



**WWTP Grit Removal System Replacement  
ADDENDUM NO. 1  
September 22, 2023**

**Answers to Questions Received**

1. Will the project be awarded if only one bid is submitted?  
*Answer: If only one bid is received, it is the intent for staff to recommend City Council to award a contract provided that the bid is within the budget.*
2. Is there a budget \$# for this project?  
*Answer: To preserve the integrity of the bidding process, the approved budget amount will not be disclosed at this time.*
3. Will a water service be required to new equipment?  
*Answer: Yes, per exhibit C, Section 1.5, B.2.d the equipment will require 20GPM @ 40 PSI.*
4. Can you provide an as-built drawing on electrical that is there now?  
*Answer: See attachment A-1 for as built wiring diagram.*
5. Can you provide an electrical drawing of what will be required?  
*Answer: Coordinate with equipment manufacturer for electrical requirements.*
6. Can you provide a complete equipment submittal with controls?  
*Answer: A full submittal will be completed at the time of order. Attachment A-3 is a general, for reference only, example of the control panel provided by Hydro-Dyne*
7. Will there be SCADA requirements be required? If so, can this be owner supplied?  
*Answer: There will be no SCADA requirements.*
8. Is there an electrical drawing showing control panel and components layout?  
*Answer: See answer to Question no. 5.*

9. Is there a one-line diagram showing where power will come from to feed control panel?  
**Answer: See Attachment A-2 power as-builts. The Contractor shall verify existing conditions in the field.**

10. Is there an electrical drawing that is dimensionalized so we can estimate wire and conduit lengths?

**Answer: The power for the grit chamber control panel comes from the press building motor control center (MCC) and can be shut off using a circuit breaker, the starters for the grit pump motors and the grit paddle motors are also located in the press building MCC.**

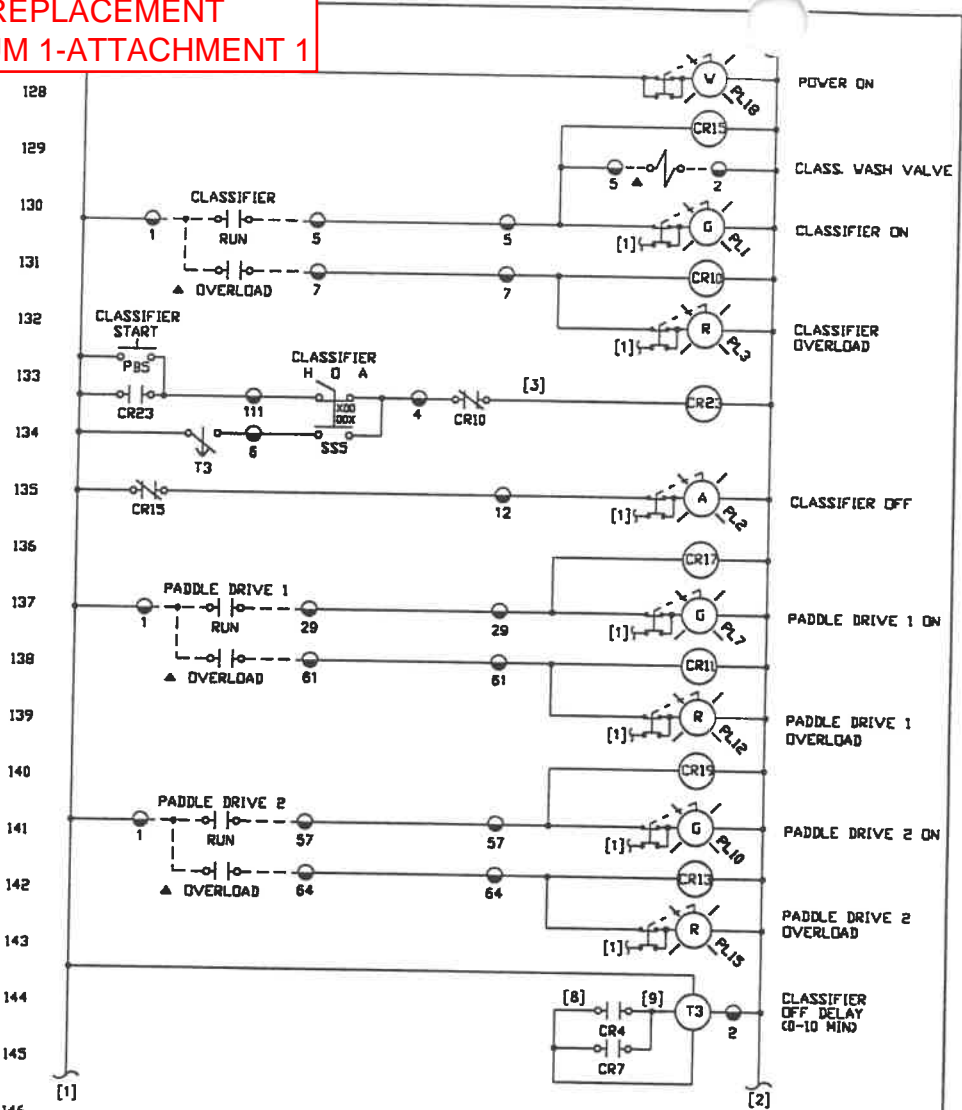
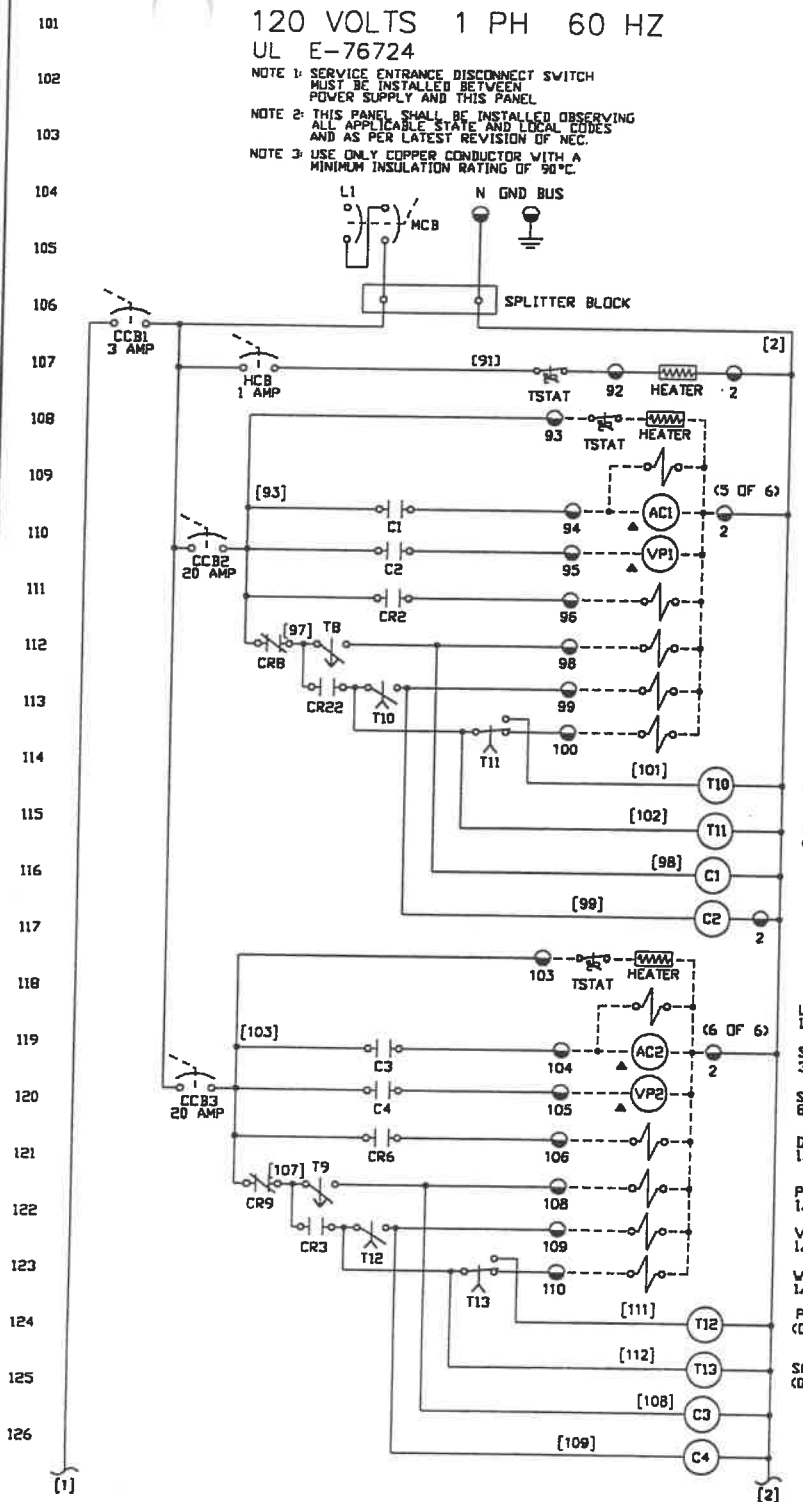
Note: This Addendum includes the following attachments:

A-1

A-2

A-3

**WWTP-GRIT REMOVAL  
SYSTEM REPLACEMENT  
ADDENDUM 1-ATTACHMENT 1**



DATE	REVISIONS
11/7/01	ORIGINAL PH
11/16/01	ADD LUBRICATOR/CLOSE DOWNSTREAM WHEN PUMP ON PH
4/12/02	AS BUILT PH

**TLC** TLC CONTROLS, MT. PROSPECT, IL

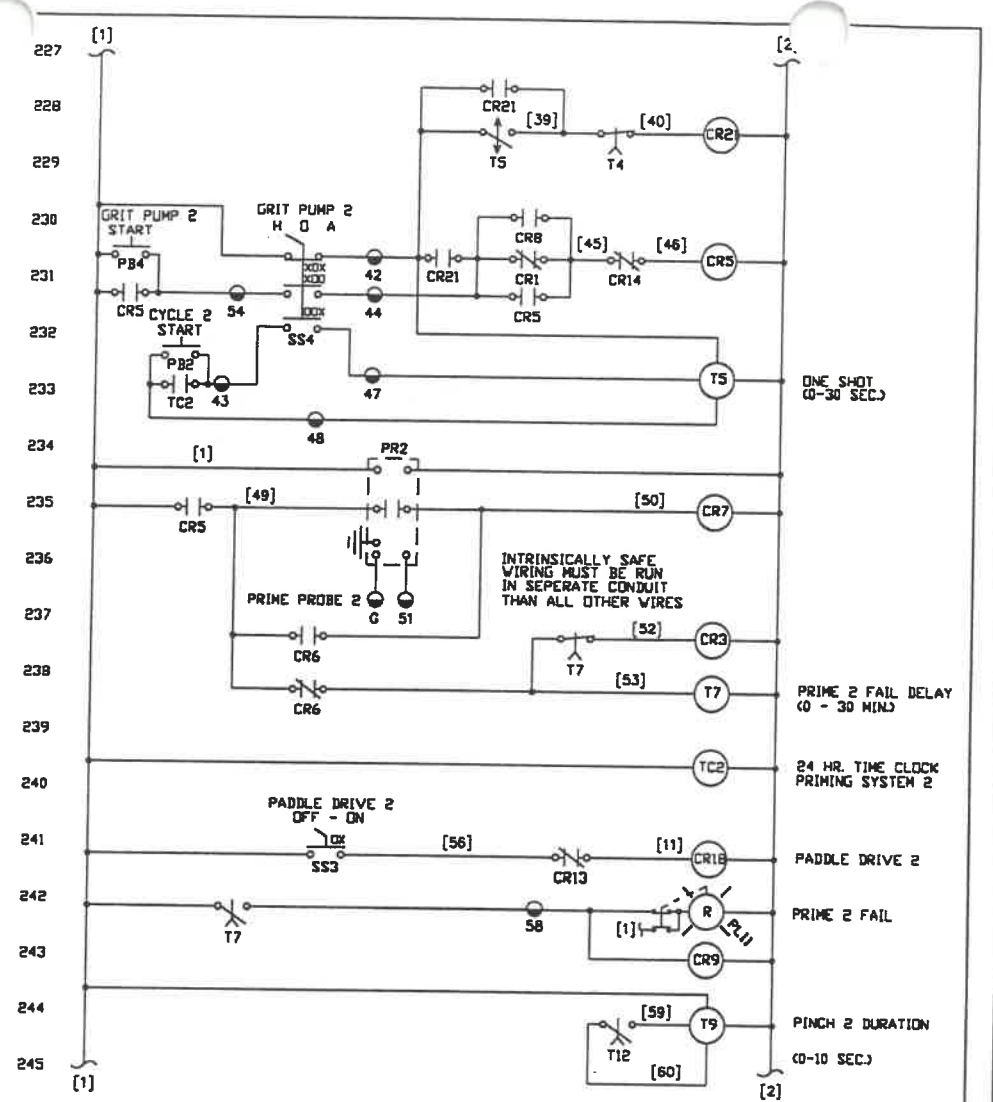
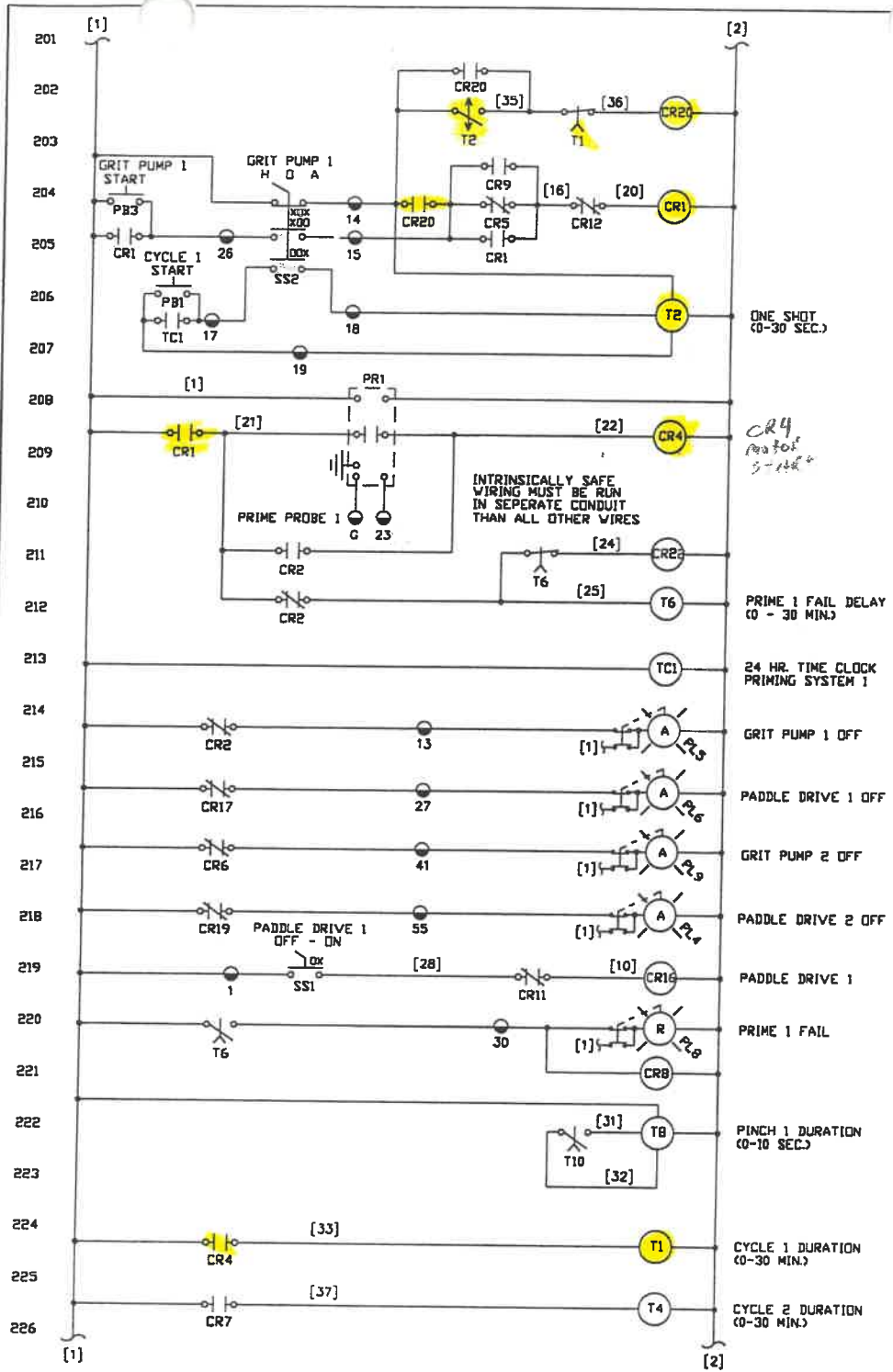
CUSTOMER: WASTE TECH INC.

CUSTOMER JOB NAME: WEST GEORGETOWN WWTP

CUSTOMER ORDER NO.: 60337  
TLC ORDER NO.: Q-26033

DRAWING NUMBER: WA110701TLC (1 OF 6)

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11/16/01	ADD LUBRICATOR/CLOSE DOWNSTREAM WHEN PUMP ON	PH
4/12/02	AS BUILT	PH

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CUSTOMER: WASTE TECH INC.

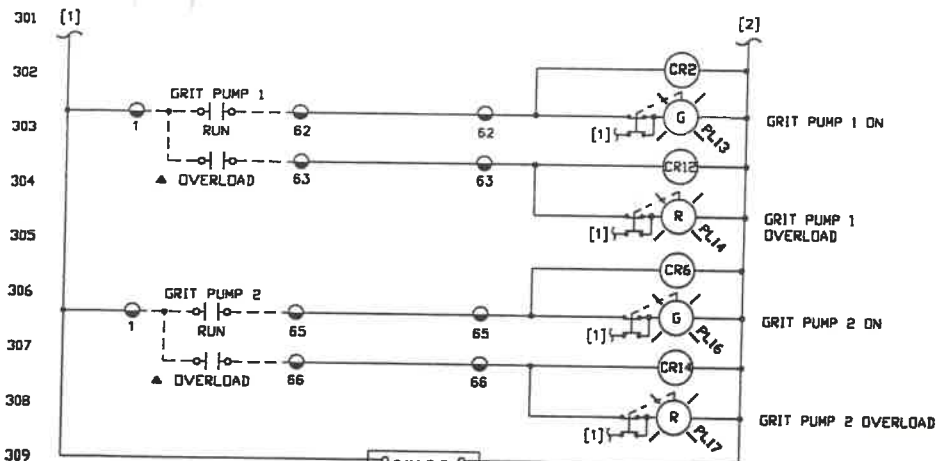
CUSTOMER JOB NAME: WEST GEORGETOWN WWTP

CUSTOMER ORDER NO.: 60337

TLC ORDER NO.: Q-26033

DRAWING NUMBER: WA110701TLC (2 OF 6)

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TERMINALS

- 1
- 2
- 4 SUB PANEL TO DOOR
- 5
- 6
- 7
- 12
- 13
- 14
- 15
- 17
- 18
- 19
- 26
- 27
- 28
- 29
- 30
- 41
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- 47
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- 61
- 62
- 63
- 64
- 65
- 66
- 111

- 67 GRIT PUMP 1 CALLED FOR
- 68
- 69 PADDLE DRIVE 1 CALLED FOR
- 70
- 71 GRIT PUMP 2 CALLED FOR
- 72
- 73 PADDLE DRIVE 2 CALLED FOR
- 74
- 75 CLASSIFIER CALLED FOR
- 76
- 77 CLASSIFIER OVERLOAD
- 78
- 79 PADDLE DRIVE 1 OVERLOAD
- 80
- 81 PADDLE DRIVE 2 OVERLOAD
- 82
- 83 GRIT PUMP 1 OVERLOAD
- 84
- 85 GRIT PUMP 2 OVERLOAD
- 86
- 87 PRIME 1 FAIL
- 88
- 89 PRIME 2 FAIL
- 90

- 2
  - 93 TO VACUUM PRIME PANEL 1
  - 94
  - 95
  - 96
  - 98
  - 99
  - 100
- 
- 2
  - 103 TO VACUUM PRIME PANEL 2
  - 104
  - 105
  - 106
  - 108
  - 109
  - 110

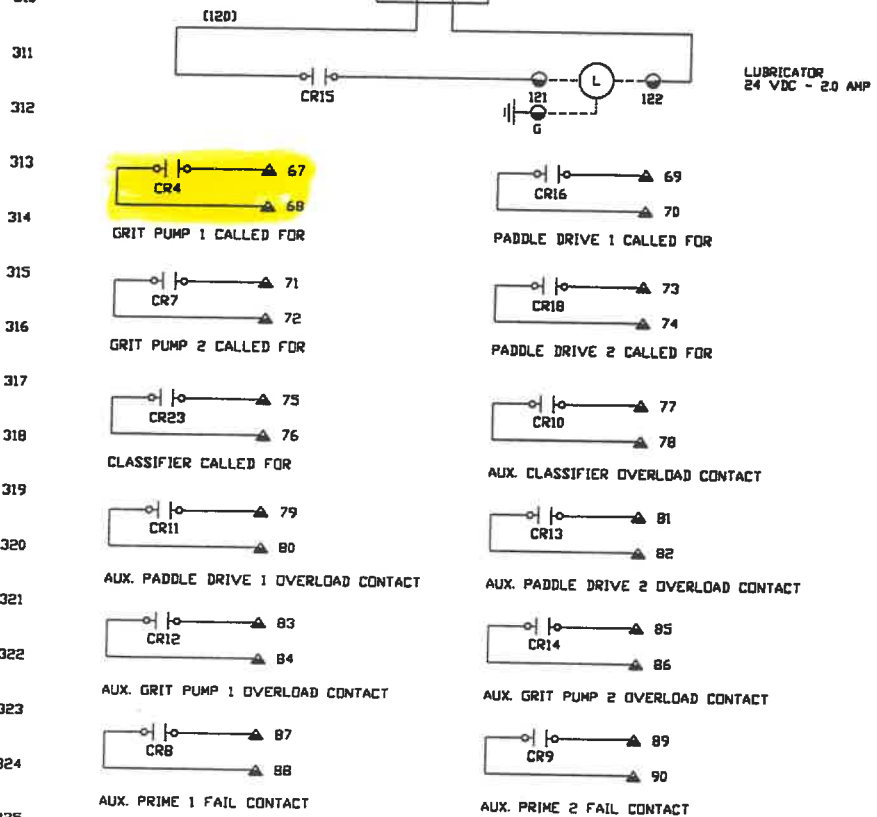
2 HEATER

- 1
- 5
- 2 CLASSIFIER/VALVE
- 3
- 5
- 7
- 1
- 29 PADDLE DRIVE 1
- 61
- 1
- 57 RUN/OVERLOAD
- 64
- 1
- 52 GRIT PUMP 1
- 63
- 1
- 65 GRIT PUMP 2
- 66

- G
- 23 PROBE 1
- 
- G
- 51 PROBE 2

INTRINSICALLY SAFE WIRING MUST BE RUN IN SEPARATE CONDUIT THAN ALL OTHER WIRES

- 121
- 122 LUBRICATOR
- G



DATE	REVISIONS
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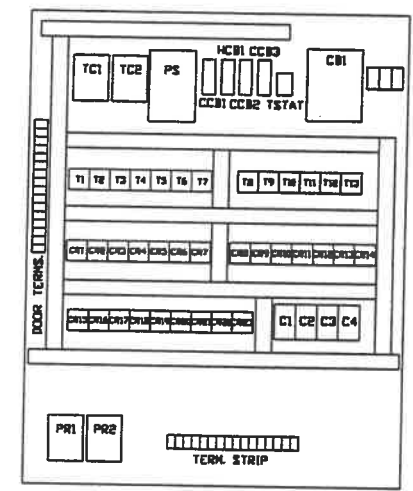
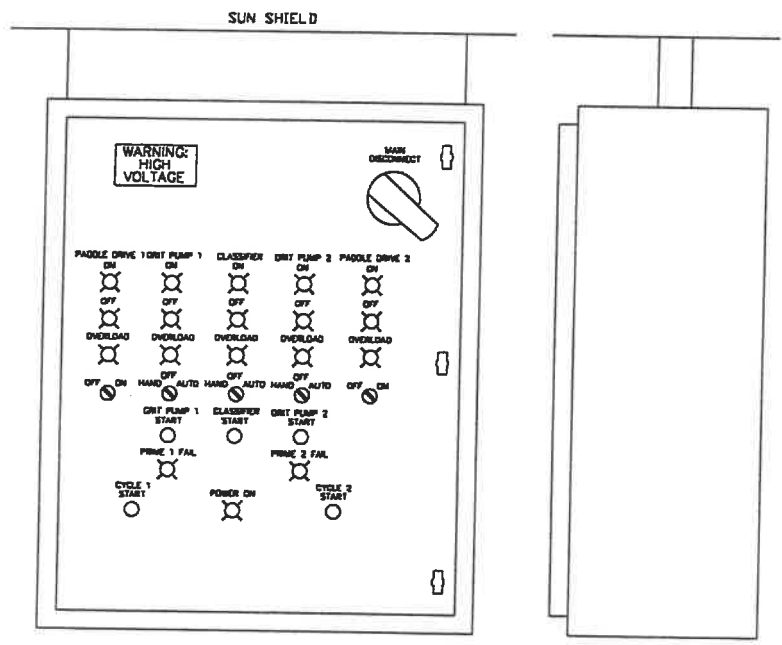
CUSTOMER ORDER NO.: 60337 TLC ORDER NO.: Q-26033

DRAWING NUMBER: WA110701TLC (3 OF 6)

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- MCB MAIN CIRCUIT BREAKER
- OCB OUTLET CIRCUIT BREAKER
- CCB CONTROL CIRCUIT BREAKER
- HCB HEATER CIRCUIT BREAKER
- CR CONTROL RELAY
- PL PILOT LIGHT
- SS SELECTOR SWITCH
- PB PUSH BUTTON
- T TIMER
- TC TIME CLOCK
- PR PROBE RELAY

◉ TERMINAL [16] WIRE NUMBER ▲ REMOTE DEVICE



36 X 30 X 8 NEMA 4X (STAINLESS STEEL) CABINET WITH CORROSION INHIBITORS

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4/12/02	AS BUILT	PH

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CUSTOMER: WASTE TECH INC.

CUSTOMER JOB NAME: WEST GEORGETOWN WWTP

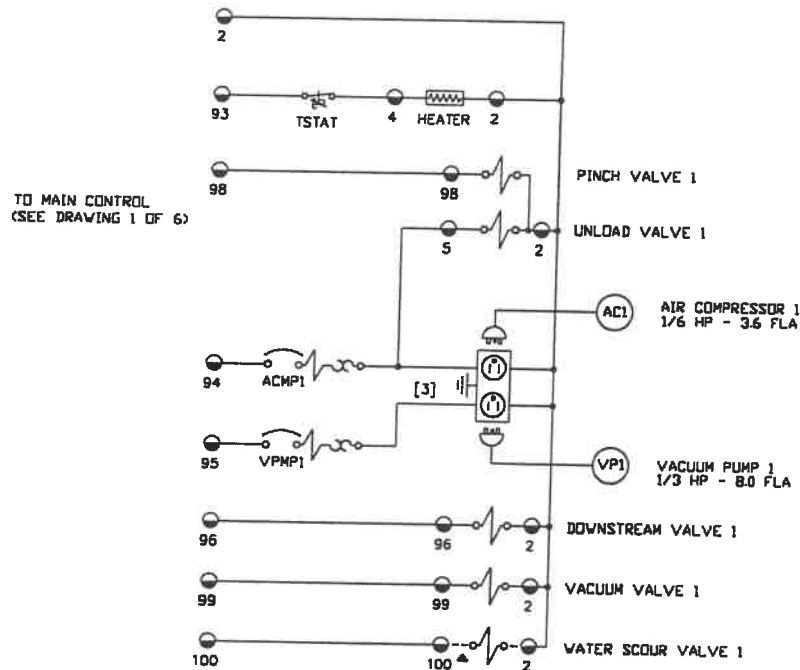
CUSTOMER ORDER NO.: 60337      TLC ORDER NO.: Q-26033

DRAWING NUMBER: WA110701TLC (4 OF 6)

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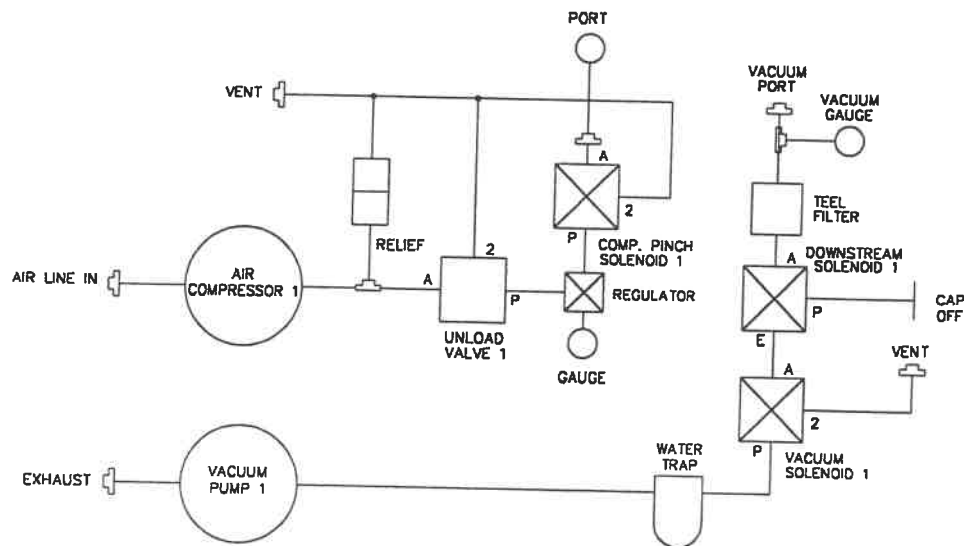
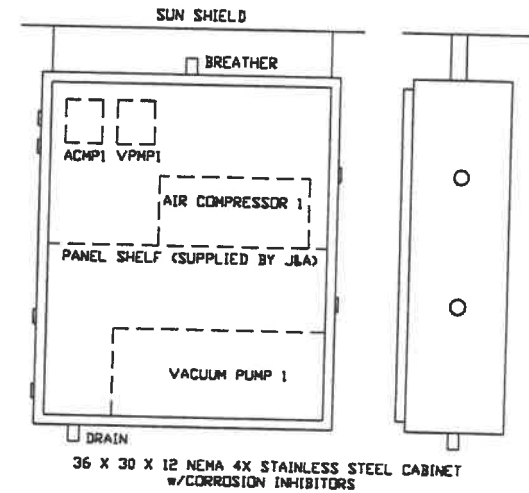
# 120 VOLTS 1 PH 60 HZ FROM CONTROL PANEL

- NOTE 1: SERVICE ENTRANCE DISCONNECT SWITCH MUST BE INSTALLED BETWEEN POWER SUPPLY AND THIS PANEL
- NOTE 2: THIS PANEL SHALL BE INSTALLED OBSERVING ALL APPLICABLE STATE AND LOCAL CODES AND AS PER LATEST REVISION OF NEC.
- NOTE 3: USE ONLY COPPER CONDUCTOR WITH A MINIMUM INSULATION RATING OF 90°C.



### TERMINALS

2	TO CONTROL PANEL
93	
94	
95	
96	
98	PINCH VALVE 1
2	
99	UNLOAD VALVE 1
5	
99	VACUUM VALVE 1
2	DOWNSTREAM VALVE 1
96	
4	HEATER
2	



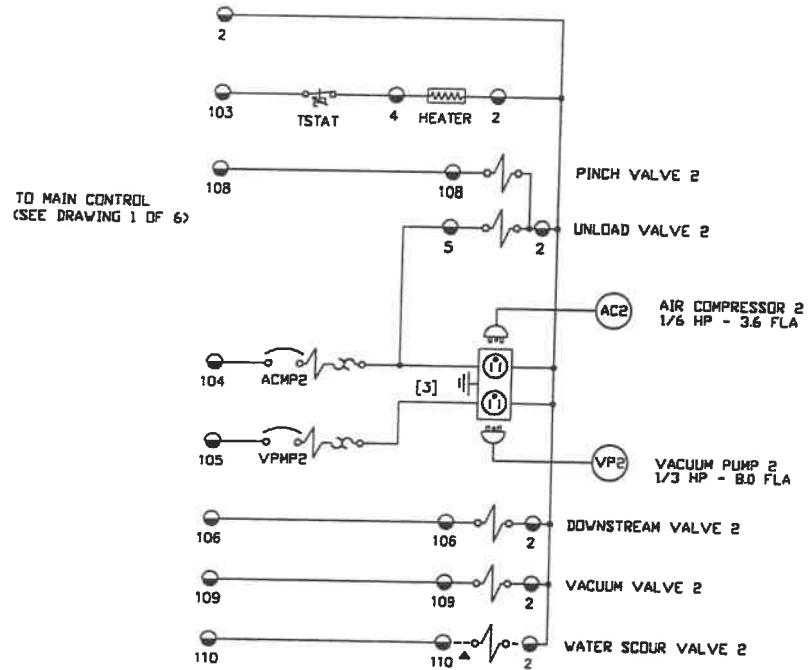
DATE	REVISIONS
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4/12/02	AS BUILT PH

<b>TLC</b> TLC CONTROLS, MT. PROSPECT, IL	
CUSTOMER:	WASTE TECH INC.
CUSTOMER JOB NAME:	WEST GEORGETOWN WWTP
CUSTOMER ORDER NO.:	60337
TLC ORDER NO.:	Q-26033
DRAWING NUMBER:	WA110701TLC (5 OF 6)

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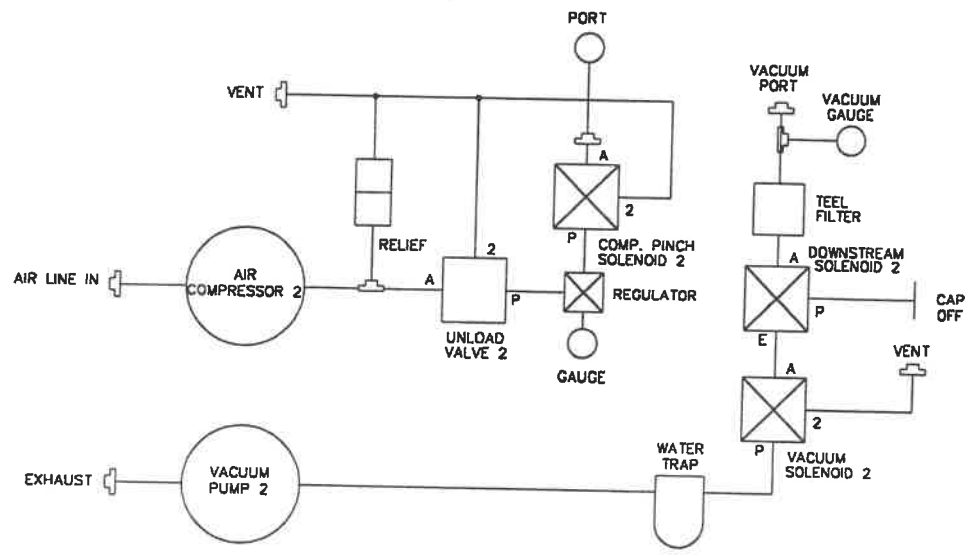
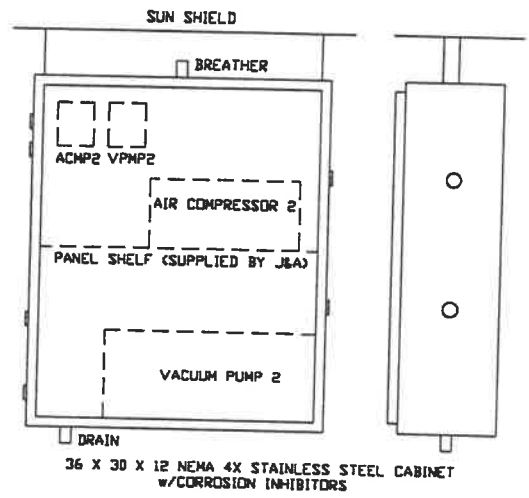
# 120 VOLTS 1 PH 60 HZ FROM CONTROL PANEL

- NOTE 1: SERVICE ENTRANCE DISCONNECT SWITCH MUST BE INSTALLED BETWEEN POWER SUPPLY AND THIS PANEL
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### TERMINALS

- 2 TO CONTROL PANEL
- 103 TO CONTROL PANEL
- 104 TO CONTROL PANEL
- 105 TO CONTROL PANEL
- 106 TO CONTROL PANEL
- 108 ---
- 109 ---
- 110 WATER SCOUR VALVE 2
- 108 PINCH VALVE 2
- 5 UNLOAD VALVE 2
- 109 VACUUM VALVE 2
- 106 DOWNSTREAM VALVE 2
- 4 HEATER
- 2



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CUSTOMER JOB NAME: WEST GEORGETOWN WWTP

CUSTOMER ORDER NO.: 60337

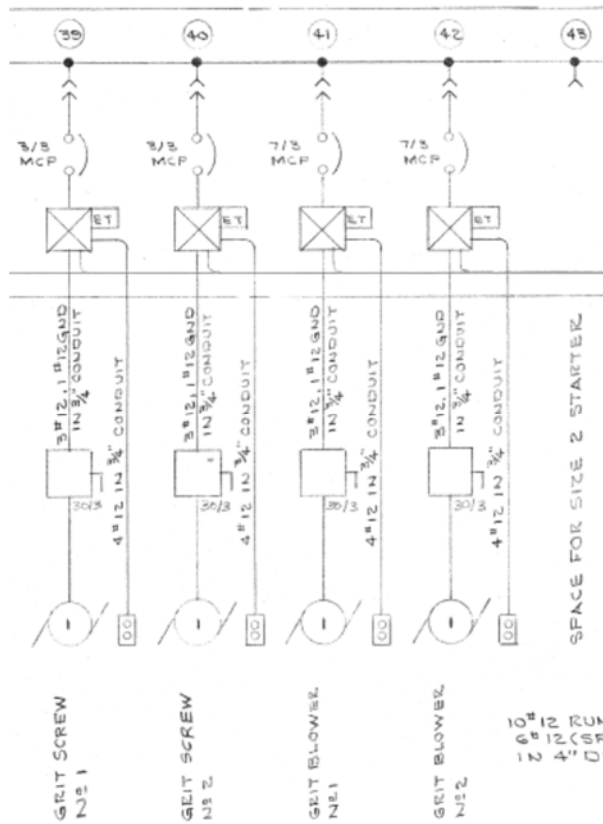
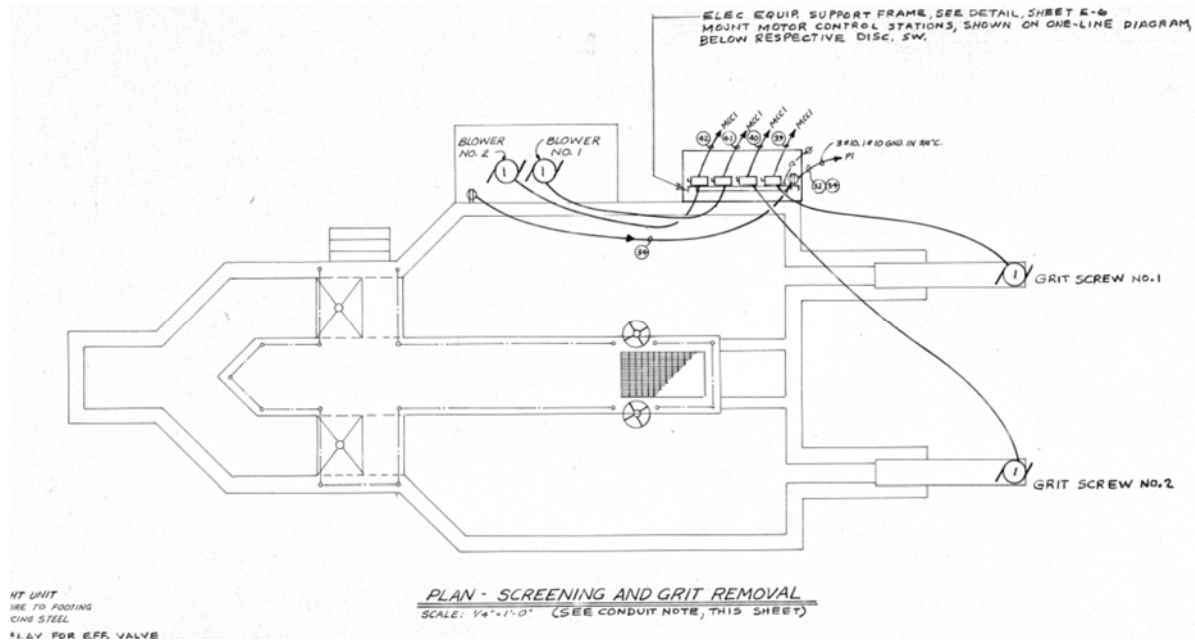
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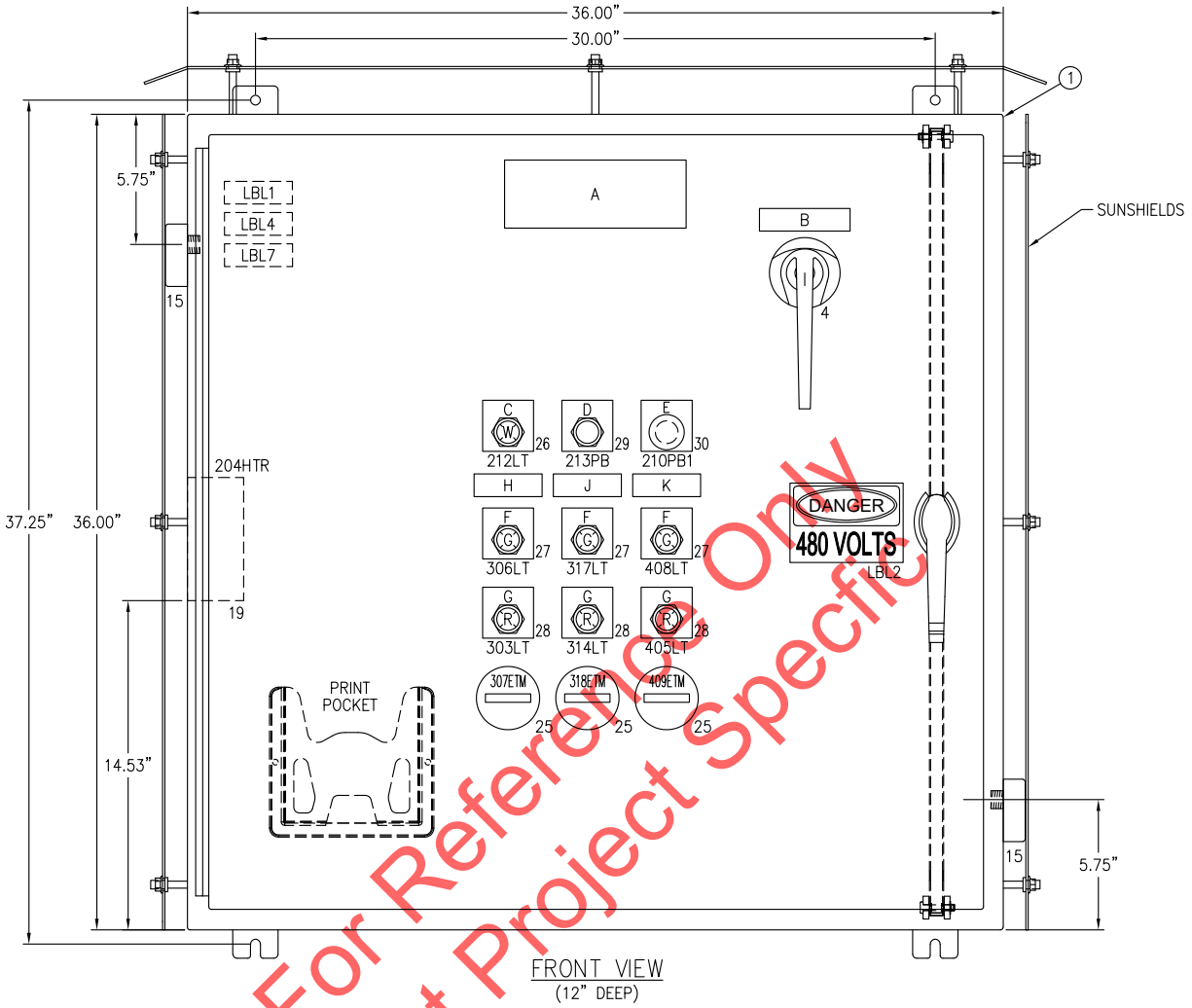


**WWTP - CITY OF GEORGETOWN**  
**GRIT REMOVAL SYSTEM REPLACEMENT**  
**Addendum 1- Attachment 2**



**GRIT CHAMBER ELECTRICAL AND ONE-LINE DIAGRAM AS-BUILT**

**WWTP-GRIT REMOVAL SYSTEM  
 REPLACEMENT  
 ADDENDUM 1-ATTACHMENT 3**



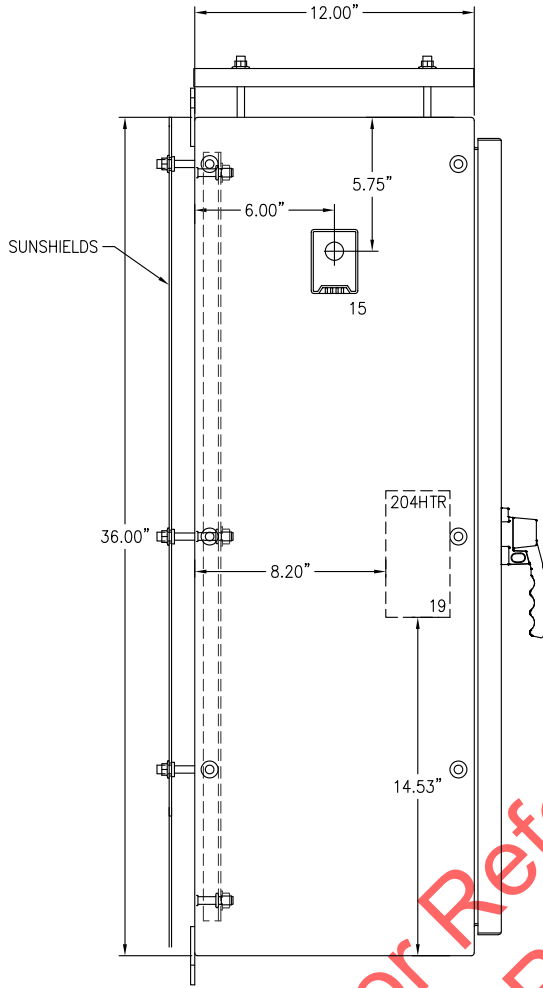
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 Not Project Specific

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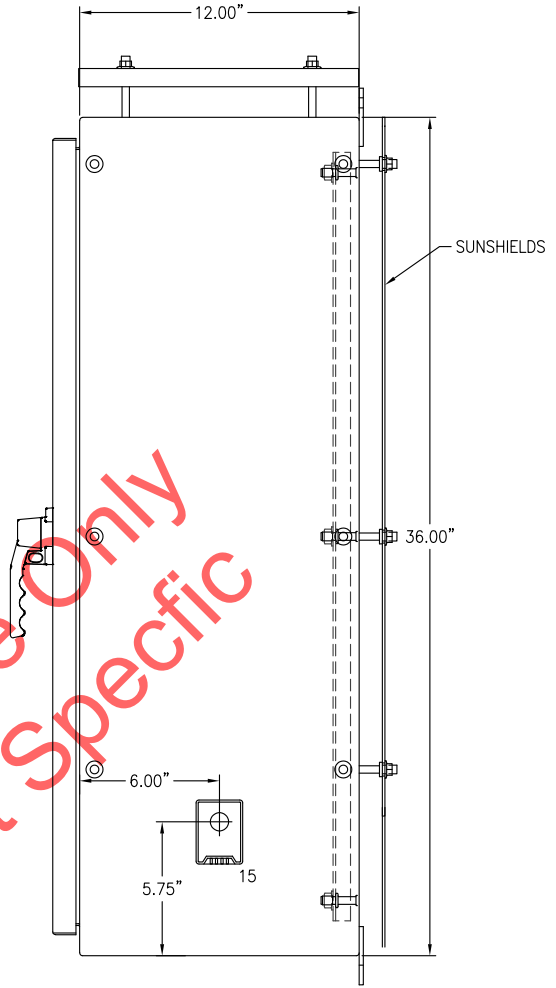
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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LEFT SIDE VIEW



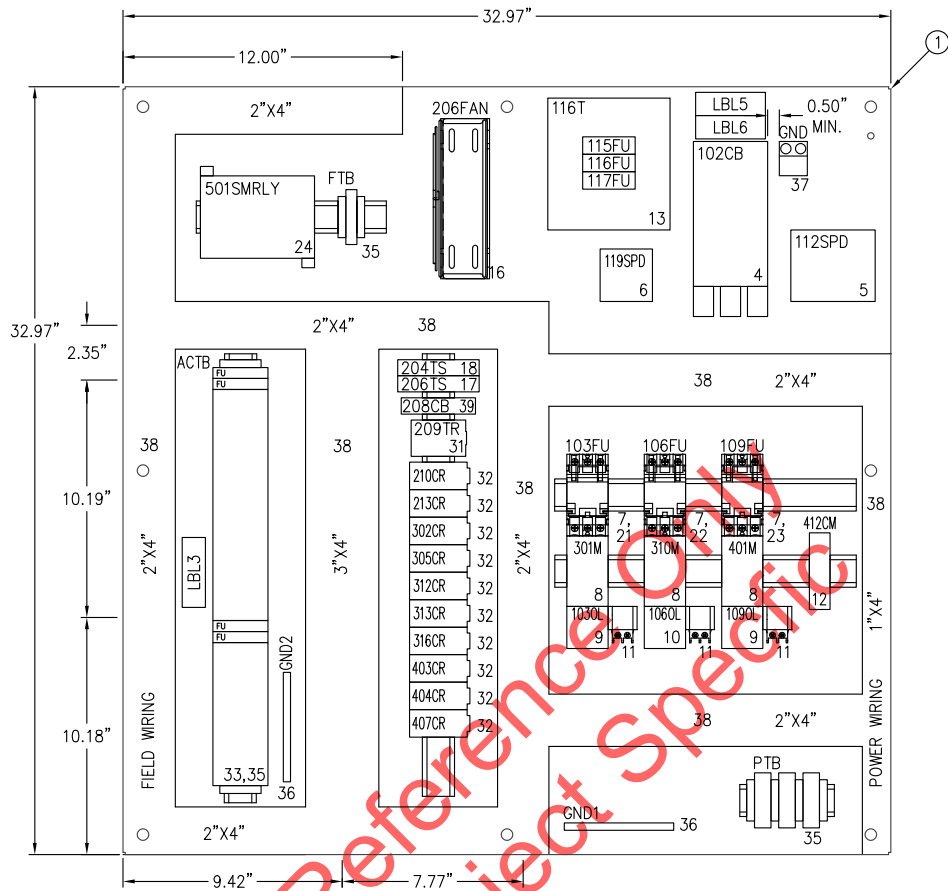
RIGHT SIDE VIEW

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TOLERANCE  
.X ± .030  
.XX ± .015  
.XXX ± .005  
.XXXX ± .0005

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SUBPANEL LAYOUT

For Reference Only  
Not Project Specific

UNLESS NOTED

TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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**CONTROL PANEL BILL OF MATERIAL**

△

ITEM	QTY	MFG	CATALOG	DESCRIPTION
1	1	SCHAEFER'S	SPN4SS-363612-056	ENCLOSURE, 36" H x 36" W x 12" D, NEMA 4X, WALL MOUNT, 3-POINT LATCH, 304SS, WHITE, SUNSHIELDS ON TOP, BACK, AND SIDES
	1	SCHAEFER'S	SPP-3636	SUBPANEL, 33" x 33"
	4	HOFFMAN	AHC110E	CORROSION INHIBITOR EMITTERS
2		(NOT USED)		
3		(NOT USED)		
4	1	SQUARE D	BDL36020	CIRCUIT BREAKER, 3 POLE, 480 VAC, 20 AMP
	1	SQUARE D	LV426963	COMPRESSION LUGS
	1	SQUARE D	LV426912	LUG SHIELD
	1	SQUARE D	PDC6BD6	DISTRIBUTION LUGS, (6) 6-14 AWG
	1	SQUARE D	9421LB7	OPERATING MECHANISM
	1	SQUARE D	9421LS13	SHAFT
	1	SQUARE D	9421LH46	ROTARY BREAKER HANDLE, NEMA 12, 6 INCH
5	1	SQUARE D	SDSA4040D	SURGE PROTECTION DEVICE, 3-PHASE, 480 VAC
	1	SQUARE D	QOSAMK	SURGE PROTECTION DEVICE MOUNTING BRACKET
6	1	SQUARE D	SDSA1175T	SURGE PROTECTION DEVICE, 1-PHASE, 120 VAC
	1	SQUARE D	QOSAMK	SURGE PROTECTION DEVICE MOUNTING BRACKET
7	3	SQUARE D	LS1D30	FUSE HOLDER, 30 AMP, TESYS MOUNT, CLASS CC FUSES
8	3	SQUARE D	LC1D09G7	MOTOR STARTER CONTACTOR, NON-REVERSING, IEC, 9 AMP, 5 HP, 120 VAC COIL
9	2	SQUARE D	LRD07	OVERLOAD RELAY, IEC, 1.6-2.5 AMP
10	1	SQUARE D	LRD12	OVERLOAD RELAY, IEC, 5.5-8 AMP
11	3	SQUARE D	LAD703F	REMOTE OVERLOAD RESET, 120 VAC
12	1	CARLO GAVAZZI	DIB01CM24100A	CURRENT MONITOR RELAY, 120VAC, SPDT, 2-100 AMP
13	1	SQUARE D	9070TF750D1	CONTROL POWER TRANSFORMER, 750 VA, 240/480 - 120 VAC
	1	SQUARE D	9070FSC2	TRANSFORMER FINGER-SAFE COVERS
	1	SQUARE D	9070FP1	TRANSFORMER FUSE PULLERS
	6	BUSSMANN	FNQ-R-4	FUSE, 4 AMP, TIME-DELAY, 600 VAC (4 SPARE)
	5	BUSSMANN	FNM-10	FUSE, 10 AMP, TIME-DELAY, 250 VAC (4 SPARE)
14		(NOT USED)		
15	2	STAHLIN	BV4XKIT	BREATHER VENT, NEMA 4X
16	1	HOFFMAN	A6AXFN	CIRCULATION FAN, 6.00", 120 VAC, 240 CFM
	1	HOFFMAN	AGARD6	FINGER FAN GUARD, 6.00"
	1	HOFFMAN	ABRKT6	FAN BRACKET, 10.00" x 6.88" x 2.00"
17	1	FINDER	7T.81.0.000.2301	TEMPERATURE SWITCH, N.O. CONTACT, -4F TO 104F
18	1	FINDER	7T.81.0.000.2401	TEMPERATURE SWITCH, N.C. CONTACT, -4F TO 104F
19	1	FINDER	7H.51.0.230.0100	ENCLOSURE HEATER, 120VAC, 100 WATTS
20		(NOT USED)		
21	6	BUSSMANN	FNQ-R-5	FUSE, 5 AMP, TIME-DELAY, 600 VAC (3 SPARE)
22	6	BUSSMANN	FNQ-R-20	FUSE, 20 AMP, TIME-DELAY, 600 VAC (3 SPARE)
23	6	BUSSMANN	FNQ-R-7	FUSE, 7 AMP, TIME-DELAY, 600 VAC (3 SPARE)
24	1	SQUARE D	SR3B261FU	ZELIO SMART RELAY, 120 VAC, 16 INPUTS, 10 OUTPUTS
	1	SQUARE D	SR2MEM02	ZELIO EEPROM MEMORY CARTRIDGE

△ DENOTES ITEM SHIPPED LOOSE

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Not Project Specific

UNLESS NOTED	
TOLERANCE	
.X	± .030
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.XXX	± .005
.XXXX	± .0005



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CONTROL PANEL BILL OF MATERIAL

ITEM	QTY	MFG	CATALOG	DESCRIPTION
25	3	ENM	T50B212	ELAPSED TIME METER, 120 VAC, NEMA 4X
26	1	SQUARE D	9001SKT38LWW31	PILOT LIGHT, WHITE, 120 VAC, PUSH-TO-TEST, 30mm, NEMA 4X
27	3	SQUARE D	9001SKT38LGG31	PILOT LIGHT, GREEN, 120 VAC, PUSH-TO-TEST, 30mm, NEMA 4X
28	3	SQUARE D	9001SKT38LRR31	PILOT LIGHT, RED, 120 VAC, PUSH-TO-TEST, 30mm, NEMA 4X
29	1	SQUARE D	9001SKR1BH2	PUSHBUTTON, BLACK, MOMENTARY, FLUSH HEAD, 2 NO - 2 NC, 30mm, NEMA 4X
30	1	SQUARE D	9001SKR9RH13	PUSHBUTTON, RED, PUSH-PULL MAINTAINED, MUSHROOM HEAD, 1 NO - 1 NC, 30mm, NEMA 4X
31	1	IDEC	RTE-P1AF20	TIMER RELAY, DPDT, 120 VAC, 8-PIN
	1	IDEC	SR2P-06	TIMER RELAY BASE, 8-PIN
32	10	IDEC	RU4S-C-A110	CONTROL RELAY, 4PDT W/ IND LIGHT, 120 VAC, 6 AMP CONTACTS
	10	IDEC	SY4S-05	RELAY SOCKET
33	4	WEIDMULLER	1014300000	TERMINAL BLOCK, WSI 6/2/LD, 60-150V AC/DC, 1/4" x 1-1/4", 20-8 AWG
	7	BUSSMANN	MDL-2	2 AMP FUSE, TIME-DELAY, 250V, 1/4" x 1-1/4" (5 SPARE)
	7	BUSSMANN	MDL-1	1 AMP FUSE, TIME-DELAY, 250V, 1/4" x 1-1/4" (5 SPARE)
34		(NOT USED)		
35	79	WEIDMULLER	1020100000	TERMINAL BLOCK, WDU 4, BEIGE, 600V, 22-10 AWG
	4	WEIDMULLER	1050000000	TERMINAL BLOCK END PLATE, WAP 2.5-10, BEIGE
	9	WEIDMULLER	0383560000	END BRACKET, EW 35, BEIGE
36	2	SQUARE D	PK12GTA	GROUND BAR
37	1	PANDUIT	LAM2A1/0-14-6Y	GROUND LUG
38	A/R	PANDUIT	TYPE F	WIRE DUCT
39	1	SQUARE D	M9F42105	MINIATURE CIRCUIT BREAKER, 5 AMP, 1-POLE, 120 VAC

△ DENOTES ITEM SHIPPED LOOSE

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Not Project Specific

UNLESS NOTED	
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

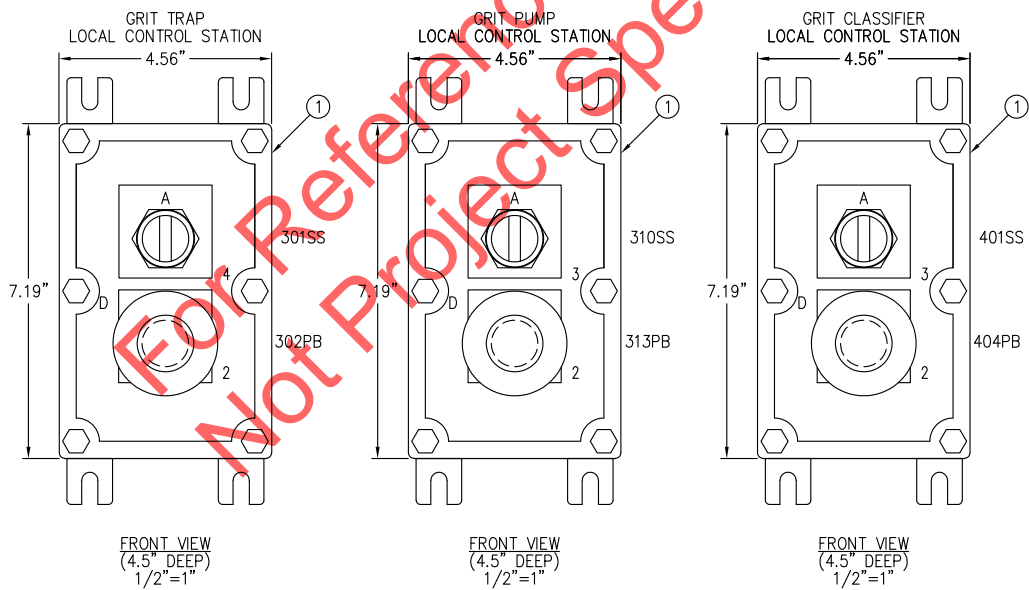


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LOCAL CONTROL STATION BOM				
1	3	AKRON	CXI-363-X2-N4-N5-(2)N7	NEMA 7 ENCLOSURE, 2 OPERATORS, PHENOLIC NAMEPLATES
2	3	AKRON	XPPPS-2RE	EMERGENCY STOP PUSHBUTTON, PUSH-PULL MAINTAINED, 1 NC, NEMA 7
3	2	AKRON	XP3-SSC	SELECTOR SWITCH, 3-POSITION, MAINTAINED, 1 NO/NC, NEMA 7
4	1	AKRON	XP2-SSC	SELECTOR SWITCH, 2-POSITION, MAINTAINED, 1 NO/NC, NEMA 7

LOCAL CONTROL STATION ENGRAVING SCHEDULE						
ID NO.	QTY	TYPE	SIZE	PLATE COLOR	LETTER COLOR	FIRST LINE \ SECOND LINE, ETC
A	1	LP	1.75" SQ.	WHITE	BLACK	GRIT TRAP \ OFF ON
B	1	LP	1.75" SQ.	WHITE	BLACK	GRIT PUMP \ HAND OFF AUTO
C	1	LP	1.75" SQ.	WHITE	BLACK	GRIT CLASSIFIER \ HAND OFF AUTO
D	3	LP	1.75" SQ.	YELLOW	BLACK	EMERGENCY STOP



UNLESS NOTED	
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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**LABEL SCHEDULE**

LBL1 **INFORMATION LABEL:**  
 SERIAL NO. AB0638-3 CUSTOMER ID: 04573  
 LINE VOLTAGE 480 VAC, 3 PHASE, 3 WIRE, 60 Hz.  
 CONTROL VOLTAGE 120 VAC LARGEST MOTOR HP 5 TOTAL FLA 13  
 RCS CONTACT W. BARNETT  
 REF. DWG. NO. AB0638B TYPE 4X ENCLOSURE  
 SHORT CIRCUIT CURRENT: 18 KA RMS SYMMETRICAL, 480 V. MAXIMUM

LBL2 DANGER 480 VOLTS

LBL3 USE COPPER CONDUCTORS ONLY RECOMMENDED TORQUE: 8.9 IN. LB.

LBL4 TO MAINTAIN ENCLOSURE RATING, USE HUBS OR FITTINGS WITH THE SAME ENVIRONMENTAL RATING AS THE ENCLOSURE.  
 O-Z/GEDNEY CHM SERIES HUBS  
 APPLETON HUB SERIES HUBS  
 CROUSE HINDS ST SERIES

LBL5 480VAC

LBL6 USE COPPER CONDUCTORS ONLY RATED 60°C OR HIGHER

LBL7 U.L. 508A

FUSES	103FU	FNQ-R-5	5A	600VAC
	106FU	FNQ-R-20	20A	600VAC
	109FU	FNQ-R-7	7A	600VAC
	115FU, 116FU	FNQ-R-4	4A	600VAC
	117FU	FNM-10	10A	250V
	206FU, 501FU	MDL-1	1A	250V
	204FU, 414FU	MDL-2	2A	250V

NOTE: FUSE LABELS TO BE LOCATED NEAR EACH RESPECTIVE FUSEHOLDER.

WIRING COLOR CODE:

BLACK - POWER  
 RED - 120 VAC HOT  
 WHITE - 120 VAC NEUTRAL  
 GREEN - GROUND  
 BLUE - 24 VDC  
 WHITE/BLUE - 24 VDC COMMON  
 ORANGE - DRY CONTACTS  
 YELLOW - JUMPERS

SHOP NOTES:

HEAT SHRINK WIRE LABELS  
 TINNED COPPER WIRE

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Not Project Specific

**CONTROL PANEL ENGRAVING SCHEDULE**

ID NO.	QTY	TYPE	SIZE	PLATE COLOR	LETTER COLOR	FIRST LINE \ SECOND LINE, ETC
A	1	NP	3" x 8"	WHITE	BLACK	GRIT SYSTEM \ CONTROL PANEL
B	1	NP	1" x 4"	YELLOW	BLACK	MAIN DISCONNECT \ 480VAC, 3PH, 60HZ
C	1	LP	2.25" SQ.	WHITE	BLACK	CONTROL POWER \ ON
D	1	LP	2.25" SQ.	WHITE	BLACK	RESET
E	1	LP	2.25" SQ.	YELLOW	BLACK	EMERGENCY \ STOP
F	3	LP	2.25" SQ.	WHITE	BLACK	RUNNING
G	3	LP	2.25" SQ.	WHITE	BLACK	FAULT
H	1	NP	1" x 3"	WHITE	BLACK	GRIT TRAP
J	1	NP	1" x 3"	WHITE	BLACK	GRIT PUMP
K	1	NP	1" x 3"	WHITE	BLACK	GRIT CLASSIFIER

NAMEPLATES ATTACHED WITH S.S. SCREWS

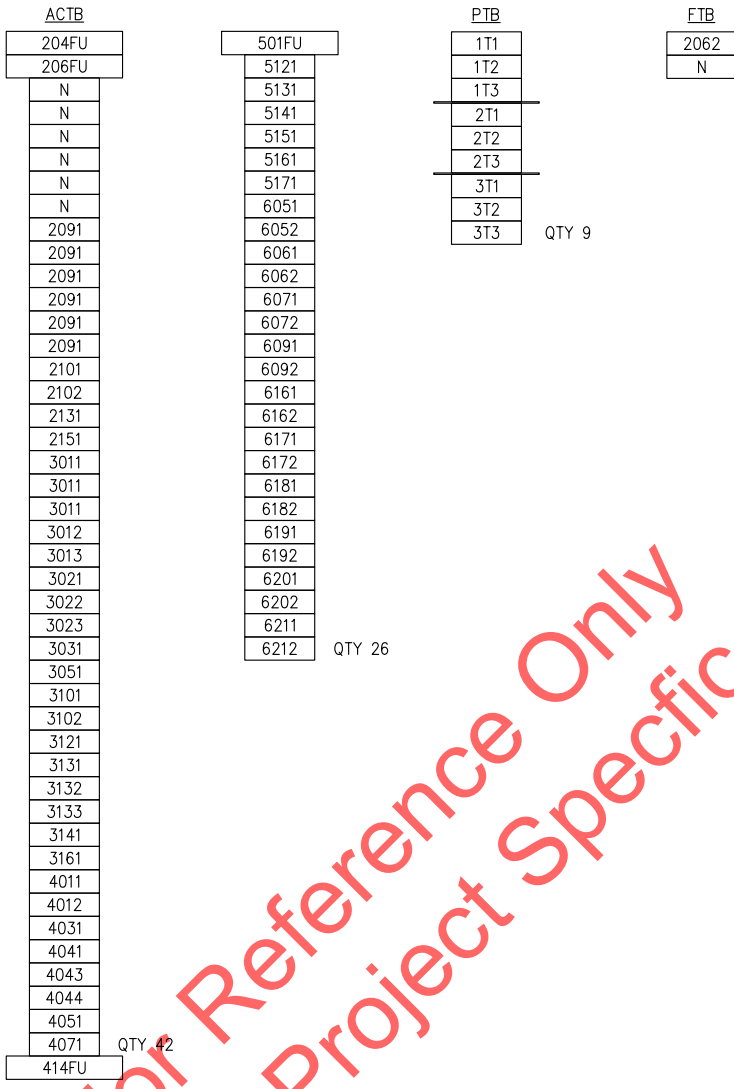
**UNLESS NOTED**

TOLERANCE	
.X	± .030
.XX	± .015
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.XXXX	± .0005



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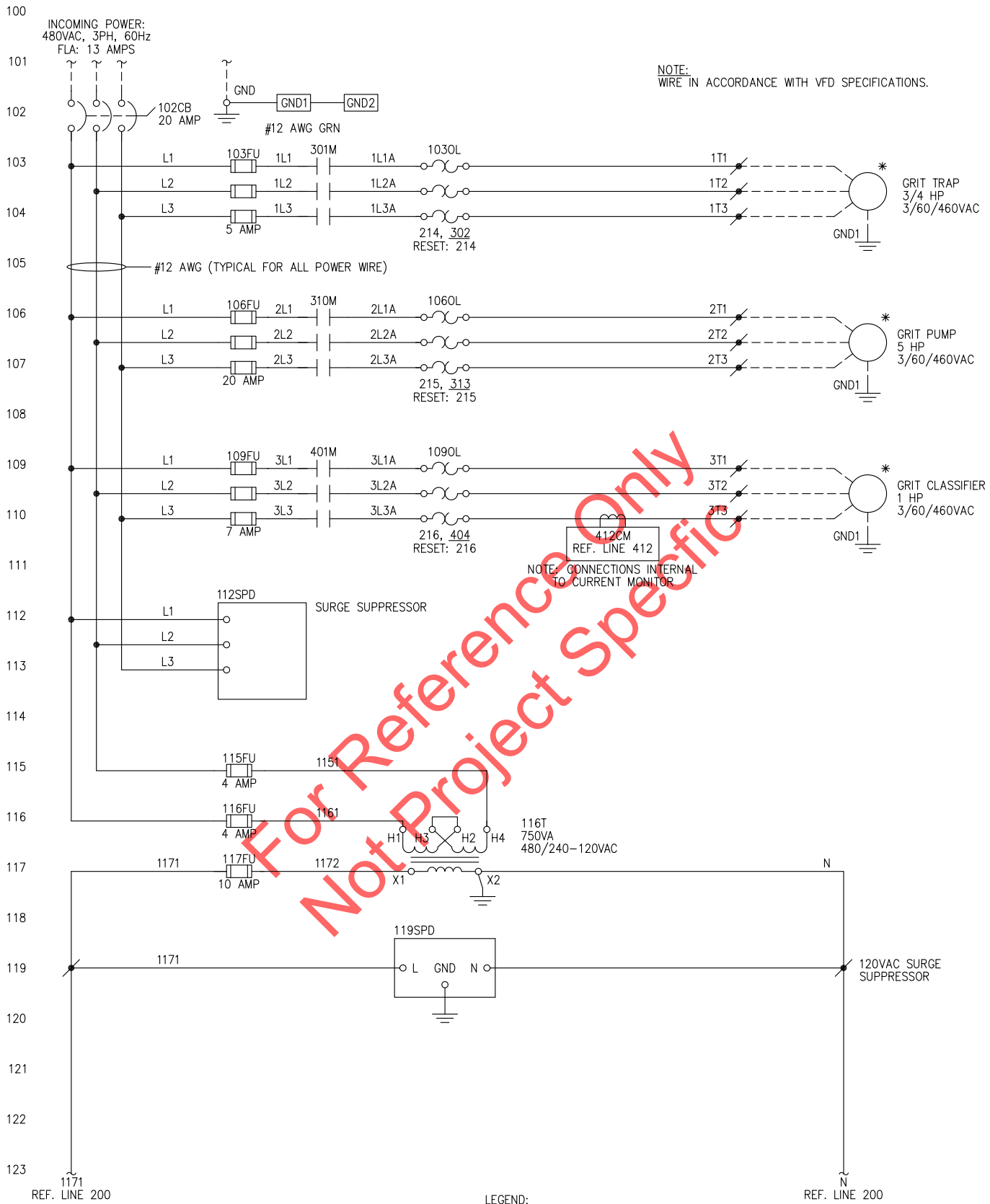
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 Not Project Specific

TERMINAL BLOCK LAYOUT

UNLESS NOTED	
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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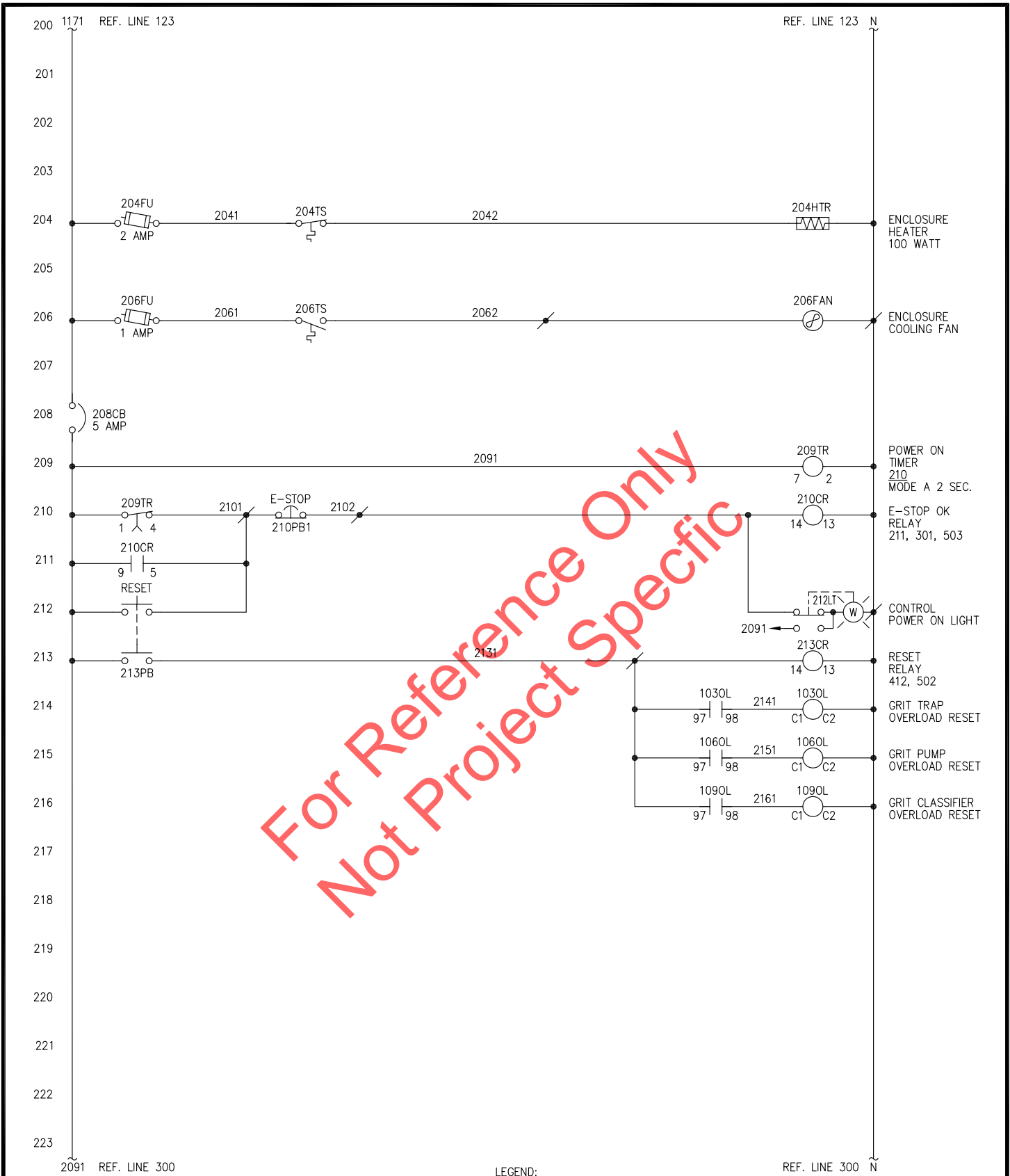
LEGEND:  
 \* DENOTES A TERMINAL BLOCK POINT  
 \* DENOTES ITEM REMOTE FROM CONTROL PANEL  
 --- DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED

TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
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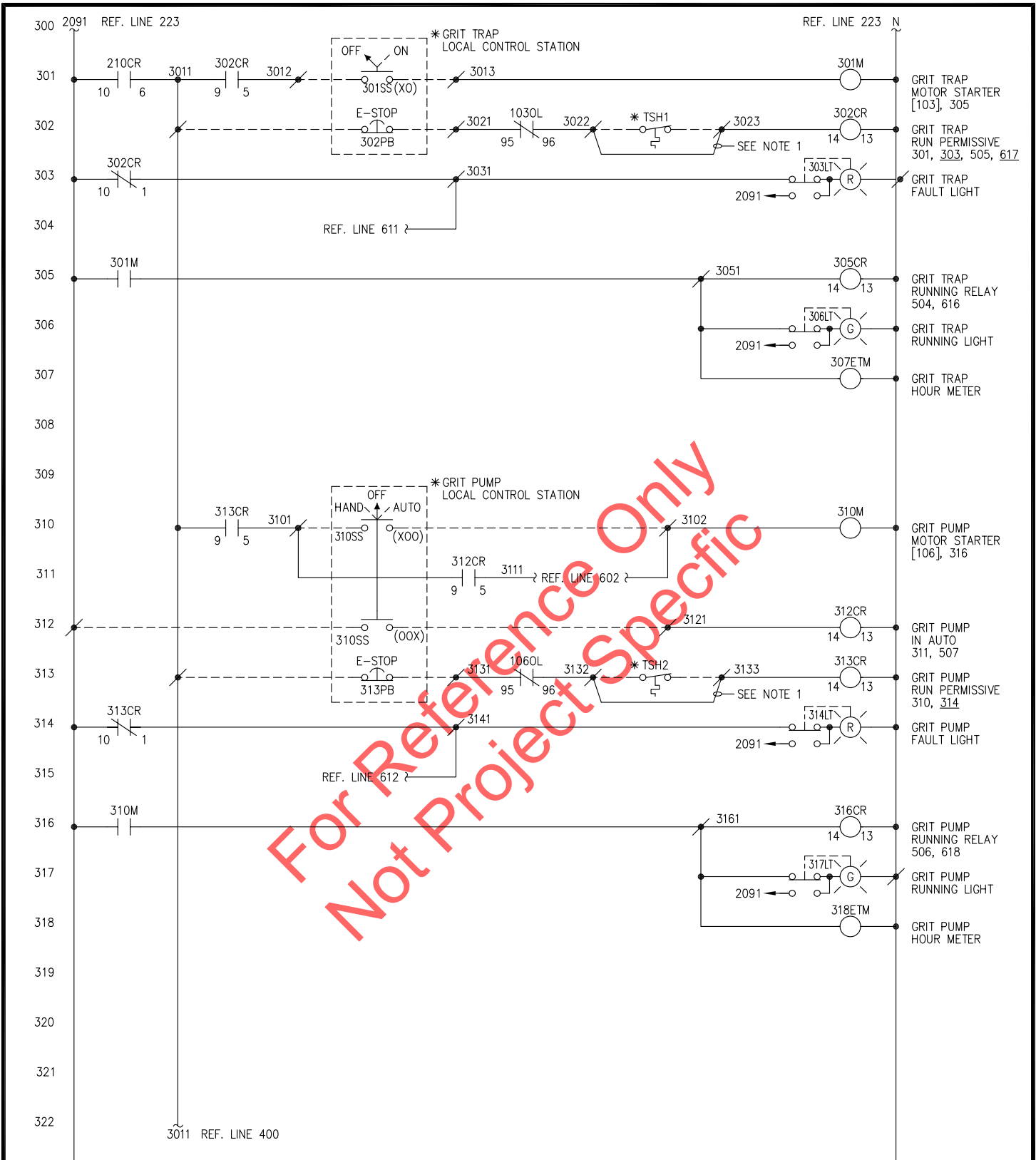
For Reference Only  
Not Project Specific

**LEGEND:**  
 DENOTES A TERMINAL BLOCK POINT  
 DENOTES ITEM REMOTE FROM CONTROL PANEL  
 DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED	
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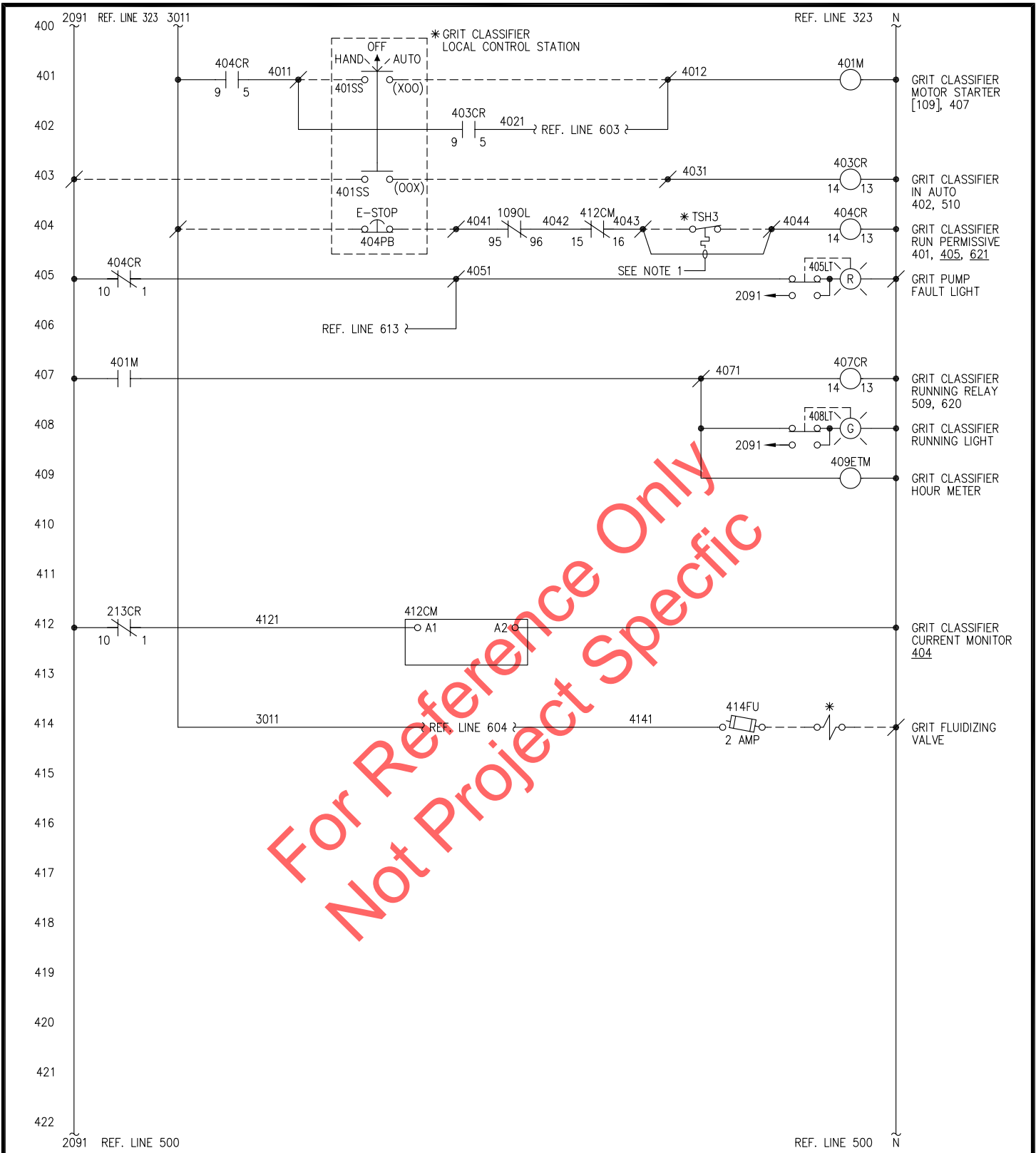
NOTE 1: YELLOW JUMPERS INSTALLED AT TERMINALS WHEN TEMPERATURE SWITCHES ARE NOT USED. (TYP.)

- LEGEND:
- /— DENOTES A TERMINAL BLOCK POINT
  - \* DENOTES ITEM REMOTE FROM CONTROL PANEL
  - - - DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED

TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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NOTE 1: YELLOW JUMPERS INSTALLED AT TERMINALS WHEN TEMPERATURE SWITCHES ARE NOT USED. (TYP.)

**LEGEND:**

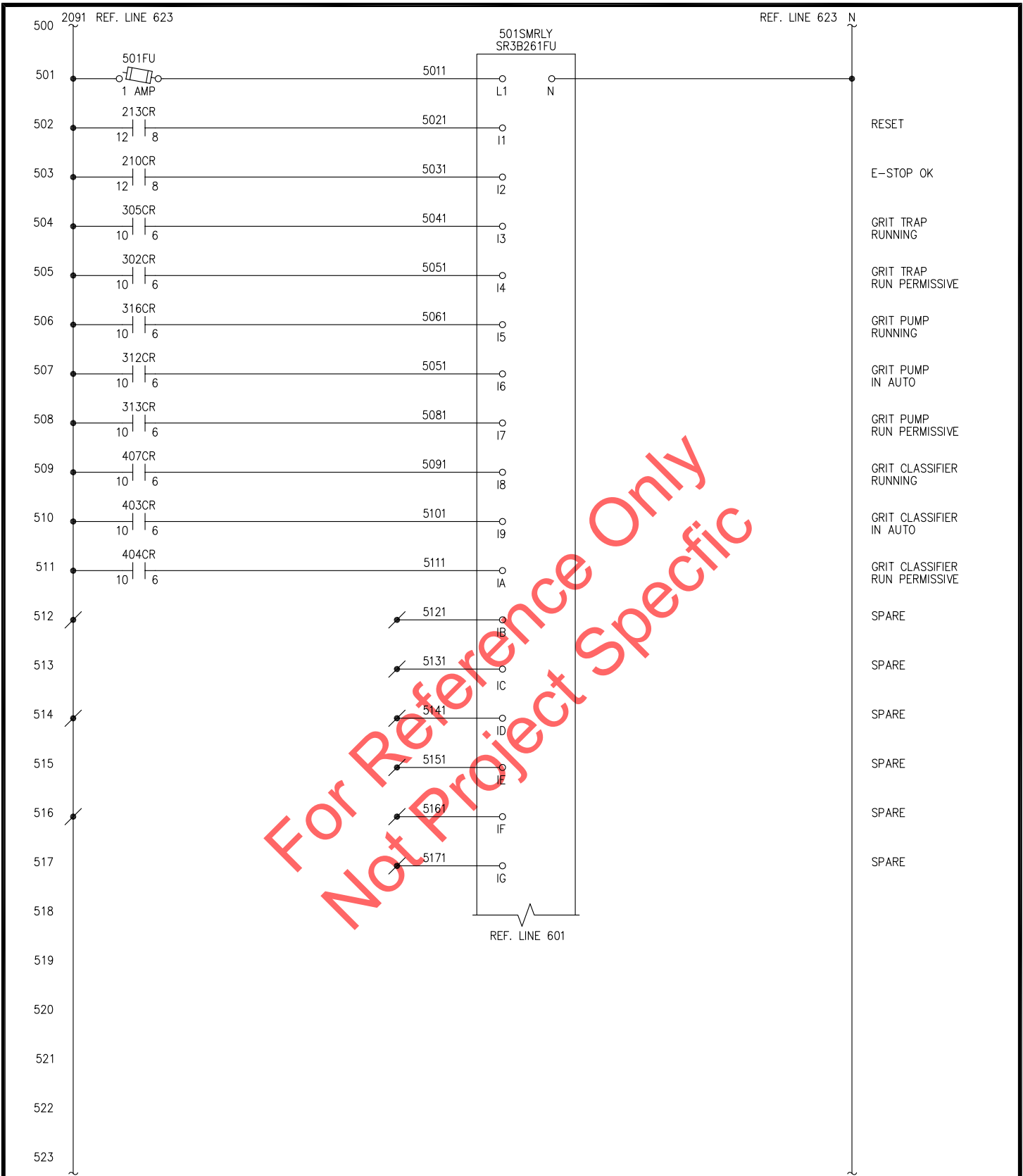
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- \* DENOTES ITEM REMOTE FROM CONTROL PANEL
- DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED	
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
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LEGEND:  
 DENOTES A TERMINAL BLOCK POINT  
 DENOTES ITEM REMOTE FROM CONTROL PANEL  
 --- DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED

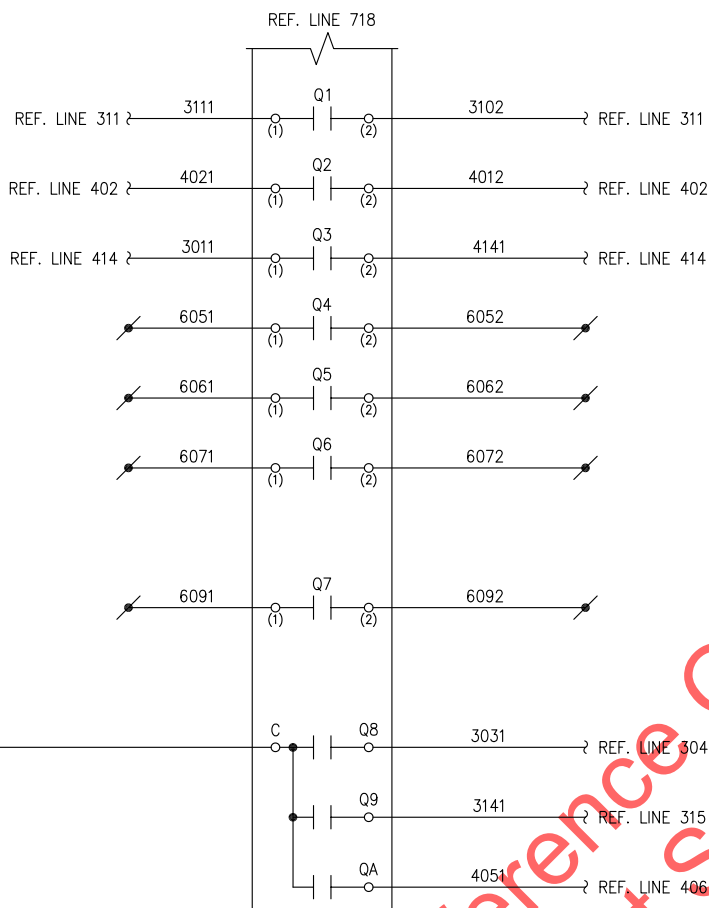
TOLERANCE	
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2091 REF. LINE 523

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GRIT PUMP  
AUTO RUN COMMAND

GRIT CLASSIFIER  
AUTO RUN COMMAND

GRIT FLUIDIZING VALVE  
AUTO RUN COMMAND

SPARE

SPARE

SPARE

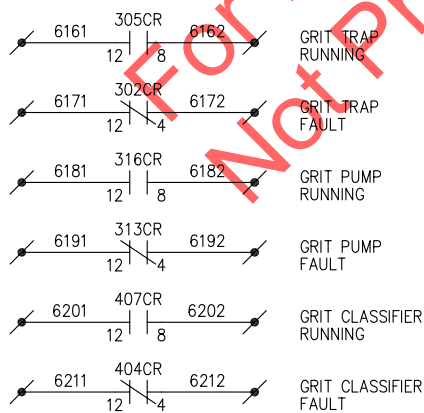
SPARE

GRIT TRAP  
FAULT OUTPUT

GRIT PUMP  
FAULT OUTPUT

GRIT CLASSIFIER  
FAULT OUTPUT

DRY CONTACTS



CONTACT RATING:  
6A @ 240VAC & 30VDC (TYP.)

LEGEND:

- ⚡ DENOTES A TERMINAL BLOCK POINT
- \* DENOTES ITEM REMOTE FROM CONTROL PANEL
- DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED

TOLERANCE

.X ± .030

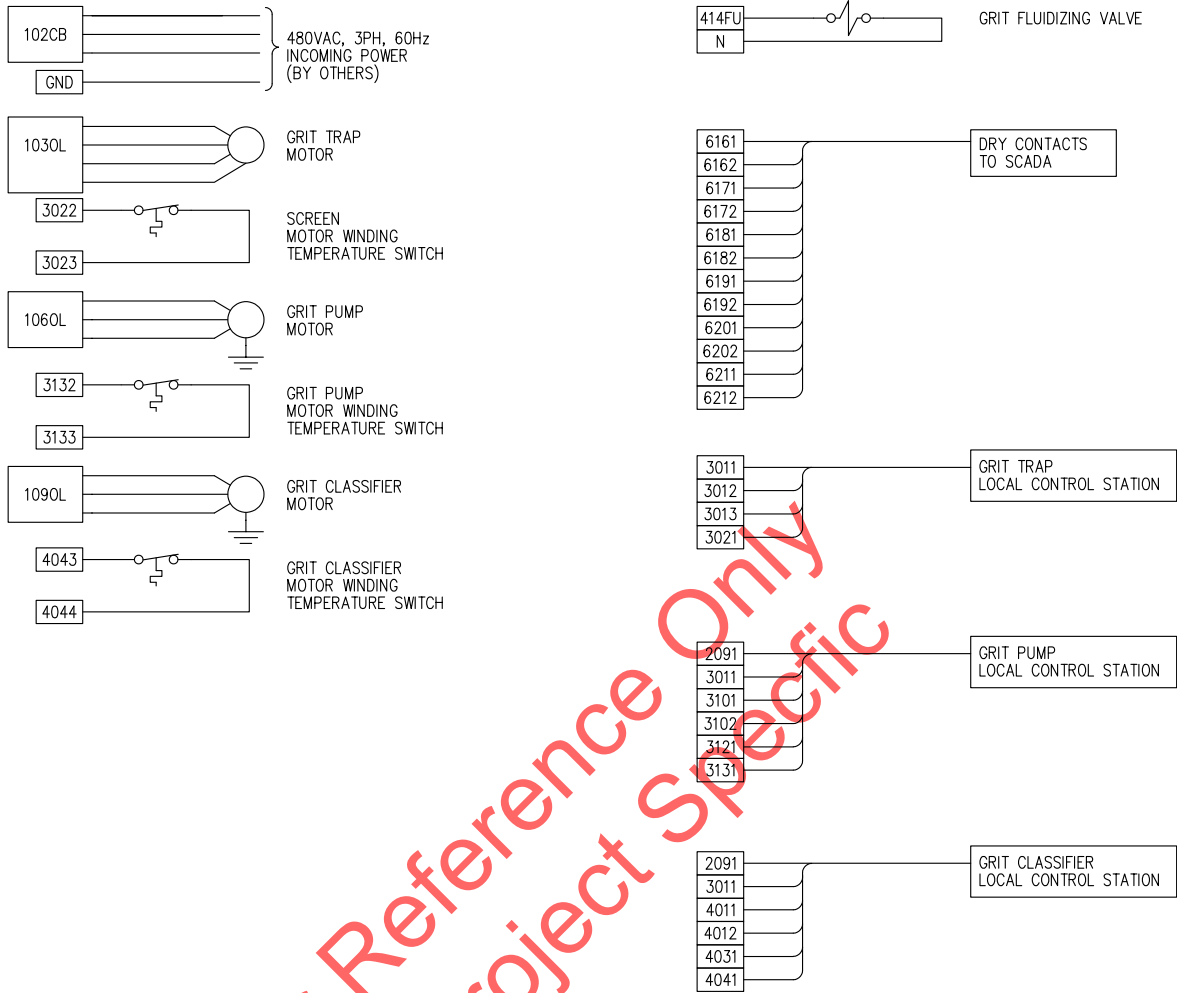
.XX ± .015

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.XXXX ± .0005

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# FIELD WIRING DIAGRAM



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Not Project Specific

**LEGEND:**  
 DENOTES A TERMINAL BLOCK POINT  
 DENOTES ITEM REMOTE FROM CONTROL PANEL  
 DENOTES WIRING EXTERNAL TO CONTROL PANEL

UNLESS NOTED

TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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## DEVICE SETTINGS

### 412CM – CURRENT MONITOR

#### DIP SETTINGS

1	ON
2	OFF
3	ON
4	OFF
5	ON
6	ON

	FACTORY SETTING	FIELD SETTING
HYSTERESIS	MIN	
LEVEL	MIN	
DELAY	MIN	

#### NOTES:

- THE CURRENT MONITOR DIAL SHALL BE SET TO MINIMUM FROM FACTORY.
- FIELD CONFIGURATION SHALL BE PERFORMED BY THE STARTUP TECHNICIAN PER THE APPROPRIATE TECHNICAL DOCUMENTS.

### 206TS ENCLOSURE FAN

FAN ON/OFF	80 °F
------------	-------

### 204TS ENCLOSURE HEATER

HEATER ON/OFF	40 °F
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### 501SMRLY – SETTINGS

BIT REF.	DESCRIPTION	TIMER RESOLUTION	FACTORY SETTING	FIELD SETTING
T1	GRIT SYSTEM CYCLE TIMER	H:M	4 HOURS	
T2	GRIT PUMP RUN TIMER	M:S	15 MINUTES	
T3	GRIT CLASSIFIER OFF DELAY TIMER	M:S	2 MINUTES	
T4	GRIT FLUIDIZING VALVE ON TIMER	M:S	1 MINUTE	

#### NOTES:

- VALUES SHOWN IN ABOVE TABLES ARE TYPICAL AND ADDITIONAL VALVES MAY BE ADDED AT AS-BUILT FOR ADDITIONAL FIELD SETTINGS REQUIRED FOR EQUIPMENT SHOWN.

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For Project Specific

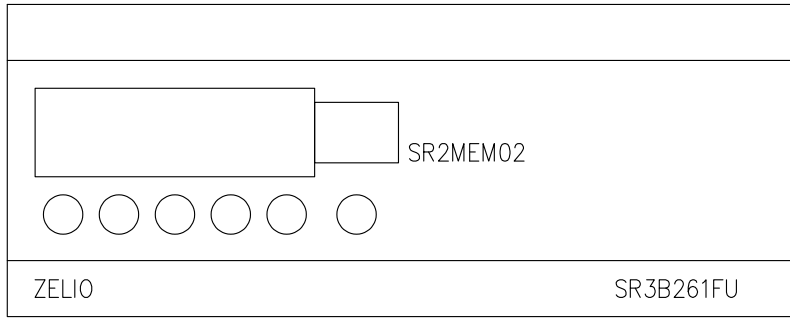
#### UNLESS NOTED

TOLERANCE
.X ± .030
.XX ± .015
.XXX ± .005
.XXXX ± .0005



## DEVICE SETTINGS (CONTINUED)

Z01SMRLY – I/O



### INPUTS

I1	RESET
I2	E-STOP OK
I3	GRIT TRAP RUNNING
I4	GRIT TRAP RUN PERMISSIVE
I5	GRIT PUMP RUNNING
I6	GRIT PUMP IN AUTO
I7	GRIT PUMP RUN PERMISSIVE
I8	GRIT CLASSIFIER RUNNING
I9	GRIT CLASSIFIER IN AUTO
IA	GRIT CLASSIFIER RUN PERMISSIVE
IB	SPARE
IC	SPARE
ID	SPARE
IE	SPARE
IF	SPARE
IG	SPARE

### OUTPUTS

Q1	GRIT PUMP AUTO RUN COMMAND
Q2	GRIT CLASSIFIER AUTO RUN COMMAND
Q3	GRIT FLUIDIZING AUTO RUN COMMAND
Q4	SPARE
Q5	SPARE
Q6	SPARE
Q7	SPARE
Q8	GRIT TRAP FAULT OUTPUT
Q9	GRIT PUMP FAULT OUTPUT
QA	GRIT CLASSIFIER FAULT OUTPUT

### Z01SMRLY – SETPOINT CHANGE INSTRUCTIONS

TO ALTER THE VALUE OF A TIMER OR COUNTER:

1. PRESS THE GREEN "MENU/OK", PRESS ARROW DOWN TO "PARAMETER".  
PRESS "MENU/OK"
2. TO ACCESS THE REQUIRED TIMER PRESS THE "UP" ARROW KEY UNTIL THE DESIRED TIMER IS DISPLAYED.
3. PRESS THE "RIGHT" ARROW UNTIL TIME VALUE FLASHES.
4. MODIFY THE TIME VALUE USING THE "UP" OR "DOWN" ARROW KEYS.
5. VALIDATE THE CHANGES BY PRESSING THE "MENU/OK", PRESS "MENU/OK" AGAIN WHEN ASKED TO CONFIRM CHANGES.
6. PRESS "MENU/OK" TO RETURN TO MAIN SCREEN.
7. TO ENABLE/DISABLE THE REVERSING SEQUENCE, PRESS THE "LEFT" ARROW (Z1) WHEN THE COMPACTOR IS STOPPED.
8. TO ENABLE/DISABLE THE JAM SEQUENCE, PRESS THE "DOWN" ARROW (Z2) WHEN THE COMPACTOR IS STOPPED.

#### UNLESS NOTED

TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005



## SEQUENCE OF OPERATIONS

### GRIT TRAP MODE OF OPERATION:

ON: WHEN THE GRIT TRAP ON-OFF SELECTOR IS IN THE ON POSITION, IT WILL RUN CONTINUOUSLY.  
FAULTS: IN THE EVENT OF A FAULT, THE GRIT TRAP FAULT LIGHT WILL ILLUMINATE. A FAULT ON THE GRIT TRAP CAN BE RESET USING THE RESET PUSHBUTTON. THE GRIT VORTEX UNIT WILL FAULT PER THE FOLLOWING CONDITIONS:  
1. MOTOR THERMOSTAT TRIPPED (IF AVAILABLE).  
2. MOTOR THERMAL OVERLOAD TRIPPED.  
3. EMERGENCY STOP PRESSED AT MAIN PANEL OR LOCAL CONTROL STATION.

### GRIT PUMP MODE OF OPERATION:

HAND: WHEN THE GRIT PUMP HAND-OFF-AUTO SELECTOR IS IN THE HAND POSITION, THE GRIT PUMP WILL RUN CONTINUOUSLY.  
AUTO: WHEN THE GRIT PUMP HAND-OFF-AUTO SELECTOR IS IN THE AUTO POSITION, THE GRIT PUMP WILL RUN BASED ON THE CONFIGURABLE 24-HOUR CYCLE TIMER FOLLOWING THE COMPLETION OF THE GRIT FLUIDIZING VALVE ON TIMER. THE GRIT PUMP WILL RUN UNTIL THE TIME SET ON THE GRIT PUMP MAXIMUM RUN TIMER RELAY IS COMPLETED.  
FAULTS: IN THE EVENT OF A FAULT, THE GRIT PUMP FAULT LIGHT WILL ILLUMINATE. A FAULT ON THE GRIT PUMP CAN BE RESET USING THE RESET PUSHBUTTON. THE PUMP WILL FAULT PER THE FOLLOWING CONDITIONS:  
1. MOTOR THERMOSTAT TRIPPED (IF AVAILABLE).  
2. FAIL TO START IN AUTO MODE.  
3. MOTOR THERMAL OVERLOAD TRIPPED.  
4. EMERGENCY STOP PRESSED AT MAIN PANEL OR LOCAL CONTROL STATION.

### GRIT CLASSIFIER MODE OF OPERATION:

HAND: WHEN THE GRIT CLASSIFIER HAND-OFF-AUTO SELECTOR IS IN THE HAND POSITION, THE CLASSIFIER WILL RUN CONTINUOUSLY.  
AUTO: WHEN THE GRIT CLASSIFIER HAND-OFF-AUTO SELECTOR IS IN THE AUTO POSITION, THE CLASSIFIER WILL RUN WHEN THE GRIT PUMP IS RUNNING AND CONTINUE TO RUN FOR THE TIME SET IN THE GRIT CLASSIFIER OFF DELAY TIMER RELAY.  
FAULTS: IN THE EVENT OF A FAULT, THE GRIT CLASSIFIER FAULT LIGHT WILL ILLUMINATE. A FAULT ON THE CLASSIFIER CAN BE RESET USING THE RESET PUSHBUTTON. THE CLASSIFIER WILL FAULT PER THE FOLLOWING CONDITIONS:  
1. HIGH CURRENT SENSED BY THE CURRENT MONITOR.  
2. MOTOR THERMOSTAT TRIPPED (IF AVAILABLE).  
3. FAIL TO START IN AUTO MODE.  
4. MOTOR THERMAL OVERLOAD TRIPPED.  
5. EMERGENCY STOP PRESSED AT MAIN PANEL OR LOCAL CONTROL STATION.

### GRIT FLUIDIZING VALVE MODE OF OPERATION:

CLOSED: WHEN THE VALVE OPEN-CLOSE-AUTO SELECTOR IS IN THE CLOSED POSITION, THE VALVE WILL REMAIN CLOSED CONTINUOUSLY (DE-ENERGIZED).  
OPEN: WHEN THE VALVE OPEN-CLOSE-AUTO SELECTOR IS IN THE OPEN POSITION, THE VALVE WILL REMAIN OPEN CONTINUOUSLY (ENERGIZED).  
AUTO: WHEN THE VALVE OPEN-CLOSE-AUTO SELECTOR IS IN THE AUTO POSITION, THE VALVE WILL OPEN BASED ON THE CONFIGURABLE 24-HOUR CYCLE TIMER FOR THE TIME SET IN THE FLUIDIZING VALVE ON TIMER PRIOR TO THE GRIT PUMP RUNNING.

### EMERGENCY STOP

WHEN THE E-STOP PUSHBUTTON IS PRESSED THE GRIT TRAP, GRIT PUMP, AND GRIT CLASSIFIER CLASSIFIER WILL STOP IMMEDIATELY, ALL VALVES WILL RETURN TO THEIR POWERED-OFF POSITION, AND THE CONTROL POWER LIGHT WILL TURN OFF. TO RESET, ENSURE THE E-STOP IS ENABLED AND PRESS THE EMERGENCY STOP RESET PUSHBUTTON.

### NOTES:

- IF THE POWER TO THE PANEL IS INTERRUPTED, THE EQUIPMENT MAY CYCLE IMMEDIATELY ONCE THE POWER IS RESTORED. PRESSING THE RESET PUSHBUTTON AFTER A POWER OUTAGE WILL NOT BE REQUIRED.

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UNLESS NOTED

TOLERANCE  
.X ± .030  
.XX ± .015  
.XXX ± .005  
.XXXX ± .0005

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