

**AGREEMENT FOR THE SUPPLY OF ELECTRICAL EQUIPMENT FOR THE
TERTIARY FILTRATION PROJECT – ELECTRICAL PACKAGE 2 – MCC's, PLC's, &
COMM PANELS**

PROJECT# 11281.L.

THIS AGREEMENT FOR EQUIPMENT PROCUREMENT is made this 1st day of October, 2024, and entered into by and between the City of Meridian, a municipal corporation organized under the laws of the State of Idaho, hereinafter referred to as "CITY", 33 East Broadway Avenue, Meridian, Idaho 83642, and Advanced Electrical Technologies, hereinafter referred to as "SUPPLIER", whose business address is 720 S. Kit, Caldwell, ID 83605.

INTRODUCTION

Whereas, the City has a need for 1 MCC, 2 PLC's and 2 Comm Panels as specified in the contract documents; and

WHEREAS, the Supplier is specially trained, experienced and competent to provide and has agreed to provide such equipment;

NOW, THEREFORE, in consideration of the mutual promises, covenants, terms and conditions hereinafter contained, the parties agree as follows:

TERMS AND CONDITIONS

1. Services, Supplies, Equipment Specifications & Requirements:

1.1 Supplier shall supply the Switchboards to the City upon execution of this Agreement and receipt of the City's written notice to proceed, all items, and comply in all respects, as specified in the Invitation for Bids titled "TERTIARY FILTRATION PROJECT – ELECTRICAL PACKAGE 2" and Suppliers bid dated by which by this reference are incorporated herein, together with all addendums issued.

1.2 The Supplier shall provide all equipment and services under this Agreement consistent with the requirements and standards established by applicable federal, state and City laws, ordinances, regulations and resolutions and the UCC. The Supplier represents and warrants that it will perform its work in accordance with generally accepted industry standards and practices for the profession or professions that are used in performance of this Agreement and that are in effect at the time of performance of this Agreement.

2. Consideration

2.1 The Supplier shall be compensated on a Fixed Price basis as provided in Attachment B "Payment Schedule" attached hereto and by reference made a part hereof, for the Not-To-Exceed amount of **\$340,000.00**.

2.2 The Supplier shall provide the City with a detailed invoice upon delivery of all services, supplies, equipment or chemicals, which the City will pay within 30 days of receipt of a correct invoice and approval by the City Project Manager. The City will not withhold any Federal or State income taxes or Social Security Tax from any payment made by City to Supplier under the terms and conditions of this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Supplier.

2.3 Except as expressly provided in this Agreement, Supplier shall not be entitled to receive from the City any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement including, but not limited to, meals, lodging, transportation, drawings, renderings or mockups. Specifically, Supplier shall not be entitled by virtue of this Agreement to consideration in the form of overtime, health insurance benefits, retirement benefits, paid holidays or other paid leaves of absence of any type or kind whatsoever.

3. Invoices

Invoices shall be rendered in duplicate and shall include: (1) Purchase Order number; (2) pricing; (3) quantity; (4) description; (5) any sales taxes or use taxes as separate items, giving permit number authorizing collection of use taxes; (6) point of shipment; (7) method and class of shipment; (8) complete routing of shipment; and (9) whether transportation expense has been prepaid. Seller/Contractor/Contractor agrees to make a separate invoice for each order and shipment. Unless otherwise expressly provided in the Purchase Order, all taxes, duties, tolls, fees, import charges, or other governmental exactions shall be deemed included in the purchase price of the supplies and services and the City shall have no liability to pay Seller/Contractor/Contractor or any third party any amount in excess of the specified purchase price. City of Meridian, a local governmental entity of the State of Idaho, is exempt from any Federal Manufacturer's Excise Tax under the provision of Section 4221(a)(4) of the Internal Revenue Code. All invoices shall exclude such excise tax. All invoices shall be sent to the following address:

City of Meridian, Accounts Payable, 33. East Broadway Ave., Meridian, Idaho 83642.

4. **Term:**

4.1 This agreement shall become effective upon execution by both parties, and shall expire upon on successful startup and commissioning or unless sooner terminated as provided below.

4.2 The City reserves the right to extend the agreement for up to four (4) additional one-year periods if mutually agreeable to both parties. Any and all extensions must be documented in writing and be executed by both parties. Any continuation of this agreement beyond September 30 of any fiscal year is subject to City Council approval.

4.3 Should Supplier default in the performance of this Agreement or materially breach any of its provisions, City, at City's option, may terminate this Agreement by giving written notification to Supplier.

4.4 Should City fail to pay Supplier all or any part of the compensation set forth in Attachment B of this Agreement on the date due, Supplier, at the Supplier's option, may terminate this Agreement if the failure is not remedied by the City within thirty (30) days from the date payment is due.

5. **Termination:**

If, through any cause, Supplier, its officers, employees, or agents fails to fulfill in a timely and proper manner its obligations under this Agreement, violates any of the covenants, agreements, or stipulations of this Agreement, falsifies any record or document required to be prepared under this agreement, engages in fraud, dishonesty, or any other act of misconduct in the performance of this contract, the City shall thereupon have the right to terminate this Agreement by giving written notice to Supplier of such termination and specifying the effective date thereof at least fifteen (15) days before the effective date of such termination.

Notwithstanding the above, Supplier shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Agreement by Supplier, and the City may withhold any payments to Supplier for the purposes of set-off until such time as the exact amount of damages due the City from Supplier is determined. This provision shall survive the termination of this agreement and shall not relieve Supplier of its liability to the City for damages.

6. **Independent Supplier:**

6.1 In all matters pertaining to this agreement, Supplier shall be acting as an independent Supplier, and neither Supplier nor any officer, employee or agent of Supplier will be deemed an employee of City. Except as expressly provided in Attachment A, Supplier has no authority or responsibility to exercise any rights or power vested in the City and therefore has no authority to bind or incur any obligation on behalf of the City. The selection and

designation of the personnel of the City in the performance of this agreement shall be made by the City.

6.2 Supplier, its agents, officers, and employees are and at all times during the term of this Agreement shall represent and conduct themselves as independent Suppliers and not as employees of the City.

6.3 Supplier shall determine the method, details and means of performing the work and services to be provided by Supplier under this Agreement. Supplier shall be responsible to City only for the requirements and results specified in this Agreement and, except as expressly provided in this Agreement, shall not be subjected to City's control with respect to the physical action or activities of Supplier in fulfillment of this Agreement. If in the performance of this Agreement any third persons are employed by Supplier, such persons shall be entirely and exclusively under the direction and supervision and control of the Supplier.

7. Indemnification and Insurance:

- a. Supplier shall indemnify and save and hold harmless City from and for any and all losses, claims, actions, judgments for damages, or injury to persons or property and losses and expenses and other costs including litigation costs and attorney's fees, arising out of, resulting from, or in connection with the performance of this Agreement by the Supplier, its servants, agents, officers, employees, guests, and business invitees, and not caused by or arising out of the tortuous conduct of City or its employees. Supplier shall maintain, and specifically agrees that it will maintain, throughout the term of this Agreement, liability insurance, in which the City shall be named an additional insured, except Workers Compensation Insurance, in the minimum amounts as follow: General Liability One Million Dollars (\$1,000,000) per incident or occurrence, Automobile Liability Insurance One Million Dollars (\$1,000,000) per incident or occurrence and Workers' Compensation Insurance, in the statutory limits as required by law. The limits of insurance shall not be deemed a limitation of the covenants to indemnify and save and hold harmless City; and if City becomes liable for an amount in excess of the insurance limits, herein provided, Supplier covenants and agrees to indemnify and save and hold harmless City from and for all such losses, claims, actions, or judgments for damages or injury to persons or property and other costs, including litigation costs and attorneys' fees, arising out of, resulting from , or in connection with the performance of this Agreement by the Supplier or Supplier's officers, employs, agents, representatives or sub-suppliers and resulting in or attributable to personal injury, death, or damage or destruction to tangible or intangible property, including use of. Supplier shall provide City with a Certificate of Insurance, or other proof of insurance evidencing Supplier's compliance with the requirements of this paragraph and file such proof of insurance with the City at least ten (10) days prior to the date Supplier begins performance of its obligations under this Agreement. In the event the insurance minimums are changed, Supplier shall immediately submit proof of compliance with the changed limits.

Evidence of all insurance shall be submitted to the City Purchasing Agent with a copy to Meridian City Accounting, 33 East Broadway Avenue, Meridian, Idaho 83642.

7.2 Any deductibles, self-insured retention, or named insureds must be declared in writing to the City.

7.3 To the extent of the indemnity in this contract, Supplier's Insurance coverage shall be primary insurance regarding the City's elected officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City or the City's elected officers, officials, employees and volunteers shall be excess of the Supplier's insurance and shall not contribute with Supplier's insurance except as to the extent of City's negligence.

- b. The Supplier's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

7.4 All insurance coverages for Suppliers subs shall be subject to all of the insurance and indemnity requirements stated herein.

7.5 The limits of insurance described herein shall not limit the liability of the Supplier and Supplier's agents, representatives, employees or subcontractors.

7.6 The limits of insurance described herein shall not limit the liability of the Contractor and Contractor's agents, representatives, employees or subcontractors.

- 8. **Warranty:** In addition to any warranty required in the specifications, all equipment, coatings, valves, controls, and other components provided under this agreement shall be guaranteed for two (2) years against defects in workmanship and materials from the notice of acceptance.
- 9. **Notices:** Any and all notices required to be given by either of the parties hereto, unless otherwise stated in this agreement, shall be in writing and be deemed communicated when mailed in the United States mail, certified, return receipt requested, addressed as follows:

City of Meridian
Procurement Manager
33 E. Broadway Avenue
Meridian, Idaho 83642
Ph. (208) 489-0417
Email: kwatts@meridianCity.org

Either party may change their address for the purpose of this paragraph by giving written notice of such change to the other in the manner herein provided.

10. **Attorney Fees:** Should any litigation be commenced between the parties hereto concerning this Agreement, the prevailing party shall be entitled, in addition to any other relief as may be granted, to court costs and reasonable attorneys' fees as determined by a Court of competent jurisdiction. This provision shall be deemed to be a separate contract between the parties and shall survive any default, termination or forfeiture of this Agreement.
11. **Time is of the Essence:** The parties hereto acknowledge and agree that time is strictly of the essence with respect to each and every term, condition and provision hereof, and that the failure to timely perform any of the obligations hereunder shall constitute a breach of, and a default under, this Agreement by the party so failing to perform.
12. **Assignment:** It is expressly agreed and understood by the parties hereto, that Supplier shall not have the right to assign, transfer, hypothecate or sell any of its rights under this Agreement except upon the prior express written consent of City.
13. **Discrimination Prohibited:** In performing the Work required herein, Supplier shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any person on the basis of race, color, religion, sex, national origin or ancestry, age or disability.
14. **Reports and Information:**
 - 14.1 At such times and in such forms as the City may require, there shall be furnished to the City such statements, records, reports, data and information as the City may request pertaining to matters covered by this Agreement.
 - 14.2 Supplier shall maintain all writings, documents and records prepared or compiled in connection with the performance of this Agreement for a minimum of four (4) years from the termination or completion of this or Agreement. This includes any handwriting, typewriting, printing, photo static, photographic and every other means of recording upon any tangible thing, any form of communication or representation including letters, words, pictures, sounds or symbols or any combination thereof.
15. **Audits and Inspections:** Subject to applicable laws respecting the protection of privacy and the City's requirement to comply with the Idaho Public Records Act, at any time during normal business hours and as often as the City may deem necessary, there shall be made available to the City for examination all of Supplier's records with respect to all matters covered by this Agreement. Supplier shall permit the City to audit, examine, and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of

employment and other data relating to all matters covered by this Agreement.

16. **Publication, Reproduction and Use of Material:** No material produced in whole or in part under this Agreement shall be subject to copyright in the United States or in any other country. The City shall have unrestricted authority to publish, disclose and otherwise use, in whole or in part, any reports, data or other materials prepared under this Agreement.
17. **Compliance with Laws:** In performing the scope of work required hereunder, Supplier shall comply with all applicable laws, ordinances, and codes of Federal, State, and local governments.

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Idaho, and the ordinances of the City of Meridian.

Certifications.

Pursuant to Idaho Code §§ 67-2359 and 67-2346, Contractor hereby certifies:

- A. That Contractor is not currently owned or operated by the government of China and will not, for the duration of this Contract, be owned or operated by the government of China.
 - B. That Contractor is not currently engaged in, and will not for the duration of the Contract engage in, a boycott of goods or services from Israel or territories under its control.
 - C. Consultant certifies that: (i) as of the Effective Date, it is not engaged in a "Boycott," as defined in Idaho Code §67-2347A, of any individual or company because that individual or company engages in or supports (a) the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, minerals, hydroelectric power, nuclear energy, or agriculture, or (b) the manufacture, distribution, sale, or use of any "Firearm," as defined in Idaho Code §18-3302(2)(d); and (ii) it will not engage in any such boycott during the Term.
18. **Changes:** The City may, from time to time, request changes in the Scope of Work to be performed hereunder. Such changes, including any increase or decrease in the amount of Supplier's compensation, which are mutually agreed upon by and between the City and Supplier, shall be incorporated in

written amendments which shall be executed with the same formalities as this Agreement.

- 19. **Construction and Severability:** If any part of this Agreement is held to be invalid or unenforceable, such holding will not affect the validity or enforceability of any other part of this Agreement so long as the remainder of the Agreement is reasonably capable of completion.
- 20. **Waiver of Default:** Waiver of default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided above.
- 21. **Advice of Attorney:** Each party warrants and represents that in executing this Agreement. It has received independent legal advice from its attorney's or the opportunity to seek such advice.
- 22. **Entire Agreement:** This Agreement contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.
- 24. **Order of Precedence:** The order or precedence shall be the contract agreement, the Invitation for Bid document, then the winning bidders submitted bid document.
- 23. **Applicable Law:** This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Idaho, and the ordinances of the City of Meridian.
- 24. **Approval Required:** This Agreement shall not become effective or binding until approved by the City of Meridian.

CITY OF MERIDIAN:

ADVANCED TECHNOLOGIES: ELECTRICAL

By: _____
Keith Watts, Procurement Manager

By: _____

Dated: _____

Dated: _____

CITY PM: David Briggs

Approved by Council:

ATTACHMENT A

SPECIFICATIONS & REQUIREMENTS

REFER TO INVITATION TO BID PW-2426-11281.L

ALL ADDENDUMS, ATTACHMENTS, AND EXHIBITS included in the Invitation to Bid Package, are by this reference made a part hereof.

SPECIFICATIONS / SCOPE OF WORK

Documents from the Invitation to Bid:

- **VOLUME 1: TECHNICAL SPECIFICATIONS – WRRF TERTIARY FILTRATION FACILITIES PRE-PROCUREMENT PACKAGE 2 by Stantec Consulting Services, Inc. (100 pages)**
- **DRAWINGS – WRRF TERTIARY FILTRATION FACILITIES PRE-PROCUREMENT PACKAGE 2 by Stantec Consulting Services, Inc. (21 pages)**

See attached updated documents:

- **Rockwell Automation Document # STFB3MCC0001**
- **Updated Drawings: MERIDIAN WATER RESOURCE RECOVERY FACILITY TERTIARY FILTRATION FACILITIES (19 pages)**

ATTACHMENT B

MILESTONE / PAYMENT SCHEDULE

A. Total and complete compensation for this Agreement shall not exceed \$340,000.00.

MILESTONE DATES/PRICING SCHEDULE						
ITEM	DESCRIPTION	EQUIPMENT SPECIFICATION	SUPPLEMENTARY REFERENCE SPECIFICATIONS	REFERENCE DRAWINGS	QTY	TOTAL
1	MCC's	26 24 19		500-E-202 500-E-604 500-E-607		\$70,000.00
2	Chem Building 3 PLC	40 95 10	10 63 13 40 91 00 40 95 13 40 95 20	000-I-603 000-I-604 500-I-501 500-I-502 500-I-503 530-I-501 530-I-502 530-I-503		\$145,000.00
3	TF Building PLC	40 95 10	10 63 13 40 91 00 40 95 13 40 95 20	000-I-603 000-I-604 500-I-501 500-I-502 500-I-503 530-I-501 530-I-502 530-I-503		\$95,000.00
4	Chem Building 3 Comms Panel	40 95 10	10 63 13 40 91 00 40 95 13 40 95 20	000-I-603 000-I-604 500-I-504 500-I-505 530-I-504 530-I-505		\$15,000.00
5	TF Building Comms Panel	40 95 10	10 63 13 40 91 00 40 95 13 40 95 20	000-I-603 000-I-604 500-I-504 500-I-505 530-I-504 530-I-505		\$15,000.00
Contract includes furnishing all labor, materials, equipment, and incidentals as required for the Tertiary Filtration Electrical Package 2 - Pre-Procurement per ITB #PW-2426-11281.L. All equipment shall be delivered (FOB Destination) to the City, 3401 N. Ten Mile Road, Meridian, ID 83646. The manufacturer will submit at time of delivery; complete operation and maintenance manuals covering the equipment as delivered. CONTRACT TOTAL..... <u>\$340,000.00</u>						

Rockwell Automation

Centerline 2100 Motor Control Center

Basic Structure Information

Project Name: City of Meridian WRRF TF
Project Item: STFB3MCC0001
Project ID #: 5334856/1

Motor Control Center Details

This MCC(s) was developed using an available fault current of 50,001 to 65,000 A.
MCC configuration & pricing subject to change, if actual Available Fault Current differs.

Motor Control Center Details

Power System Type: Wye, 3-phase, 3-wire with solidly grounded neutral
Voltage: 480 Volts / 60 Hertz
Available Fault Current: 50,001 to 65,000 A
Master Nameplate: 1 Line(s)
Unit Nameplate Type: Acrylic - Black letters on white
Wiring Type: B-T Control and Power Terminal Blocks
Wiring Diagram Location: Within each unit
Arc Resistant MCC: No
IntelliCENTER Network: Ethernet
IMC Device Firmware: Upgraded to latest available version (saves up to 1 hour of customer configuration time per section)

Incoming Line Details

MCC Connection Type: Main Circuit Breaker
Incoming Line Cable Entry: Bottom Mounted

Bus Details

Main Bus Rating: 600A
Main Bus Material: Copper / Tin Plated
Main Bus Bracing: 65kA (rms symmetrical)

Insulated Bus: None Selected

Horizontal Ground Bus Size: 1/4" X 2"
Horizontal Ground Bus Plating: Unplated Copper
Horizontal Ground Bus Location: Bottom
Vertical Ground Bus Type: Unit Load Copper and Plug-in Copper
Incoming Ground Lug Size: #6 AWG - 250 kcmil (2 Supplied as Standard)
Incoming Ground Cable Size: None Selected

Enclosure Details

Enclosure Type: 1G - with Gasketed Doors
NEMA 3R/4 Lifting Angle: No
Section Depth: Front Mounted, 15" Deep
Section Height: 90" High
Stab Opening Protection: Automatic Shutters
Isolation Barriers: Yes
Wireway Tie Bar: Yes

Total Shipping Block(s): 1
Total Section(s): 3
Total Unit(s): 16

Ethernet Network Information

Full Ethernet Network Information can be found on the One-Line Diagram associated with this project item. This drawing can be obtained by requesting Pre-order drawings through PowerControl Builder.

Section Modifications (Qty/Mods)

Section Number	Section Width (inches)	Options/Modifications
1	20"	N/A
2	20"	N/A
3	20"	N/A

Rockwell Automation

Centerline 2100 Motor Control Center

Unit Description

Project Name: City of Meridian WRRF TF
Project Item: STFB3MCC0001
Project ID #: 5334856/1

General Information

Line Voltage / Frequency: 480 Volts / 60 Hertz
Power System Configuration: Wye, 3-phase, 3-wire with solidly grounded neutral
Class I Wiring Type: B-T Control and Power Terminal Blocks
NEMA Enclosure Type: 1G - with Gasketed Doors
Available Fault Current: 50,001 to 65,000 A
Unit Nameplate Type: Acrylic - Black letters on white
Delivery Program: ENG

Unit Information

Description	Unit Features
Unit Loc: 01A Del Prog: PEII Unit ID: 2 ENSW - Stratix 5200 20-Port 1783-CMS20DN <u>Wiring Diagram</u> 10007662157 <u>Name Plate Information</u> ETHERNET SWITCH <u>Ethernet Information</u> Device Type IP Address Subnet Mask 2100-ESW 192.168.1.1 255.255.255.0 No Cable Length Ethernet Switch Firmware Version: LATEST	Catalog Number: 2100-ESW5220K-T10GRP-751S Total Space Factor = 1 Full Stratix 5200 Firmware DLR (Device Level Ring) Power Adapters (w/Unit Mtg) <u>Features Included</u> Sleeve Type Markers (-751S)
Unit Loc: 01C Del Prog: SCII Unit ID: 1 ENPS - Ethernet Power Supply Unit <u>Rating</u> 125A <u>Wiring Diagram</u> 10004071286 <u>Name Plate Information</u> ETHERNET POWER SUPPLY	Catalog Number: 2100-EPS8KBH-30TGM-751S Total Space Factor = 1 Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (15A Trip) Disconnect Type = Circuit Breaker Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, V/60Hz Control Wiring: #16 AWG MTW(TEW) Cu <u>Features Included</u> Sleeve Type Markers (-751S)

Unit Loc: 01E Del Prog: ENG Unit ID: 5 FCBX - Empty Unit Insert <u>Wiring Diagram</u> 10005455227 <u>Name Plate Information</u> SPD	Catalog Number: 2100M-CKC-36TGM-79L-79U Total Space Factor = 1.5 Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (60A Trip) Disconnect Type Circuit Breaker <u>Features Included</u> Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) <u>Engineered Spec(s)/Modification(s)</u> (1) ASCO SPD - 300 ka/phase (At 480V Delta or Wye - At 600V Wye only) - UL Rated,450****P30ACCN20 (1) Engineered Modification and/or Custom Diagram
Unit Loc: 01H Del Prog: FT1 Unit ID: 9 MCB - Main Circuit Breaker <u>Rating</u> 300A <u>Wiring Diagram</u> 10004074268 <u>Name Plate Information</u> MAIN INCOMING BREAKER 300 AMP	Catalog Number: 2193MB-DKC-48TKM-80A500 Total Space Factor = 2.5 Circuit Breaker: Electronic (LSI), 65kA at 480V (300) with Frame Rating of 400A (- NONE- Frame), Bottom Mounted, 300A Trip Lugs Supplied: Screw type mech.,CU/AL wire, 350 kcmil Size Wire, 1 Cables per Phase <u>Engineered Spec(s)/Modification(s)</u> (1) 140G Ground Fault, Electronic LSIG, Frame Sizes H, J, K (UL Rated), ARMS Option (1) Engineered Modification and/or Custom Diagram (1) 140G Maintenance Mode - Switch Mode Selector Switch, Blue Indicator Light, & Control components for K & M Frame. - Separate Source (no CPT) For R and N Frame breakers, use option -760A (1) 0.5 Space Factor Adder (1) 80VA Control Transformer-Fusing/Fuse Block Included,1497-B-BASX-3-N
Unit Loc: 02A Del Prog: SCII Unit ID: 7 FCB - Feeder Circuit Breaker <u>Rating</u> 125A <u>Wiring Diagram</u> 10004849880 <u>Name Plate Information</u> STFB3AHU0001 HEAT PUMP <u>Overload Relay(s)</u> Motor Full Load Current (FLC) = Not Available	Catalog Number: 2193F-CKC-41TJM-79L-79U Total Space Factor = 1.5 Circuit Breaker: Thermal Magnetic, 65kA at 480V (125) with Frame Rating of 250A (J6 Frame), Plug-In Unit, 125A Trip Lugs Supplied: Std Mech/Lug Pads, 250 kcmil Size Wire, 1 Cables per Phase <u>Features Included</u> Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U)

Unit Loc: 02D Del Prog: FT1 Unit ID: 3 FVNR - Full Voltage Non-Reversing Starter w/CB Rating 5 HP Wiring Diagram 10008111980 Name Plate Information STFB3EXH0001 EXHAUST FAN NO 1 Overload Relay(s) E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 6.88 Motor Service Factor = 1.15 Ethernet Information <table><tr><td>Device Type</td><td>IP Address</td><td>Subnet Mask</td></tr><tr><td>2113</td><td>192.168.1.2</td><td>255.255.255.0</td></tr></table> Cable Length: 2.3 m E300 Overload Firmware Version: LATEST Catalog Number: 2113B-BAB-3-5LGA-6P-7FE3EDCN3VR-39TGA-79L-79U-85T-90-91-750-751S Size: NEMA Size 1 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (15A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) Features Included Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON-OFF Type: LED Push To Test, Color(s): Green, Amber (-5LGA) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Elapsed Time Meter (-85T) 1 NO on Starter (-90) 1 NC on Starter (-91) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S) Engineered Spec(s)/Modification(s) (1) Bulletin 800T/H, Selector Switch, Padlocking Cover, Part number 800T-N163 (Padlock not included),800T-N163 (1) Engineered Modification and/or Custom Diagram (1) Bulletin 800H, Push Button, Push-Pull or Push-Pull/Twist, Maintained Contact, Non-Illuminated,800H-FRX???? (1) Rockwell Automation Bulletin 700-HK Slim Line Relay, DPDT, 2-pole, 2 Form C, AgNi Contacts,700-HK32? Note - TD4, TD5	Device Type	IP Address	Subnet Mask	2113	192.168.1.2	255.255.255.0
Device Type	IP Address	Subnet Mask				
2113	192.168.1.2	255.255.255.0				

Unit Loc: 02HDel Prog: FT1 Unit ID: 4 FVNR - Full Voltage Non-Reversing Starter w/CB Rating 10 HP Wiring Diagram 10008111982 Name Plate Information SPARE Overload Relay(s) E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 13.65 Motor Service Factor = 1.15 Ethernet Information <table><tr><td>Device Type</td><td>IP Address</td><td>Subnet Mask</td></tr><tr><td>2113</td><td>192.168.1.4</td><td>255.255.255.0</td></tr></table> Cable Length: 2.96 m E300 Overload Firmware Version: LATEST	Device Type	IP Address	Subnet Mask	2113	192.168.1.4	255.255.255.0	Catalog Number: 2113B-BAB-3-5LGA-6P-7FE3EDCN3VR-41TGA-79L-79U-85T-90-91-750-751S Size: NEMA Size 1 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (30A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) Features Included Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON-OFF Type: LED Push To Test, Color(s): Green, Amber (-5LGA) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Elapsed Time Meter (-85T) 1 NO on Starter (-90) 1 NC on Starter (-91) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S) Engineered Spec(s)/Modification(s) (1) Bulletin 800T/H, Selector Switch, Padlocking Cover, Part number 800T-N163 (Padlock not included),800T-N163 (1) Engineered Modification and/or Custom Diagram (1) Bulletin 800H, Push Button, Push-Pull or Push-Pull/Twist, Maintained Contact, Non-Illuminated,800H-FRX???? (1) Rockwell Automation Bulletin 700-HK Slim Line Relay, DPDT, 2-pole, 2 Form C, AgNi Contacts,700-HK32? Note - TD4, TD5
Device Type	IP Address	Subnet Mask					
2113	192.168.1.4	255.255.255.0					
Unit Loc: 02KDel Prog: SCII Unit ID: 10 DOOR - Blank Unit Door	Catalog Number: 2100-BK05 Total Space Factor = 0.5						
Unit Loc: 02LDel Prog: SCII Unit ID: 11 DOOR - Blank Unit Door	Catalog Number: 2100-BK10 Total Space Factor = 1						
Unit Loc: 03ADel Prog: SCII Unit ID: 6 FCB - Feeder Circuit Breaker Rating 40A Wiring Diagram 10004266840 Name Plate Information STFB3MKU0001 MAKE UP AIR UNIT Overload Relay(s) Motor Full Load Current (FLC) = Not Available	Catalog Number: 2193F-AKB-34TGM-79L-79U Total Space Factor = 1 Circuit Breaker: Thermal Magnetic, 65kA at 480V (40) with Frame Rating of 125A (G6C Frame), Plug-In Unit, 40A Trip Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase Features Included Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U)						

Unit Loc: 03C Unit ID: 4 FVNR - Full Voltage Non-Reversing Starter w/CB Rating 10 HP Wiring Diagram 10008111982 Name Plate Information STFB3EXH0003 EXHAUST FAN NO 3 Overload Relay(s) E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 13.65 Motor Service Factor = 1.15 Ethernet Information <table><tr><td>Device Type</td><td>IP Address</td><td>Subnet Mask</td></tr><tr><td>2113</td><td>192.168.1.5</td><td>255.255.255.0</td></tr></table> Cable Length: 2.64 m E300 Overload Firmware Version: LATEST Catalog Number: 2113B-BAB-3-5LGA-6P-7FE3EDCN3VR-41TGA-79L-79U-85T-90-91-750-751S Size: NEMA Size 1 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (30A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) Features Included Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON-OFF Type: LED Push To Test, Color(s): Green, Amber (-5LGA) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Elapsed Time Meter (-85T) 1 NO on Starter (-90) 1 NC on Starter (-91) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S) Engineered Spec(s)/Modification(s) (1) Bulletin 800T/H, Selector Switch, Padlocking Cover, Part number 800T-N163 (Padlock not included),800T-N163 (1) Engineered Modification and/or Custom Diagram (1) Bulletin 800H, Push Button, Push-Pull or Push-Pull/Twist, Maintained Contact, Non-Illuminated,800H-FRX???? (1) Rockwell Automation Bulletin 700-HK Slim Line Relay, DPDT, 2-pole, 2 Form C, AgNi Contacts,700-HK32? Note - TD4, TD5	Device Type	IP Address	Subnet Mask	2113	192.168.1.5	255.255.255.0
Device Type	IP Address	Subnet Mask				
2113	192.168.1.5	255.255.255.0				

Unit Loc: 03E Del Prog: FT1 Unit ID: 8 FVNR - Full Voltage Non-Reversing Starter w/CB Rating 25 HP Wiring Diagram 10008111984 Name Plate Information SPARE Overload Relay(s) E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 6-60A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 32.34 Motor Service Factor = 1.15 Ethernet Information <table><tr><td>Device Type</td><td>IP Address</td><td>Subnet Mask</td></tr><tr><td>2113</td><td>192.168.1.6</td><td>255.255.255.0</td></tr></table> Cable Length: 2.97 m E300 Overload Firmware Version: LATEST	Device Type	IP Address	Subnet Mask	2113	192.168.1.6	255.255.255.0	Catalog Number: 2113B-CAB-3-5LGA-6P-7FE3EDCN6VR-44TGA-79L-79U-85T-90-91-750-751S Size: NEMA Size 2 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (50A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) Features Included Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON-OFF Type: LED Push To Test, Color(s): Green, Amber (-5LGA) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Elapsed Time Meter (-85T) 1 NO on Starter (-90) 1 NC on Starter (-91) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S) Engineered Spec(s)/Modification(s) (1) Bulletin 800T/H, Selector Switch, Padlocking Cover, Part number 800T-N163 (Padlock not included),800T-N163 (1) Engineered Modification and/or Custom Diagram (1) Bulletin 800H, Push Button, Push-Pull or Push-Pull/Twist, Maintained Contact, Non-Illuminated,800H-FRX??? (1) Rockwell Automation Bulletin 700-HK Slim Line Relay, DPDT, 2-pole, 2 Form C, AgNi Contacts,700-HK32? Note - TD4, TD5
Device Type	IP Address	Subnet Mask					
2113	192.168.1.6	255.255.255.0					

Unit Loc: 03GDel Prog: FT1 Unit ID: 4 FVNR - Full Voltage Non-Reversing Starter w/CB Rating 10 HP Wiring Diagram 10008111982 Name Plate Information SPARE Overload Relay(s) E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 13.65 Motor Service Factor = 1.15 Ethernet Information <table><tr><td>Device Type</td><td>IP Address</td><td>Subnet Mask</td></tr><tr><td>2113</td><td>192.168.1.7</td><td>255.255.255.0</td></tr></table> Cable Length: 3.3 m E300 Overload Firmware Version: LATEST	Device Type	IP Address	Subnet Mask	2113	192.168.1.7	255.255.255.0	Catalog Number: 2113B-BAB-3-5LGA-6P-7FE3EDCN3VR-41TGA-79L-79U-85T-90-91-750-751S Size: NEMA Size 1 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (30A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) Features Included Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON-OFF Type: LED Push To Test, Color(s): Green, Amber (-5LGA) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Elapsed Time Meter (-85T) 1 NO on Starter (-90) 1 NC on Starter (-91) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S) Engineered Spec(s)/Modification(s) (1) Bulletin 800T/H, Selector Switch, Padlocking Cover, Part number 800T-N163 (Padlock not included),800T-N163 (1) Engineered Modification and/or Custom Diagram (1) Bulletin 800H, Push Button, Push-Pull or Push-Pull/Twist, Maintained Contact, Non-Illuminated,800H-FRX???? (1) Rockwell Automation Bulletin 700-HK Slim Line Relay, DPDT, 2-pole, 2 Form C, AgNi Contacts,700-HK32? Note - TD4, TD5
Device Type	IP Address	Subnet Mask					
2113	192.168.1.7	255.255.255.0					
Unit Loc: 03JDel Prog: SCII Unit ID: 11 DOOR - Blank Unit Door	Catalog Number: 2100-BK10 Total Space Factor = 1						
Unit Loc: 03LDel Prog: SCII Unit ID: 11 DOOR - Blank Unit Door	Catalog Number: 2100-BK10 Total Space Factor = 1						

Rockwell Automation

Centerline 2100 Motor Control Center

Front Elevation

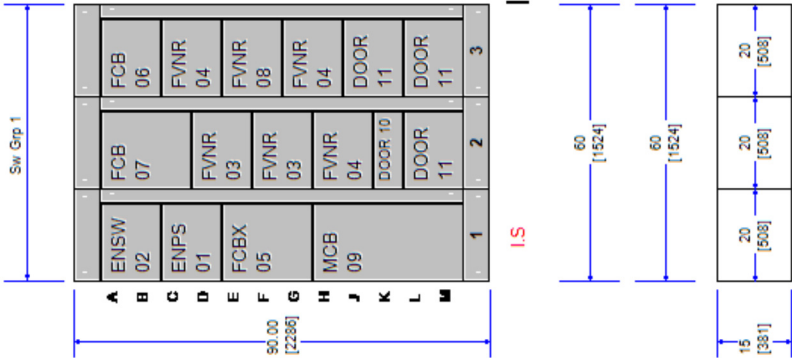
Project Name: City of Meridian WRRF TF

Project Item: STFB3MCC0001

Project ID #: 5334856/1

Rockwell Automation/Allen-Bradley

PowerControl Builder Lineup



NOTE: Dimensions are subject to change after design review.

ENCLOSURE: NEMA Type 1G (General Purpose with Gasketed Doors)

Estimated Heat Loss: 697 watts.

BTU/hr. Required: 2377

Air Conditioning Tons: 0.20

Estimated Weight: 1500 lbs. (680 kg)

Heat loss values are for estimating purposes only.

SHEET KEYNOTES

A. UPS

B. THE INTEGRATION OF SOFSEPL00001 ONTO THE SCADA RING WILL OCCUR IN THE FOPP AT THE DOWATERING PLC.

C. ETHERNET SWITCH - STANTRX-5000 1753-0451UP

D. ETHERNET SWITCH - STANTRX-5000 1753-0451UP WITH THICK CLIENT.

E. PLC - CONTROLLOGIX 1764-L7X.

F. REFER TO DRAWING 5001-504 FOR STANDARD LAYOUT OF PANEL.

G. REFER TO DRAWING 5001-501 FOR STANDARD LAYOUT OF PANEL.

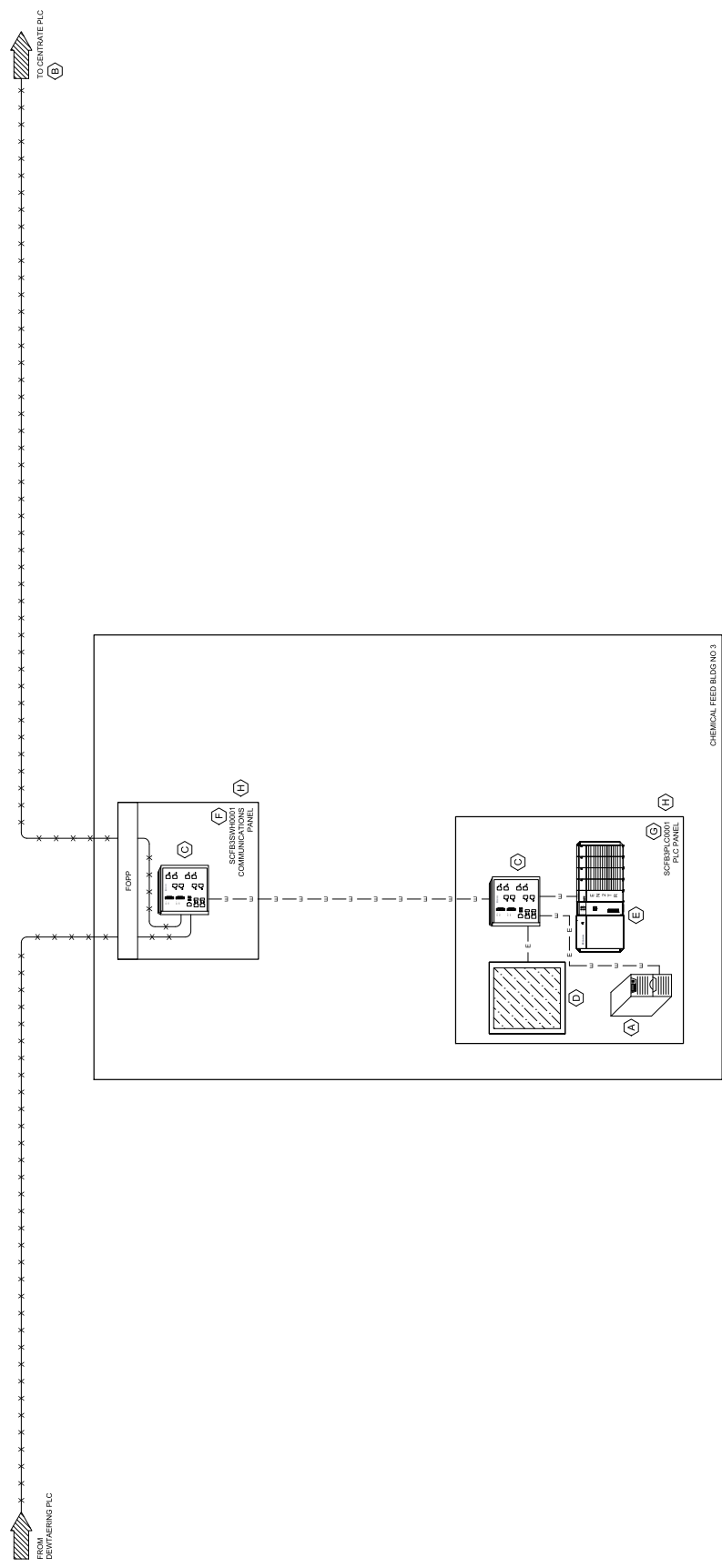
H. COMMUNICATIONS AND PLC PANELS ARE PROCURED IN PRE-PURCHASE PACKAGE 2. COORDINATE INSTALLATION WITH OWNER.

LEGENDS

----- ELECTRICAL SIGNAL

---E---E--- ETHERNET CABLE

---X---X--- FIBER CABLE (MULTI-MODE)



Permit/Seal

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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Client/Project
CITY OF MERIDIAN
MERIDIAN WATER RESOURCE
RECOVERY FACILITY
FACILITIES
MERIDIAN, IDAHO

Project No.: 202003136
Drawing No.: 000-I-603
Scale: NO SCALE
Date: 08/04/21
Author: J. J. J. J. J.
Checker: J. J. J. J. J.
Title: CONTROL NETWORK
ARCHITECTURE - I

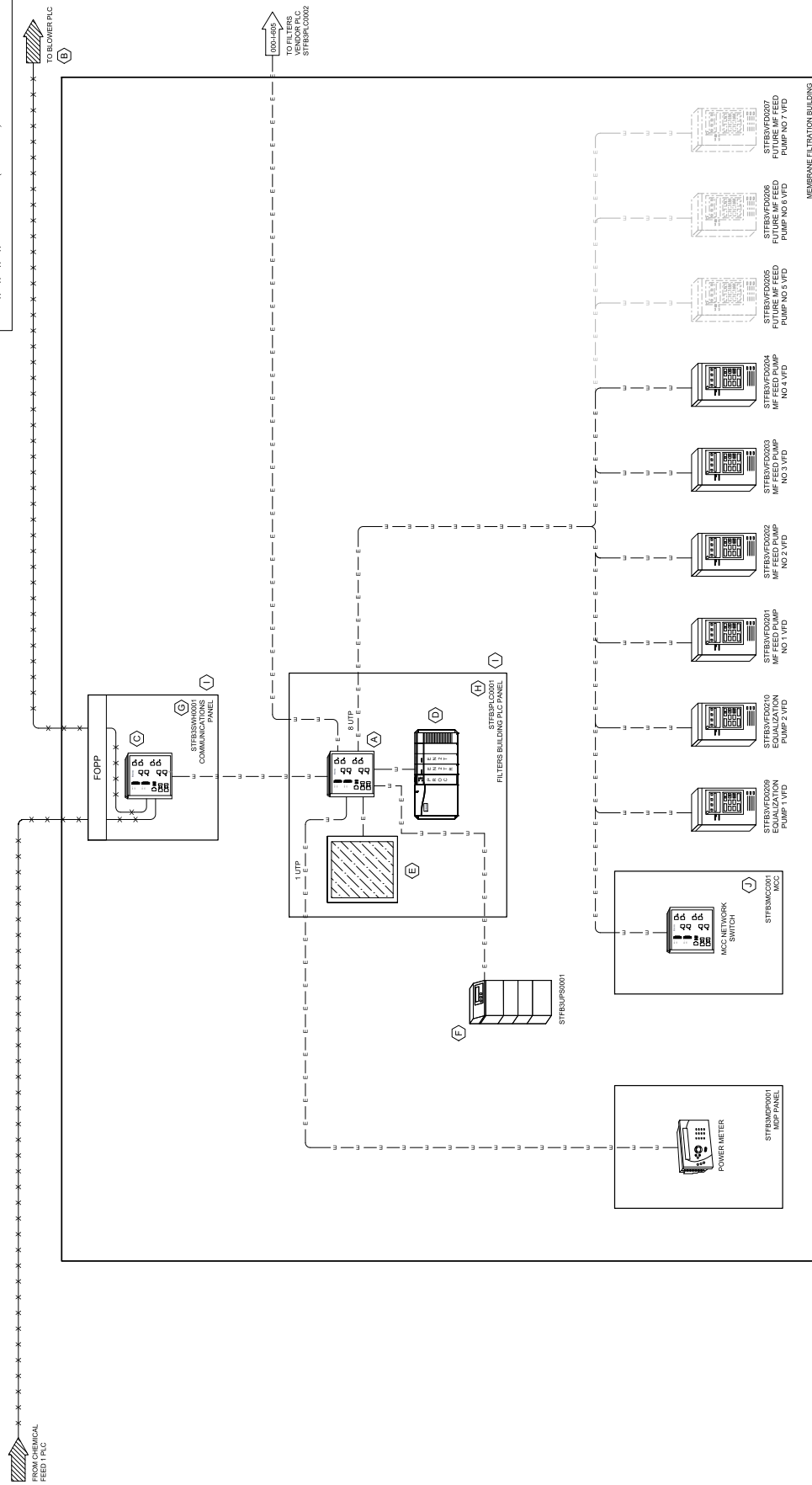
Revision:
Drawing No.:
000-I-603

SHEET KEYNOTES

1. STAFF 52001 TRS-CHEN2009
2. THE INTEGRATION OF FERRER C0001 ONTO THE SCADA RING WILL OCCUR IN THE FORTHCOMING YEAR.
3. AT THE CHEMENG P.L.C.
4. STAFF 52001 TRS-CHEN199
5. P.C. CONTINGUOUS 756/147X
6. OT - HOPE INDUSTRIAL HEALTH 19.5-60/60 WITH THICK CLIENT.
7. UPS.
8. REFER TO DRAWING 5001-1564 FOR STANDARD LAYOUT OF PANEL.
9. REFER TO DRAWING 5001-1561 FOR STANDARD LAYOUT OF PANEL.
10. COMMUNICATIONS AND P.L.C. PANELS ARE PROVIDED IN PRE-PURCHASE PACKAGE 2.
11. COORDINATE INSTALLATION WITH OWNER.
12. STAFF 52001 TRS-CHEN2020

LEGENDS

- LEGENDS**
- | | |
|-----------------|--------------------------|
| ----- | ELECTRICAL SIGNAL |
| - E - E - E - | ETHERNET CABLE |
| X X X X X X X X | FIBER CABLE (MULTI-MODE) |





Stantec
8600A, Kansas City, MO 64114
Tel: +1 816 455 5865
www.stantec.com

BILL OF MATERIAL

ITEM NO	QTY	MANUFACTURER	MODEL NUMBER	DESCRIPTION
1	1	SACINAW	SCE-90484FSD	ENCLOSURE half 90484FSD
2	1	SACINAW	SCE-9048F1	BACK PANEL half 9048F1
3	2	SACINAW	SCE-9038MP20	SIDE PANEL half 9038MP20
4	1	SACINAW	SCE-LF-RND	ENCLOSURE LIGHT half 9038MP20
5	1	ALLEN BRADLEY	1756A17	PLC RACK, 17 SLOT
6	1	ALLEN BRADLEY	1756-P4S	PLC POWER SUPPLY
7	1	ALLEN BRADLEY	1756-L73	PLC PROCESSOR
8	1	ALLEN BRADLEY	1756-EN2T	PLC ETHERNET MODULE
9	1	ALLEN BRADLEY	1756-EN2R	PLC ETHERNET REDUNDANCY MODULE
10	3	ALLEN BRADLEY	1756-IA16	PLC DISCRETE INPUT MODULE
11	1	ALLEN BRADLEY	1756-OW16	PLC DISCRETE OUTPUT MODULE
12	2	ALLEN BRADLEY	1756-F5H	PLC ANALOG INPUT MODULE
13	1	ALLEN BRADLEY	1756-OPH	PLC ANALOG OUTPUT MODULE
14	7	ALLEN BRADLEY	1756-K2	PLC FILL MODULE
15	3	ALLEN BRADLEY	1402-RFM-20F-FT-120A-2	IFM MODULE, DISCRETE INPUT
16	1	ALLEN BRADLEY	1402-RFM-60F-FT-120-2	IFM MODULE, DISCRETE OUTPUT
17	2	ALLEN BRADLEY	1402-ARM-IF-5	IFM MODULE, ANALOG INPUT
18	1	ALLEN BRADLEY	1402-RAFMK-3	IFM MODULE, ANALOG OUTPUT
19	3	ALLEN BRADLEY	1402-CABLE-X	IFM CABLE, DISCRETE INPUT
20	1	ALLEN BRADLEY	1402-CABLE-Y	IFM CABLE, DISCRETE OUTPUT
21	2	ALLEN BRADLEY	1402-ACABLE-JD	IFM CABLE, ANALOG INPUT
22	1	ALLEN BRADLEY	1402-ACABLE-JWB	IFM CABLE, ANALOG OUTPUT
23	5	ALLEN BRADLEY	1402-RTB-20-N	IFM REMOVABLE TERMINAL BLOCK (RTB), 20 POLE
24	3	ALLEN BRADLEY	1402-RTB-16-N	IFM REMOVABLE TERMINAL BLOCK (RTB), 16 POLE
25	1	ALLEN BRADLEY	1755-CHS200P	ETHERNET SWITCH, STRATIX 5200 CHS200P
26	1	DELL	OPTIPLEX 3090	DESKTOP WORKSTATION
27	1	HOPE	HISML19-5-F0V8	19.5" WIDESCREEN PANEL MOUNT MONITOR AND INDUSTRIAL TOUCH SCREEN, NON TOUCH HMI
28	1	HOPE	NB-R3-WMT-BLK-4-LJ08	KEYBOARD
29	1	PFANNENBERG	1712100010	THERMOSTAT half 1712100010
30	2	PFANNENBERG	1162114055	COOLING FAN KIT, 8" half 1162114055
31	2	PFANNENBERG	1175000055	FILLER KIT half 1175000055
32	1	NOT USED	NOT USED	NOT USED
33	1	NOT USED	NOT USED	NOT USED
34	1	NOT USED	NOT USED	NOT USED
35	1	EATON	FAZ-C01-1NA-SP	CIRCUIT BREAKER 10A ab 1405-m1100
36	7	EATON	FAZ-C05-1NA-SP	CIRCUIT BREAKER 5A ab 1405-m1050
37	6	EATON	FAZ-C03-1NA-SP	CIRCUIT BREAKER 3A ab 1405-m1030
38	1	TRANSISTOR	1104-15-000	SURGE SUPPRESSOR, DR-EP-120-0
39	-	NOT USED	NOT USED	NOT USED
40	1	PHOENIX CONTACT	9004H1	CONVENIENCE OUTLET, DUPLEX ab 1402-net15
41	2	PHOENIX CONTACT	2869763	24VDC POWER SUPPLY, QUANT 10A ab 1006-ab240a
42	1	PHOENIX CONTACT	2320157	24VDC REDUNDANCY MODULE, QUANT-DIODE12-24VDC ab 1006-240a020
43	20	PHOENIX CONTACT	3044032	FUSED TERMINAL BLOCK, UT 4-HSI ab 1402-081120
44	45	PHOENIX CONTACT	3044102	TERMINAL BLOCK, GREY, UT 4 ab 1402-4
45	3	PHOENIX CONTACT	3044128	GROUNDING TERMINAL BLOCK, UT 4 PE ab 1402-gp4
46	10	PHOENIX CONTACT	3047025	END COVER, GREY, DUT 2.5X12.22MM ab 1402-2503
47	32	PHOENIX CONTACT	0909865	END ANCHOR, ENG 3SN ab 1402-2403
48	20	PHOENIX CONTACT	3032224	PLUG-IN BRIDGE, RED (50) FBS 50-6 ab 1402-gp4-50
49	1	PHOENIX CONTACT	3032211	PLUG-IN BRIDGE, BLUE (50) FBS 50-6 BU ab 1402-gp5-50-b
50	1	PHOENIX CONTACT	0800307	TERMINAL STRIP MARKER CARRIER, LBEED ab 1402-gp05
51	12	HOFFMAN	P-GSKH	GROUND BAR
52	1	HOFFMAN	ALF5W2	DOOR SWITCH (FOR LIGHT)
53	1	HOFFMAN	DAH4001	PANEL HEATER
54	AR	ALLEN BRADLEY	DA1169	ON PAUL
55	-	NOT USED	NOT USED	NOT USED
56	-	NOT USED	NOT USED	NOT USED
57	AR	PANDUIT	PXALG06	2" X 4" WIRING DUCT, GRAY, NARROW SLOT, TYPE F
58	AR	PANDUIT	CL2G6	2" WIRING DUCT COVER, GRAY
59	AR	PANDUIT	PXALWH6	2" X 4" WIRING DUCT, WHITE, NARROW SLOT, TYPE F
60	AR	PANDUIT	CL2WH6	2" WIRING DUCT COVER, WHITE
61	AR	PANDUIT	PXALG05	3" X 4" WIRING DUCT, GRAY, NARROW SLOT, TYPE F
62	AR	PANDUIT	CL3G6	3" WIRING DUCT COVER, GRAY
63	AR	PANDUIT	PXALWH6	3" X 4" WIRING DUCT, WHITE, NARROW SLOT, TYPE F
64	AR	PANDUIT	CL3WH6	3" WIRING DUCT COVER, WHITE
65	AR	PANDUIT	PXALG06	4" X 4" WIRING DUCT, GRAY, NARROW SLOT, TYPE F
66	AR	PANDUIT	CL4G6	4" WIRING DUCT COVER, GRAY
67	AR	PANDUIT	PXALWH6	4" X 4" WIRING DUCT, WHITE, NARROW SLOT, TYPE F
68	AR	PANDUIT	CL4WH6	4" WIRING DUCT COVER, WHITE
69	AR	PANDUIT	PXALB06	2" X 4" WIRING DUCT, BLUE, NARROW SLOT, TYPE F
70	AR	PANDUIT	CL2B06	2" WIRING DUCT COVER, BLUE

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codes and standards. It is intended to
provide general information or comment only.

CITY OF MERIDIAN
Client/Project
MERIDIAN WATER RESOURCE
RECOVERY FACILITY
FACILITIES
MERIDIAN, IDAHO
Project No.: 202003136
As Issued: 03/15/2020
Scale: NO SCALE
Sheet: 500-I-502
Title: MEMBRANE BUILDING
PLC BILL OF MATERIAL
Revision:
Drawing No.: 500-I-502

Revision	By	Appd	YYYY.MM.DD

	Issued	By	Appd.	YYYY.MM.DD
E PROCUREMENT PACKAGE 2		Waf	NMS	2024-06-28
D SWS REVIEW		Waf	NMS	2024-06-27

PRELIMINARY
NOT FOR
CONSTRUCTION

RECOVERED WATER RESOURCE
RECOVERY FACILITY
TERTIARY FILTRATION
FACILITIES
MERIDIAN, IDAHO

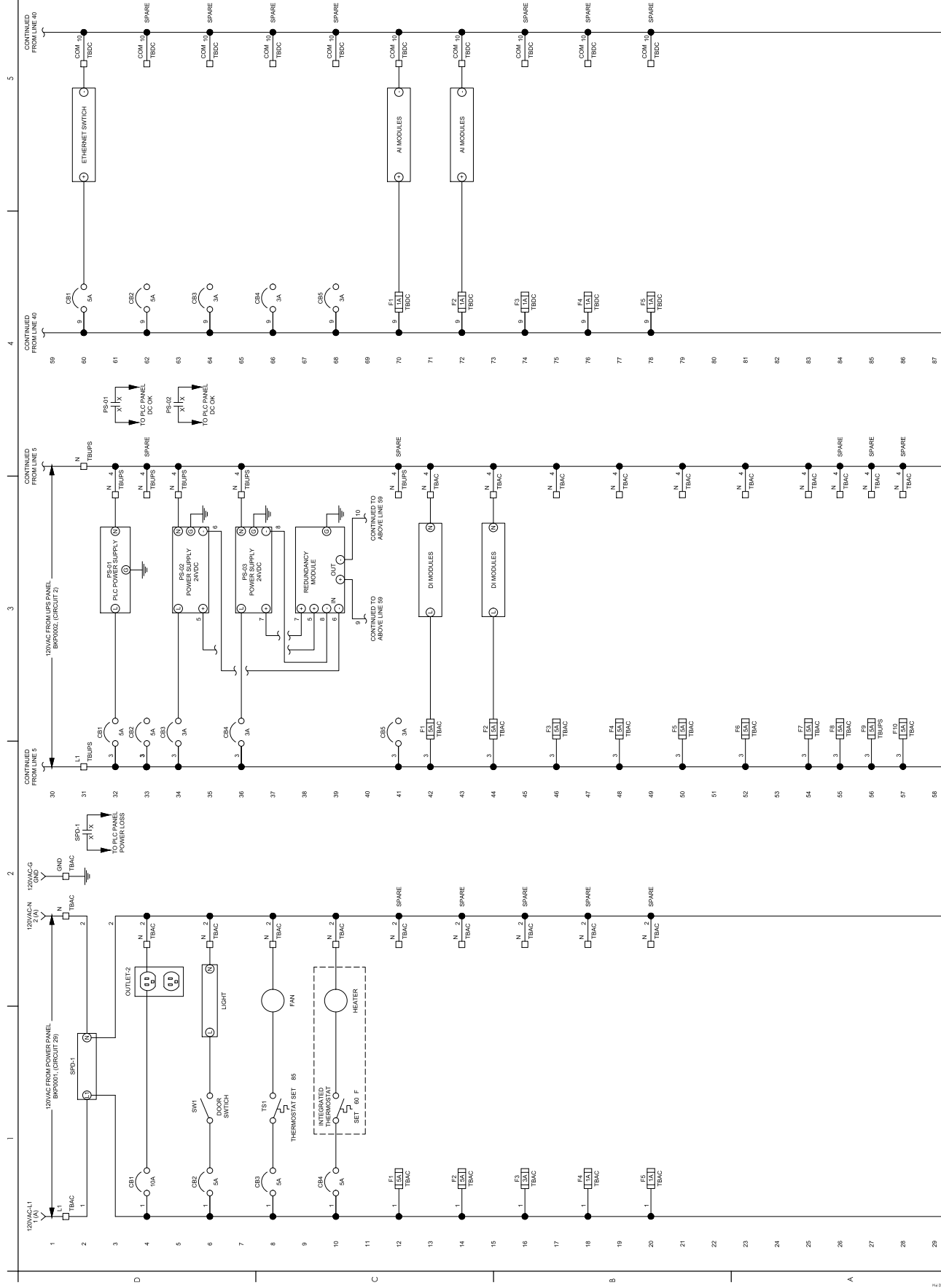
003136

2024.06.21

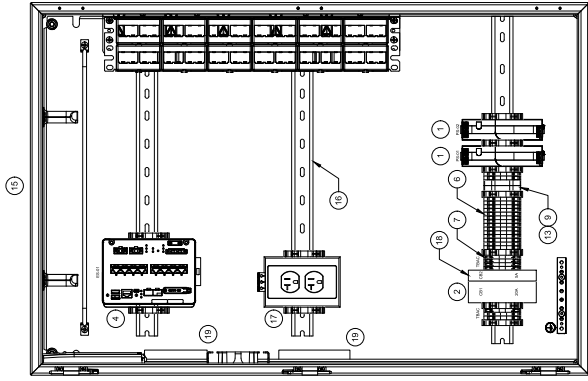
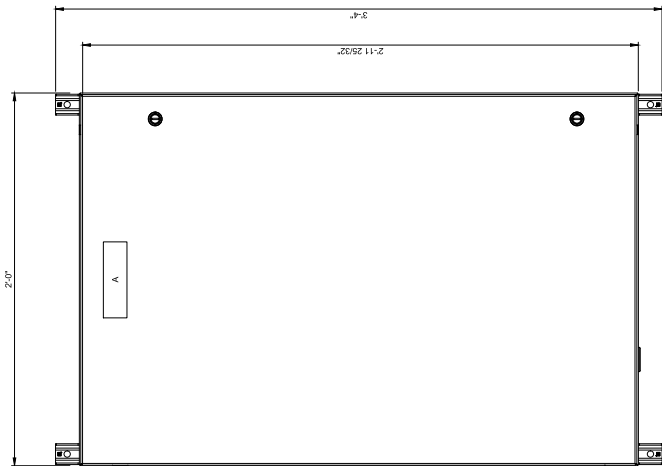
Chid. YIFY_MM.CO

BUILDING
ING DIAGRAM

503



BILL OF MATERIAL				
ITEM NO	QTY	MANUFACTURER	MODEL NUMBER	DESCRIPTION
1	2	ALLEN BRADLEY	1000-ALE120E	ESSENTIAL POWER SUPPLY, 24-2DC, DC, 120W, 120VAC AC INPUT VOLTAGE
2	1	ALLEN BRADLEY	1489-MXC200	BULLETIN 1484M THERMAL-MAGNETIC CIRCUIT BREAKERS, STANDARD CONFIGURATION, AC 2 POLE CONFIGURATION, TRIP CURVE C UL950A MAX. VOLTAGE 480V/577V AC, 80V DC, ECEN MAX VOLTAGE 400V, AC 5A
3	-	NOT USED	NOT USED	
4	1	ALLEN BRADLEY	1783-CAN10P	STRATX 5000 SWITCH MODULAR BASE, 8 POLE, 100 / 1000 PORTS, 2.5FT 100 / 1000 SLOTS, LAYER 2 FW, ADVANCED FEATURES
5	2	ALLEN BRADLEY	1783-SPFH0LX	STRATX FIBER SFP, 100 MBIT CONNECTIVITY OVER SINGLE MODE FIBER DUAL LC
6	14	ALLEN BRADLEY	1462-A	1462-REC TERMINAL BLOCK, ONE CIRCUIT FEED THROUGH BLOCK, 600VAC, 30A (22 AWG-10 AWG) STANDARD FEED THROUGH GREEN/YELLOW STRIPE (STANDARD)
7	5	ALLEN BRADLEY	1462-G4	1462-1/2C TERMINAL BLOCK, ONE CIRCUIT FEED THROUGH GROUND BLOCK, 1MM (22 AWG-10 AWG) STANDARD FEED THROUGH GREEN/YELLOW STRIPE (STANDARD)
8	AR	ALLEN BRADLEY	1462-DJ35	1462-TERMINAL BLOCK ACCESSORIES AND ANCHOR, END ANCHOR
9	2	ALLEN BRADLEY	1462-WFB250	1462-REC TERMINAL BLOCK, ONE-CIRCUIT FUSE BLOCK (X 22 MM) FUSE, TYPE W 2.5MM (1/2Z AWG - # 12 AWG) NEON INDICATOR, SIZE 25 (STANDARD)
10	AR	ALLEN BRADLEY	1462-JFB5-10	BACK JAMPER, INSULATED, 8MM 10 POLE GRAY, PKG. QTY OF 10 JFB5-10
11	AR	ALLEN BRADLEY	1462-CJM2	CENTER JAMPER SCREW TYPE 6MM CENTER TO CENTER, 2 POLE, GRAY, PKG. QTY OF 20 FOR USE WITH 1462-JM, JAM
12	AR	ALLEN BRADLEY	1462-CJM3	CENTER JAMPER SCREW TYPE 6MM CENTER TO CENTER, 3 POLE, GRAY, PKG. QTY OF 50 FOR USE WITH 1462-JM, JAM
13	2	MERSEN	GC10	MINIATURE FUSE, 125 VOLT, 125 V A, 5 X 20 MM THERMULE, GLASS/CERAMIC
14	6	PANDUIT	CMDSLC28U	MMU-COM ADAPTER MODULE, SINGLE MODE FIBER, DUPLEX, BLUE/BLUE
15	1	PANDUIT	ZDC3C-5	PRE-CONFIGURED NETWORK ZONE SYSTEM FIBER CABINET
16	AR	ALLEN BRADLEY	186-100	DIN RAIL
17	1	PROTEK CONTACT	6000481	CONNECTION OUTLET, DUK EX 1489-0410
18	1	ALLEN BRADLEY	1489-M1C050	BULLETIN 1484M THERMAL-MAGNETIC CIRCUIT BREAKERS, STANDARD CONFIGURATION, AC 1 POLE CONFIGURATION, TRIP CURVE C UL950A MAX. VOLTAGE 480V/577V AC, 80V DC, ECEN MAX VOLTAGE 400V, AC 5A
19	2	PANDUIT	F49WQDLCZ	F49P-LC DUPLEX ADAPTER, OM3/OM4



FRONT PANEL LAYOUT

BACK PANEL LAYOUT

STFB3WH0001
FILTERS BUILDING COMMUNICATIONS PANEL

STFB3WH0001

PANEL LABEL		
LABEL	PANEL TAG	DESCRIPTION
A	STFB3WH0001	COMMUNICATIONS PANEL

**PRELIMINARY
NOT FOR
CONSTRUCTION**

CITY OF MERIDIAN
MERIDIAN WATER RESOURCE
RECOVERY FACILITY
TERTIARY FILTRATION
FACILITIES
MERIDIAN, IDAHO

File Name: Q3136504-004

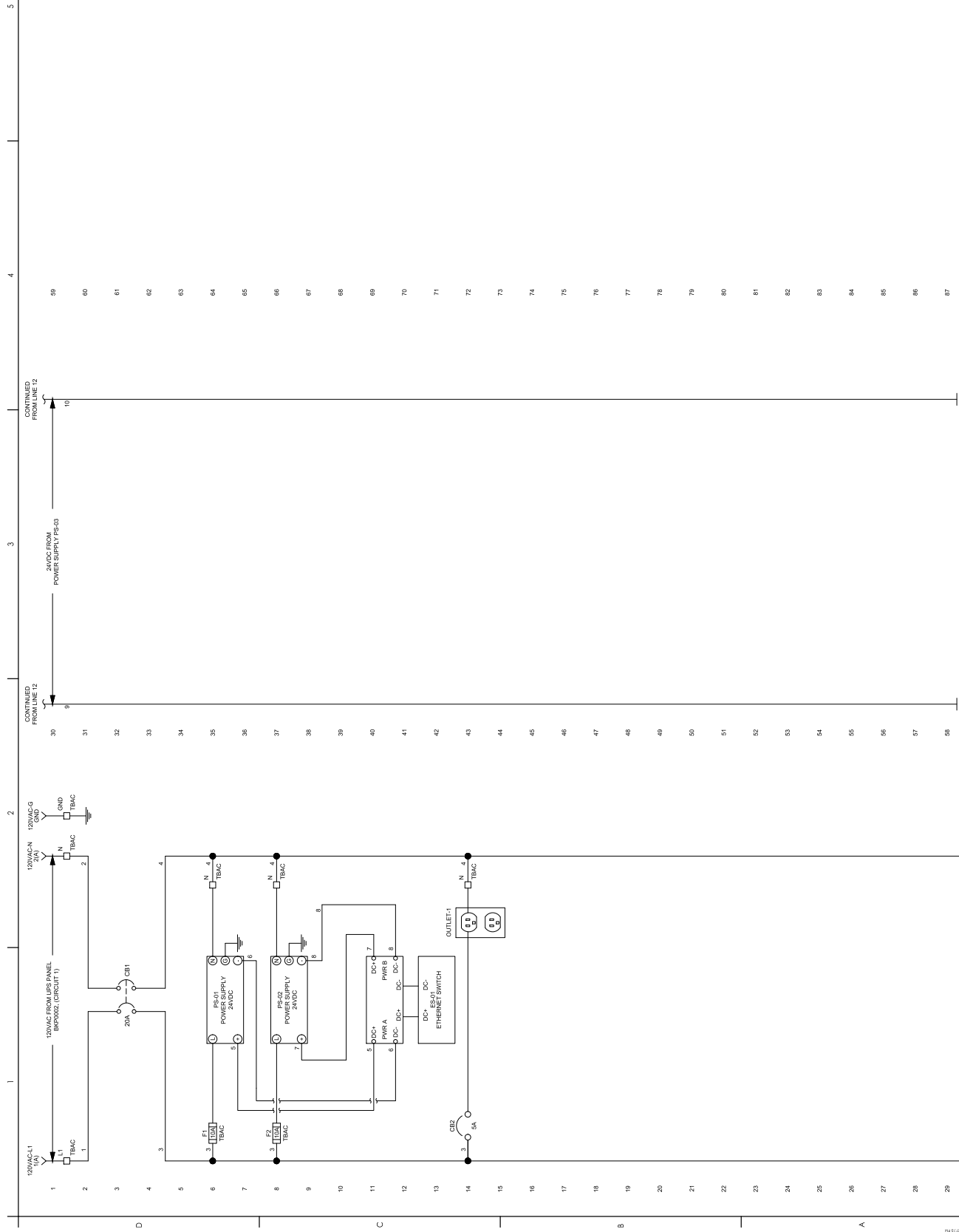
Scale: 3" = 1'-0"

Owner	JPM	2024.06.21
Design	Chad	MMT.AM.CO

title
MEMBRANE BUILDING
COMMUNICATIONS PANEL
LAYOUT AND BOM

Revision:
Drawing No.

500-1-504

[illegible]

Permit/Seat

PRELIMINARY
NOT FOR
CONSTRUCTION

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Client/Project
CITY OF MERIDIAN
MERIDIAN WATER RESOURCE
RECOVERY FACILITY
TERTIARY FILTRATION
FACILITIES
MERIDIAN, IDAHO

Project No.:	2002003136					
Home:	0315504-025					
Scale:	NO SCALE					
Title	JPM	2024.06.21				
	KRY					
	Dwn.	Bgn.	Chsd.	YTY	AWD	ZO
MEMBRANE BUILDING COMMUNICATIONS PANEL WIRING DIAGRAM						
Revision:						

Revision: _____
Drawing No. _____

Drawing No. **500-I-505**

[illegible]

Permit/Seal

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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Client/Project
CITY OF MERIDIAN
MERIDIAN WATER RESOURCE
RECOVERY FACILITY
TERTIARY FILTRATION
FACILITIES
MERIDIAN, IDAHO

File Name: 03136534-601

Scale: 1:1

VRK		JPM	2024.06.21
Own.	Dign.	Child.	YYYY.MM.DD

Title

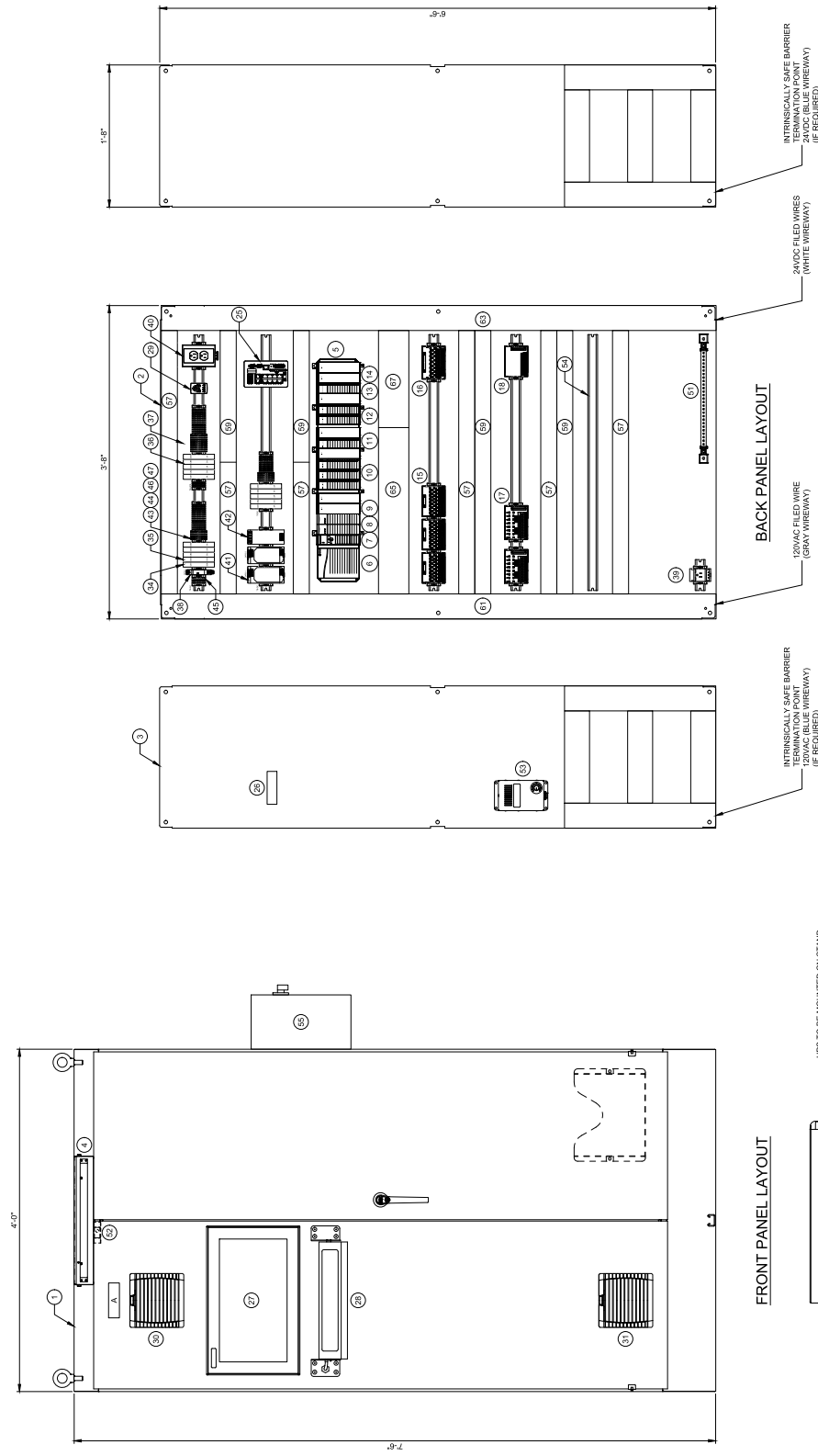
Revision:

Drawing No.
530-I-501

GENERAL SHEET NOTES

1. DO NOT REMOVE OR CUTOFF PANDUIT FINGERS FROM ADJACENT WIREWAY.
2. MAXIMUM EQUIPMENT MOUNTED DEPTH 3".
3. MAXIMUM EQUIPMENT MOUNTED HEIGHT 6".
4. U.L. LABEL LOCATED ON INSIDE THE PANEL DOOR.

PANEL LABEL		
LABEL	PANEL TAG	DESCRIPTION
A	STF83PLC0001	CHEMICAL FEED BLDG 3 PLC CONTROL PANEL



FRONT PANEL LAYOUT

BACK PANEL LAYOUT

UPS TO BE MOUNTED ON STAND
ON CABINET FLOOR
ON-SITE BY ELECTRICAL
CONTRACTOR

INTRINSICALLY SAFE BARRIER
TERMINATION POINT
24VDC (BLUE WIREWAY)
(IF REQUIRED)

_____ 24VDC FILED WIRES
(WHITE WIREWAY)

INTRINSICALLY SAFE BARR
TERMINATION POINT
120VAC (BLUE WIREWAY)
(IF REQUIRED)

SCFB3PLC0001

SCFB3PLC0001
CHEMICAL FEED BUILDING 3 PLC CONTROL PANEL

Drawing No.
530-I-501

[illegible]

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Revision: _____

Drawing No. _____

530-1-503



2727 E. Riverpark Lane #150
 80308, Idaho 83706
 1.208.345.5865
www.intellicc.com
 This Contractor will not and we request that it not be
 the Company to disclose and/or divulge on the property of Intellicc, Republic of
 or use for any purpose other than the project at Intellicc, Republic of

[illegible]

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale: NO SCALE

JAC	MSA	DAR	2024.06.21
Dwn	Dgn	Chkd	YYYY.MM.DD

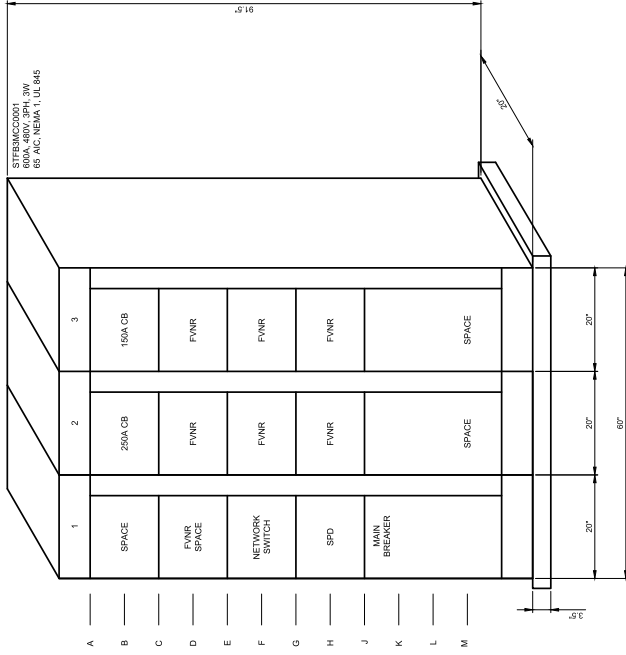
Title

MEMBRANE BUILDING
EQUIPMENT ELEVATION - I

Revision:
Drawing No.
500-E-201

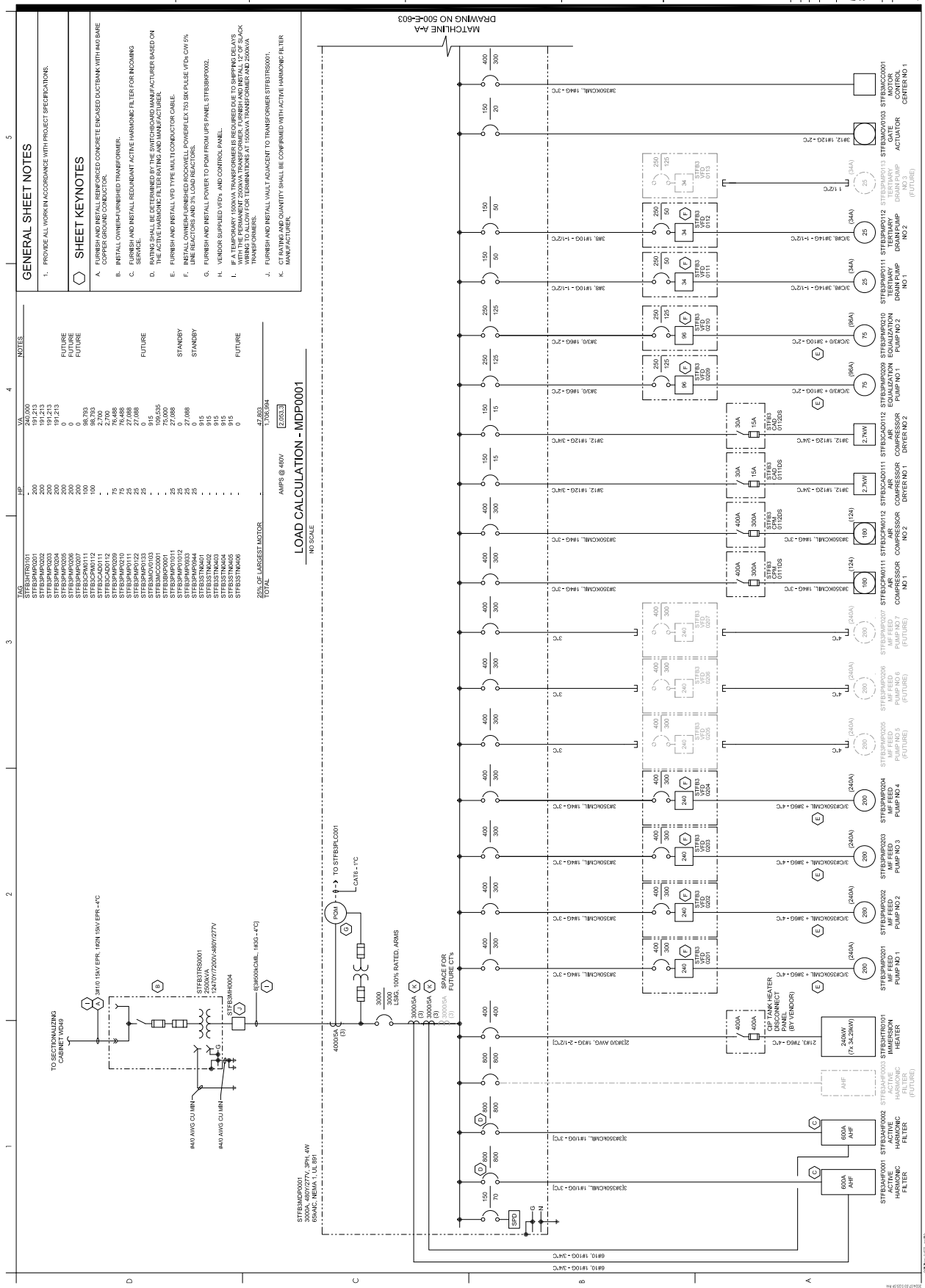
GENERAL SHEET NOTES

1. PROVIDE ALL WORK IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
2. FURNISH AND INSTALL HOUSEKEEPING PAD.
3. CONFIGURE THE HORIZONTAL BUS SO IT CAN CONNECT TO FUTURE MCC SECTIONS.



ELEVATION - MOTOR CONTROL CENTER STFB3MCC0001

NO SCALE



GENERAL SHEET NOTES

- PROVIDE ALL WORK IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

SHEET KEYNOTES

- TURN OFF AND DISCONNECT ENCLOSED DUCTBANK WITH HARM HARMER GROUND CONNECTION.
- INSTALL OWNER-SUPPLIED TRANSFORMER.
- FURNISH AND INSTALL REGUMARK ACTIVE HARMONIC FILTER FOR HARMING SERVICE.
- RATING SHALL BE DETERMINED BY THE SWITCHBOARD MANUFACTURER BASED ON THE ACTIVE HARMONIC FILTER RATING AND MANUFACTURER.
- FURNISH AND INSTALL VFD TYPE MULTI-CONDUCTOR CABLE.
- INSTALL OWNER-SUPPLIED ROCKWELL POWERFLEX 753 BK FUSE VFD 5W 5W.
- FURNISH AND INSTALL POWER TO POM FROM UPS PANEL STEB00002.
- VEHICLE SUPPLIED VFDX AND CONTROL PANEL.
- IF A TEMPORARY 1000VA TRANSFORMER IS REQUIRED DUE TO SHIPPING DELAYS, THE TRANSFORMER SHALL BE INSTALLED IN THE TRANSFORMER ROOM AND SHALL BE WIRING TO THE TRANSFORMER TERMINALS AT 1000V TRANSFORMER AND 250V TRANSFORMERS.
- FURNISH AND INSTALL SHALL BE ADJUSTED TO TRANSFORMER STEB10001.
- CT RATING AND QUANTITY SHALL BE CONFIRMED WITH ACTIVE HARMONIC FILTER MANUFACTURER.

HP	VA	NOTES
200	140,000	
200	139,213	
200	138,426	
200	137,639	
200	136,852	
200	136,065	
200	135,278	
200	134,491	
200	133,704	
200	132,917	
200	132,130	
200	131,343	
200	130,556	
200	129,769	
200	128,982	
200	128,195	
200	127,408	
200	126,621	
200	125,834	
200	125,047	
200	124,260	
200	123,473	
200	122,686	
200	121,899	
200	121,112	
200	120,325	
200	119,538	
200	118,751	
200	117,964	
200	117,177	
200	116,390	
200	115,603	
200	114,816	
200	114,029	
200	113,242	
200	112,455	
200	111,668	
200	110,881	
200	110,094	
200	109,307	
200	108,520	
200	107,733	
200	106,946	
200	106,159	
200	105,372	
200	104,585	
200	103,798	
200	103,011	
200	102,224	
200	101,437	
200	100,650	
200	99,863	
200	99,076	
200	98,289	
200	97,502	
200	96,715	
200	95,928	
200	95,141	
200	94,354	
200	93,567	
200	92,780	
200	91,993	
200	91,206	
200	90,419	
200	89,632	
200	88,845	
200	88,058	
200	87,271	
200	86,484	
200	85,697	
200	84,910	
200	84,123	
200	83,336	
200	82,549	
200	81,762	
200	80,975	
200	80,188	
200	79,401	
200	78,614	
200	77,827	
200	77,040	
200	76,253	
200	75,466	
200	74,679	
200	73,892	
200	73,105	
200	72,318	
200	71,531	
200	70,744	
200	69,957	
200	69,170	
200	68,383	
200	67,596	
200	66,809	
200	66,022	
200	65,235	
200	64,448	
200	63,661	
200	62,874	
200	62,087	
200	61,300	
200	60,513	
200	59,726	
200	58,939	
200	58,152	
200	57,365	
200	56,578	
200	55,791	
200	55,004	
200	54,217	
200	53,430	
200	52,643	
200	51,856	
200	51,069	
200	50,282	
200	49,495	
200	48,708	
200	47,921	
200	47,134	
200	46,347	
200	45,560	
200	44,773	
200	43,986	
200	43,199	
200	42,412	
200	41,625	
200	40,838	
200	40,051	
200	39,264	
200	38,477	
200	37,690	
200	36,903	
200	36,116	
200	35,329	
200	34,542	
200	33,755	
200	32,968	
200	32,181	
200	31,394	
200	30,607	
200	29,820	
200	29,033	
200	28,246	
200	27,459	
200	26,672	
200	25,885	
200	25,098	
200	24,311	
200	23,524	
200	22,737	
200	21,950	
200	21,163	
200	20,376	
200	19,589	
200	18,802	
200	18,015	
200	17,228	
200	16,441	
200	15,654	
200	14,867	
200	14,080	
200	13,293	
200	12,506	
200	11,719	
200	10,932	
200	10,145	
200	9,358	
200	8,571	
200	7,784	
200	6,997	
200	6,210	
200	5,423	
200	4,636	
200	3,849	
200	3,062	
200	2,275	
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Figure 10: Schematic diagram of the STB3PMD0204 pump assembly. The diagram shows a central dashed box representing the pump assembly, with various components labeled. On the left, there are three vertical lines representing the pump's connection points, labeled 300, 400, and 300. On the right, there are three vertical lines representing the pump's connection points, labeled 300, 400, and 300. The central dashed box contains a pump symbol labeled STB3PMD0204, with a note "300/300/400, 1000 - 300" below it. The pump symbol is also labeled "STB3PMD0204" and "PUMP NO. 2". The pump is connected to a 240V power source. The diagram also shows a 300V power source and a 300V power source. The diagram is labeled "Figure 10" and "STB3PMD0204".

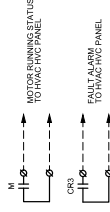
[illegible]

The schematic diagram illustrates the power supply system for a 1000W CW laser. The system starts with a 230V AC input, which is transformed and rectified to provide a 400V DC output. This output is then filtered and regulated to provide a 400V DC output to the 1000W CW laser. The diagram includes various components such as a 1000W CW laser, a 400W CW laser, a 400W CW laser, and a 400W CW laser. The diagram is labeled with various components and their ratings.

[illegible]

- STFB3MDP0001
-
- 3000A, 480Y 277V,
-
- 2000 3000A

-



FAN
STFB3EXH0001
STFB3EXH0002
STFB3EXH0003

STFB3EXH0002	EXHAUST
STFB3EXH0003	EXHAUST

1	MCC STARTER
2	HVAC HVC PANEL
3	FIELD

1. PROVIDE ALL WORK IN ACCORDANCE WITH PROJECT SPECIFICATIONS

727 E. Riverpark Lane #150
Salt Lake City, Utah 84103
Tel: 1-208-345-5865
www.stanec.com

date	g	pdby	ssn
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2023.07.17	15	MMWS	3
2023.07.22	15	MMWS	4
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2023.08.01	15	MMWS	6
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2023.08.16	15	MMWS	9
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2024.11.08	15	MMWS	99
2024.11.13	15	MMWS	100

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Project No.: 202003136	No Name: C0136509E-607	
Scale: NO SCALE	Date: 2024.06.21	
JAC	MAA	DAR
Don.	Design	Chad.
Title: MEMBRANE BUILDING TYPICAL 480V 3PH VNR SCHEMATIC		
Revision:		
Drawing No.		

500-E-607