MOTOR CIRCUIT BREAKER OR MCP.
- CONTACT SHALL CLOSE FOR A "MOTOR UNDERLOAD" CONDITION.
- CONTACT SHALL OPEN FOR A "MOTOR OVERLOAD" CONDITION.
- TIME DELAY RANGE SHALL COVER 1 TO 2 COMPLETE CYCLES OF OPERATION RANGE.