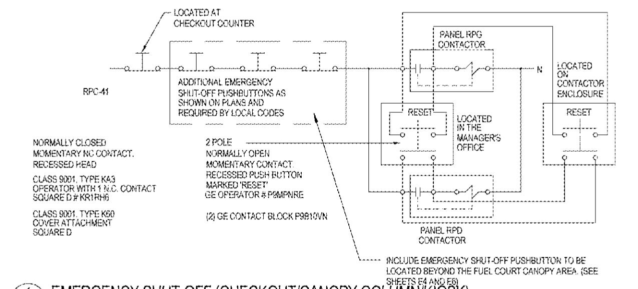
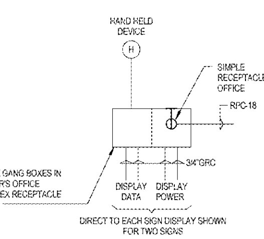


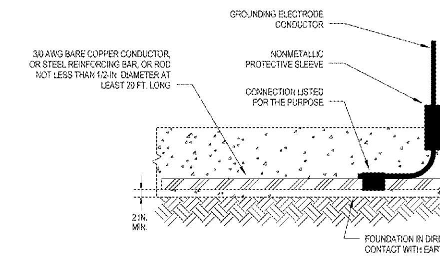
1 E7 EMERGENCY SHUT-OFF (CHECKOUT/CANOPY COLUMN/KIOSK)
NOT TO SCALE

PRICE CHANGING SIGN WIRING REQUIREMENTS:

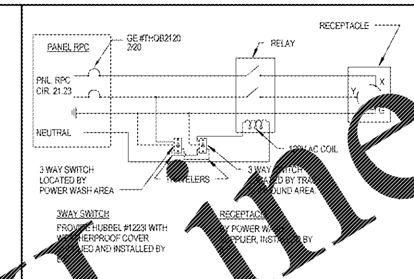
1. DEDICATED, 20 AMP CIRCUIT (MAX. CURRENT DRAW IS 350MA @ 120 VAC.)
2. PROVIDE SIMPLEX OUTLET IN MANAGER'S OFFICE FOR CONTROLLER LABELED "FOR I.D. SIGN CONTROLLER ONLY" (1) DEDICATED CIRCUIT AND OUTLET..
3. G.C. ELECTRICIAN TO RUN CONDUIT AND WIRES FOR POWER TO SIGN LOCATION PRIOR TO INSTALLATION AND MAKE FINAL CONNECTION TO SIGN AT THE TIME OF INSTALLATION SO SIGN CONTRACTOR CAN TEST FUNCTION OF SIGN AND REMOTE PRICE CHANGER.
4. INSTALL TWO 3/4"GRC TO EACH PRICE SIGN FROM SINGLE GANG BOXES IN MANAGERS OFFICE (1 POWER, 1 DATA). POWER IS FOR THE PRICE DISPLAYS AT THE SIGN.
5. MONUMENT SIGN LIGHTING CIRCUITS (PANEL LPA THRU CONTACTOR) SHALL NOT BE UTILIZED TO POWER PRICE DISPLAY LIGHTS (RPC-18 NOT THRU CONTACTOR).
6. MONUMENT SIGN LIGHTING AND DIRECTIONAL SIGNS SHALL BE ON DEDICATED CIRCUITS. SEE PANEL SCHEDULES SHEET E5. PANEL LPA



2 E7 Price Changing Sign
NOT TO SCALE



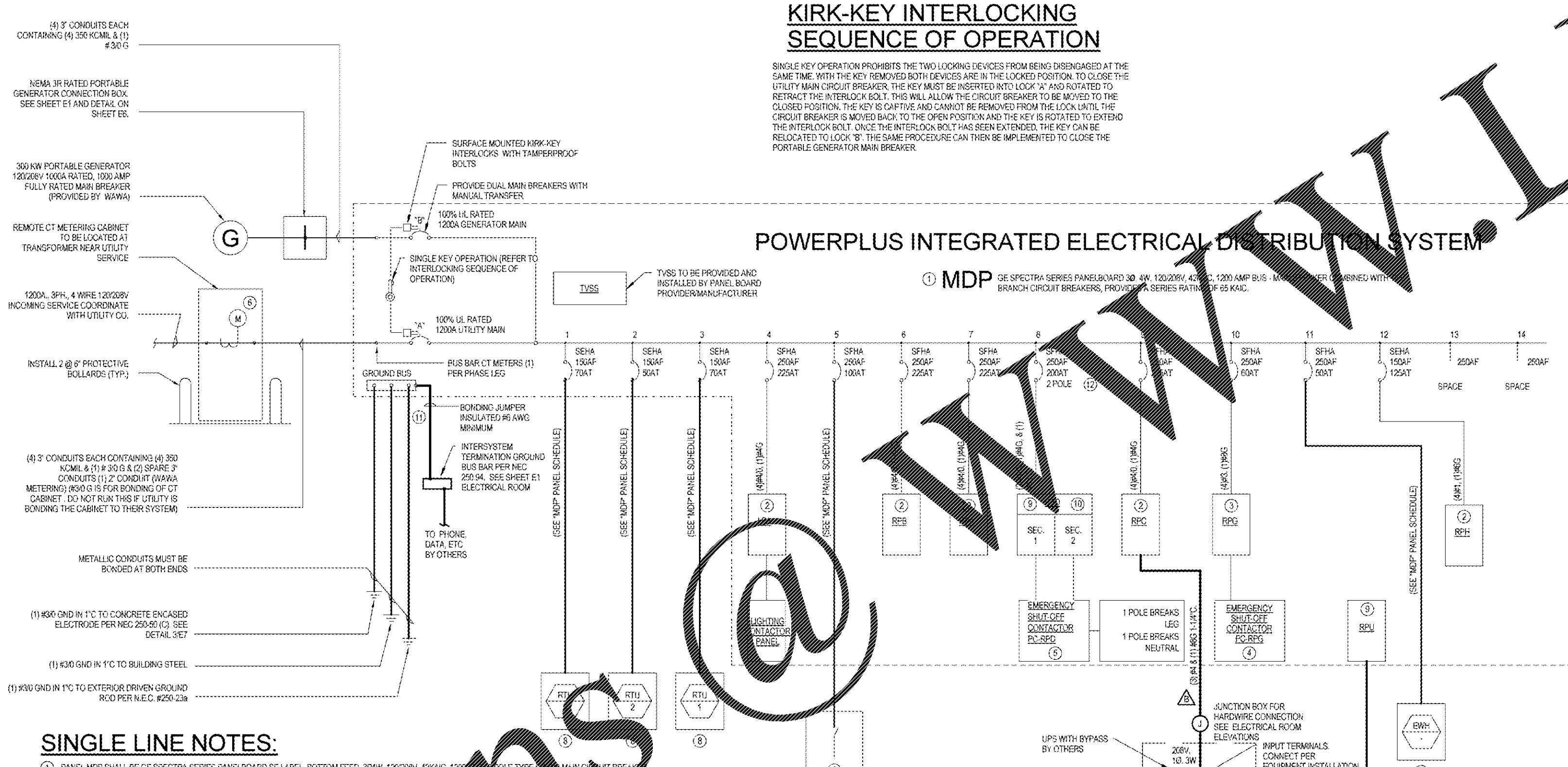
3 E7 Concrete Encased Electrode Detail
NOT TO SCALE

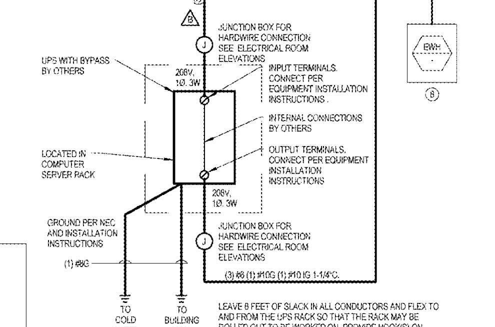


4 E7 POWER WASH WIRING DETAIL
NOT TO SCALE

KIRK-KEY INTERLOCKING SEQUENCE OF OPERATION

SINGLE KEY OPERATION PROHIBITS THE TWO LOCKING DEVICES FROM BEING DISENGAGED AT THE SAME TIME. WITH THE KEY REMOVED BOTH DEVICES ARE IN THE LOCKED POSITION. TO CLOSE THE UTILITY MAIN CIRCUIT BREAKER, THE KEY MUST BE INSERTED INTO LOCK "A" AND ROTATED TO RETRACT THE INTERLOCK BOLT. THIS WILL ALLOW THE CIRCUIT BREAKER TO BE MOVED TO THE CLOSED POSITION. THE KEY IS CAPTIVE AND CANNOT BE REMOVED FROM THE LOCK UNTIL THE CIRCUIT BREAKER IS MOVED BACK TO THE OPEN POSITION AND THE KEY IS ROTATED TO EXTEND THE INTERLOCK BOLT. ONCE THE INTERLOCK BOLT HAS BEEN EXTENDED, THE KEY CAN BE RELOCATED TO LOCK "B". THE SAME PROCEDURE CAN THEN BE IMPLEMENTED TO CLOSE THE PORTABLE GENERATOR MAIN BREAKER.





LEAVE 8 FEET OF SLACK IN ALL CONDUCTORS AND FLEX TO AND FROM THE UPS RACK SO THAT THE RACK MAY BE ROLLED OUT TO BE WORKED ON. PROVIDE HOOK(S) ON WALL ABOVE J-BOXES TO COIL UP EXTRA CABLING.

5 E7 SINGLE LINE DIAGRAM
NOT TO SCALE

SINGLE LINE NOTES:

1. PANEL MDP SHALL BE GE SPECTRA SERIES PANELBOARD SE LABEL, BOTTOM FEED, 3P4W, 120/208V, 42KAIC, 1200 ... POLE TYPE ... MAIN CIRCUIT BREAKER.
2. PANELS LPA, RPA, RPB, RPC AND RPH. SHALL BE GE TYPE AQ PANELBOARDS AS NOTED (TOP FEED, MAIN LUG ONLY).
3. PANEL RPG SHALL BE GE TYPE AQ FEED THROUGH PANELBOARD W... AMP. MAIN LUGS (TOP FEED) AS NOTED.
4. PC-RPG SHALL BE SQUARE D, 100 AMP, 3 POLE CONTACTOR, TYPE 8903SQ... DISCONNECTING OF FUEL PUMPING EQUIPMENT SHALL COMPLY WITH NEC 514.11.
5. PC-RPD SHALL BE SQUARE D. 200 AMP. 2 POLE EL... CONTACTOR TYPE 8903SVO1V... DISCONNECTING OF FUEL PUMPING EQUIPMENT SHALL COMPLY WITH NEC 514.11.
6. VERIFY ALL SHORT CIRCUIT RATINGS AND SERVICE REQUIREMENTS WITH UTILITY. ... PANELS TO BE ... RATED.
7. VERIFY ALL NAMEPLATE DATA AND INSTALL PER ... NOTIFY WAWA PROJECT MANAGER OF ANY DISCREPANCIES.
8. COORDINATE CIRCUIT PROTECTION REQUIREMENTS WITH CONTRACTOR SUPPLYING EQUIPMENT.
9. ALL EQUIPMENT FED FROM THIS PANEL SHALL BE SUPPLIED WITH AN INSULATED, ISOLATED EQUIPMENT SAFETY GROUND. THE INSULATED GROUND SHALL BE CONTINUOUS AND UNBROKEN FROM EQUIPMENT TO PANEL. PANEL RPD SHALL BE EQUIPPED WITH ISOLATED GROUND BUS BAR, PLUS AN EQUIPMENT GROUND BUS BAR THE ISOLATED GROUND ... WILL BE CONNECTED DIRECTLY TO MAIN DISTRIBUTION PANEL GROUND BUS WITH INSULATED GROUND WIRE.
10. PANEL RPD SHALL BE ... TYPE, AQ FEED THROUGH SINGLE ... 3 WIRE PANELBOARD (WIRED AS TWO WIRE), WITH 225A DUAL MAIN LUGS (TOP FEED) AS NOTED. ELECTRICAL CONTRACTOR SHALL INSTALL A JUMPER BETWEEN BOTH PHASE BUSES. PROVIDE SINGLE PHASE AND NEUTRAL FEEDER FROM MAIN DISTRIBUTION PANEL. ALL CIRCUITS FED FROM PANEL RPD SHALL BE DISCONNECTED BY EMERGENCY STOP EQUIPMENT PER METHOD GIVEN BY NEC 514.11.ELECTRICAL CONTRACTOR SHALL ... LAMINATED NAME PLATE INDICATING:

"GASOLINE DISPENSING EQUIPMENT ONLY. DO NOT INSTALL ANY ADDITIONAL CIRCUITS".

BONDIN AND GROUNDING OF NEUTRAL CONDUCTOR, GROUNDING ELECTRODE AND BONDING JUMPERS SHALL PERFORM AT THE MAIN DISTRIBUTION PANEL AS REQUIRED FOR SERVICE EQUIPMENT BY ARTICAL 250 OF THE NEC.

11. ... BREAKER INSTALLED. ONLY 1 POLE OF THE 2 POLE BREAKER REQUIRED TO BE WIRED. SEE PANEL SCHEDULE SHEET E5 FOR WIRING CONFIGURATION OF PANEL RPD.

LEGEND

(thin line)	PRE-WIRED BY HILL PHOENIX
(heavy line)	INSTALLED BY ELECTRICAL CONTRACTOR

ELECTRICAL CONTRACTOR SHALL PURCHASE POWERPLUS INTEGRATED ELECTRICAL DISTRIBUTION SYSTEM AND FROM HILL PHOENIX. CONTACT OTIS SMITH @ 800-518-6630 X3232 FAX #770-285-3252 FOR PRICING, DELIVERY AND INSTALLATION REQUIREMENTS.

GENERAL ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR SHALL FURNISH ALL LICENSES, PERMITS, ETC. REQUIRED TO PERFORM THE WORK. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE LANDLORD, LOCAL AUTHORITIES, THE UTILITY COMPANY, THE NATIONAL ELECTRICAL CODE AND ALL OTHER AUTHORITIES HAVING JURISDICTION. UPON COMPLETION OF WORK, ELECTRICAL CONTRACTOR SHALL FURNISH TO OWNER A CERTIFICATE OF APPROVAL ISSUED BY LOCAL AUTHORITIES OR BY AN ELECTRICAL INSPECTION AGENCY LICENSED BY LOCAL AUTHORITIES TO PERFORM SUCH INSPECTIONS. ALL ELECTRICAL ITEMS FURNISHED AND/OR INSTALLED BY ELECTRICAL CONTRACTOR SHALL BE UNCONDITIONALLY GUARANTEED FOR BOTH PARTS AND LABOR FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER. LIGHT BULBS AND LAMPS SHALL BE EXEMPT FROM THIS GUARANTEE, HOWEVER, ON THE DATE OF FINAL ACCEPTANCE BY OWNER, ALL LIGHT BULBS AND LAMPS SHALL BE IN WORKING ORDER. WHERE AN ITEM HAS BEEN FURNISHED BY OTHERS AND INSTALLED BY ELECTRICAL CONTRACTOR, ONLY THE INSTALLATION AND WIRING SHALL BE GUARANTEED BY ELECTRICAL CONTRACTOR; GUARANTEE ON THE ITEM SHALL BE PROVIDED BY THE PARTY FURNISHING THE ITEM.
2. GENERALLY, ALL WIRING SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT). SET SCREW FITTINGS MAY BEUSED IS AREAS NOT SUBJECT TO MOISTURE; USE WEATHERPROOF COMPRESSION FITTINGS IN ALL LOCATIONS SUBJECT TO MOISTURE. FINAL CONNECTIONS TO RECESSED LIGHTING FIXTURES, VIBRATING EQUIPMENT, ETC. SHALL BE MADE WITH FLEXIBLE METALLIC CONDUIT ("GREENFIELD") IN LENGTHS NOT TO EXCEED 5 FEET; WHERE SUCH CONNECTIONS ARE MADE IN LOCATIONS SUBJECT TO MOISTURE, USE WEATHERPROOF FLEXIBLE METALLIC CONDUIT ("SEALTITE") IN LENGTHS NOT TO EXCEED 5 FEET. IF PERMITTED BY LANDLORD AND LOCAL AUTHORITIES, CONCEALED BRANCH CIRCUIT WIRING MAY BE INSTALLED IN METALLIC CABLE ("MC"). MC CABLE SHALL BE INSTALLED IN A WORKMANLIKE MANNER. NO SUCH CABLE SHALL BE INSTALLED IN FRONT OF WALL OR PARTITION FROM CEILING SPACE DOWN INTO PANEL. SUCH CABLES SHALL BE INSTALLED WITHIN WALL OR PARTITION IF POSSIBLE. IF SUCH CABLES ARE INSTALLED IN FRONT OF WALL OR PARTITION, USE CONDUIT SLEEVES OR ENTER CABLES INTO A JUNCTION BOX INSTALLED ABOVE CEILING AND SPLICE ONTO WIRING INSTALLED IN CONDUIT DOWN INTO PANEL. IF LATTER METHOD IS USED, INSTALLATION MUST BE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE AMPACITY TABLES NOTE 8(A). FOR THIS PURPOSE, #12 AWG TYPE THHN WIRE SHALL BE RATED AT NOT MORE THAN 25 AMPERES. ALL EXPOSED WIRING, PANEL FEEDERS, HVAC EQUIPMENT FEEDERS, ETC. SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT). NO EXPOSED NON-METTALIC CABLE SHALL BE PERMITTED.
3. WIRING IN EARTH OR CONCRETE SHALL BE INSTALLED IN GRC CONDUIT, IMC CONDUIT OR PVC CONDUIT (SCHEDULE 40). EACH CONDUIT RUNNING OUT TO OR THRU THE GAS CANOPY OR TANKS AREA SHALL BE GRC FOR THE ENTIRE RUN OF CONDUIT. WHERE PVC CONDUIT IS USED, AN ADDITIONAL GROUND WIRE SHALL BE INSTALLED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. THERE SHALL BE NO EXPOSED PVC CONDUITS. ALL STUB UPS, EXTENSIONS ABOVE GRADE, ETC. SHALL BE IN METAL RACEWAY. USE GRC CONDUIT, IMC CONDUIT OR EMT. (THERE SHALL BE NO EMT INSTALLED IN CONTACT WITH EARTH OR CONCRETE.) ALL UNDERGROUND CABLE SHALL BE INSTALLED IN RACEWAY. NO DIRECT BURIAL CABLE OF ANY KIND SHALL BE USED UNLESS SPECIFICALLY NOTED. ALL UNDERGROUND WIRING SHALL BE INSTALLED AT DEPTHS AS PRESCRIBED BY THE NATIONAL ELECTRICAL CODE. WHERE REQUIRED BY THE N.E.C., INSTALL A CONCRETE ENVELOPE AROUND CONDUITS. FOR UNDERGROUND WIRING IN EXCESS OF 600 VOLTS, A CONTINUOUS WARNING RIBBON SHALL BE INSTALLED 24" ABOVE CONDUITS STATING "CAUTION BURIED HIGH VOLTAGE LINE BELOW". RIBBON SHALL BE DETECTABLE TYPE AND SHALL BE LEM PRODUCTS #DET-609 OR EQUAL. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING OF FINISHED SURFACES, EXCAVATION, CONCRETE ENVELOPES, TAMPING, BACKFIELD, ETC. REQUIRED FOR INSTALLATION OF UNDERGROUND WIRING. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES, FACILITIES, ETC. PRIOR TO STARTING ANY EXCAVATION. ELECTRICAL CONTRACTOR SHALL HAVE TOTAL RESPONSIBILITY FOR ANY DAMAGE DONE TO ANY EXISTING UNDERGROUND UTILITIES OR OTHER FACILITIES BY HIS WORK. COLORS AND FINISHES OF ALL SWITCHES, RECEPTACLES, DIMMERS, COVER PLATES, ETC. WILL BE SELECTED BY ARCHITECT. VERIFY ALL SUCH COLORS AND FINISHES PRIOR TO INSTALLING ANY WIRING DEVICES.
4. SWITCHES AND RECEPTACLES SHALL BE SPECIFICATION GRADE (NOT "COMMERCIAL GRADE"). ALL WIRING DEVICES SHALL BE RATED AT 20 AMPS AT THE VOLTAGE AT WHICH THEY WILL BE USED. WIRING DEVICES SHALL UTILIZE CLAMP TYPE TERMINALS. BACK WIRED "PRESSURE TYPE" INSERT TERMINALS ARE NOT ACCEPTABLE. SINGLE POLE SWITCHES SHALL BE HUBBELL #1221 SERIES (OR EQUAL); 3 WAY SWITCHES SHALL BE HUBBELL #1223 SERIES (OR EQUAL). FOUR WAY SWITCHES SHALL BE HUBBELL # 1224 SERIES (OR EQUAL). DUPLEX RECEPTACLES SHALL BE HUBBELL #5362 SERIES (OR EQUAL). DIMMERS SHALL BE AS SPECIFIED ON DRAWINGS. WHERE SWITCHES AND DIMMERS ARE SHOWN ADJACENT TO EACH OTHER, DO NOT INSTALL IN COMMON "GANG BOXES". SWITCHES MAY BE IN COMMON BOXES AND DIMMERS MAY BE IN COMMON BOXES. HOWEVER, IF SWITCHES AND DIMMERS ARE INSTALLED IN SAME COMMON BOX, COVER PLATES WILL NOT ALIGN PROPERLY. ALLOW 1" SPACE BETWEEN SWITCH BOXES AND DIMMER BOXES. CAUTION: USE SEPARATE NEUTRALS FOR EACH DIMMER CIRCUIT. USE OF A COMMON NEUTRAL MAY CAUSE DIMMERS TO MALFUNCTION. WHERE SWITCHES ARE SHOWN GANGED TOGETHER, LOCATIONS ARE DIAGRAMMATIC ONLY. ARRANGE SWITCHES IN ROWS AS FIELD CONDITIONS DICTATE.
5. ISOLATED GROUND CIRCUITS SHALL CONTAIN FULL SIZE, INSULATED, ISOLATED GROUND WIRE WHICH SHALL RUN DIRECTLY FROM RECEPTACLE GROUND TERMINAL TO THE SERVICE ENTANCE EQUIPMENT GROUND BUS IT SHALL BE CONNECTED AT NO OTHER POINT. WIRING FOR SUCH CIRCUITS SHALL NOT SHARE A NEUTRAL WITH NOR BE IN THE SAME CABLE OR RACEWAY WITH WIRING FOR ANY OTHER CIRCUIT. AT EACH LOCATION SHOWN, FURNISH AND INSTALL A 20 AMP, DUPLEX, ISOLATED GROUND RECEPTACLE IN PRECISE LOCATION AS DIRECTED IN FIELD. ISOLATED GROUND RECEPTACLES SHALL BE HUBBELL #IG5362 OR EQUAL. WHERE SUCH CIRCUITS ARE IN CLOSE PROXIMITY, ONE COMMON ISOLATED GROUND WIRE MAY BE INSTALLED TO SERVE TWO SUCH RECEPTACLES. HOWEVER, EACH RECEPTACLE SHALL CONTINUE TO BE SERVED BY A SEPARATE CIRCUIT AS SHOWN.
6. ALL WIRE/CONDUCTORS FOR THIS PROJECT SHALL BE COPPER REGARDLESS OF WIRING METHOD.

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PROJECT NAME
WAWA F85FB 2017.01 STORE #5254-OKE
OKEECHOBEE RD. & JENKINS RD.
FT. PIERCE, FLORIDA

SHEET TITLE
SINGLE LINE DIAGRAMS, DETAILS AND NOTES

Revision Schedule

No.	Description	Date
	PERMIT SET	06/24/2016
B	REV 2017.01	07/26/2017
	PRE-BID REVIEW SET	07/26/2017
	BID SET	08/30/2017

PROJECT NO. 2160209
DATE 08-30-2017
DRAWN MLB
CHECKED JPM

E7

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