



REQUEST FOR TENDERS No. 22-012

Kinkade Pump Station Upgrades

ISSUED: January 21, 2022

CLOSING DATE AND TIME:

Tenders must be received on or before:
3:00pm (15:00 hrs) Pacific Time on February 18, 2022

Regional District of Nanaimo Contact:

Rob Wood

250-758-1157

rwood@rdn.bc.ca

Questions should be received at least five (5) business days before the closing date.

Non-Mandatory Proponent's Site Information Meeting:

3:00pm, January 26, 2022

Contact: Rob Wood

Kinkade Pump Station

105 Kinkade Rd (Kinkade Road and McFeely Drive)

Qualicum Beach, BC

RSVP requested. Site visit attendees are required to wear steel-toed footwear, hi-vis vest and a face mask.

Instructions to Bidders

ARTICLE 1. Closing Date/Time/Location and Submission Requirements

Bidders must submit their TENDER FORM on or before **3:00pm (15:00 hrs), Pacific Time, February 18, 2022.**

Submission Requirements:

Bidders must, at minimum, submit:

1. a completed Tender Form;
2. a draft Work schedule;
3. a list of applicable labour, supervision, material and equipment charge-out rates for Extra Work

along with any supporting information to facilitate Regional District of Nanaimo (RDN) tender evaluation, with reference to Article 11 “Award” below.

Tenders will be accepted by Email only: In PDF format with “22-012 Kinkade Pump Station Upgrades” as the subject line to this electronic address: rwood@rdn.bc.ca

The RDN will not be held responsible for any technological delays.

Tenders received by any other manner will not be accepted. Tenders will not be opened in public.

ARTICLE 2. Scope of Work

Tenders are invited from qualified and experienced firms to replace the electrical kiosk and connect to and commission the upgraded submersible pumps at the Kinkade Pump Station at 105 Kinkade Rd, Qualicum Beach, BC (the delivery point), all as more fully described in the Tender Documents.

ARTICLE 3. Tender Documents

The Tender Documents referred to in this tender package include the following:

- (1) Request for Tenders, including the Tenderer’s “Tender Form”;
- (2) RDN Standard Form Construction Contract Form of Agreement*;
- (3) RDN Standard Form General Conditions of Contract
- (4) RDN Wastewater Services Environmental Management System Contractor-Supplier Package

* Includes the description of work, the drawings, the specifications, and other reference documents.

The Tenderer must carefully examine the Tender Documents. Should a Tenderer find discrepancies in, or omissions from the Tender Documents, or should they be in doubt as to their meaning, they should, prior to submitting their tender, notify the RDN contact person in writing. The Tenderer may not claim, after the submission of a tender, that there was any misunderstanding with respect to the conditions imposed by the documents.



No verbal agreement or conversation made or had at any time with any officer, agency or employee of the RDN shall affect or modify any of the terms or obligations herein stated or deemed to be any representation of warranty.

ARTICLE 4. Addenda

If the RDN determines that an amendment is required to this TENDER, the RDN will post an addendum on the RDN (www.rdn.bc.ca) and BC Bid websites (www.bcbid.gov.bc.ca). Each addendum will be incorporated into and become part of the TENDER. No amendment of any kind to the TENDER is effective unless it is contained in a written addendum issued by the RDN. It is the sole responsibility of the Proponent to check and ensure all addendums are included prior to submitting their final Tender submission.

ARTICLE 5. Tender Price

All pricing is to be in Canadian Dollars and is to include all transportation costs to the delivery point. Prices shall be filled in where indicated on the Tender Form. In the event of a price extension discrepancy when calculating the total contract value, the RDN reserves the right to correct the totals.

ARTICLE 6. Federal and Provincial Sales Taxes

Where indicated, GST shall be shown separately on the Tender Form based on the total contract value.

ARTICLE 7. Tender Signing

The TENDER must be executed by an authorized signatory in a position to legally bind their Company to the information contained in the Tender Form.

ARTICLE 8. Revisions to Tenders

Any revision to the tender by the Tenderer must be in writing properly executed and received on or before the posted closing date and time as per the submission instructions outlined in Article 1.

ARTICLE 9. Tender Withdrawal

A Tenderer may, without prejudice to themselves, withdraw their TENDER on written request received on or before the posted closing date and time as per the submission instructions outlined in Article 1.

ARTICLE 10. Tender Rejection

- .1 The RDN reserves the right to reject any or all tenders or accept other than the lowest tender and to accept the tender which it deems most advantageous.
- .2 The RDN may reject a tender if:
 - a) After investigation and consideration, the RDN concludes that the Tenderer is not qualified to do the work and/or cannot do the work and perform the Contract in a manner satisfactory to the RDN.
 - b) A tender contains qualifying conditions or otherwise fails to conform to these Instructions to Tenderers.

- c) A tender is incomplete, is considered incomplete in the Instructions to Tenderers, is obscure or irregular, which has erasures or corrections in the Tender Form or in which prices are omitted.
- d) The RDN may, in its absolute discretion, reject a Tender submitted by Tenderer if the Tenderer, or any officer or director of the Tenderer is or has been engaged either directly or indirectly through another corporation in a legal action against the RDN, its elected or appointed officers and employees in relation to:
 - any other contract for works or services; or
 - any matter arising from the RDN's exercise of its powers, duties, or functions under the Local Government Act or another enactment within five years of the date of this Call for Tenders.

In determining whether to reject a tender under this clause, the RDN will consider whether the litigation is likely to affect the Tenderer's ability to work with the RDN, its consultants and representatives and whether the RDN's experience with the Tenderer indicates that the RDN is likely to incur increased staff and legal costs in the administration of this contract if it is awarded to the Tenderer.

- .3 The RDN may reject all tenders if for any reason the RDN considers to be in its best interest to do so, including without limitation for any of the following reasons;
 - a) the lowest tender that the RDN considers otherwise acceptable is higher than the funds budgeted or otherwise available for the project;
 - b) the RDN decides not to proceed with the project or to defer the project;
 - c) if only one bid is received, then the tender may be reissued unless a financial analysis indicates that the sole bid represents a good value for the taxpayers ; or
 - d) the RDN is delayed in obtaining, or is unable to obtain, all approvals or consents it considers necessary, whether required by law or otherwise.
- .4 The RDN reserves the right to consider and to reject any tender or all tenders without notice to a Tenderer or Tenderers and without permitting a Tenderer to provide additional information.
- .5 In no event will the RDN be responsible for a Tenderer's costs of preparing or submitting a tender.

ARTICLE 11. Award

An award shall be made on the tender that will give the greatest value to the RDN based on price, quality, warranty, and schedule/completion time. The RDN shall be free to assess these criteria based solely on the information provided with tenders. The lowest, or any tender may not necessarily be accepted. The RDN will, following receipt of an acceptable tender, issue in writing a Notice of Intent to Award to the successful Tenderer. Notice of Intent to Award is anticipated to be made within 14 days of tender closing.

ARTICLE 12. Form of Contract

The supply Agreement and General Conditions of the Contract are enclosed at the end of this document. Tenderers should carefully review this form of Contract.

ARTICLE 13. No Claim for Compensation



Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderer shall have any claim for any compensation of any kind whatsoever, as a result of participating in the tender, and by submitting a bid each Tenderer shall be deemed to have agreed that it has no claim.

ARTICLE 14. Solicitation of Board Members

“If a member of the Board, or a person who was a member of the Board in the previous six months has a direct or indirect interest in the contract, then the Tenderer shall report this to the RDN in accordance with Section 107 of the *Community Charter* upon being notified of the award of the contract.

The Tenderer warrants and represents that it has not received any information or a record from any Board member or former Board member contrary to Section 108 of the *Community Charter*.” The successful Tenderer will be required to direct all communications related to their contract through the staff members responsible for the project.

ARTICLE 15. Freedom of Information and Protection of Privacy Act

All documents submitted to the RDN will be held in confidence by the RDN, subject to the provisions of the Province of British Columbia’s *Freedom of Information and Protection of Privacy Act*. All tenders become the property of the RDN. The successful vendor and value of the award is routinely released.

ARTICLE 16. Conflict Of Interest

The Tenderer declares that it has no financial interest, directly or indirectly in the business of any third party that would be or be seen to be a conflict of interest in carrying out the services. It warrants that neither it nor any of its officers or directors, or any employee with authority to bind the Tenderer, has any financial or personal relationship or affiliation with any elected official or employee of the RDN or their immediate families which might in any way be seen to create a conflict.

ARTICLE 17. Collusion

The Tenderer shall not engage in collusion of any sort and shall ensure that no person or other legal entity, other than the Tenderer has an interest in the TENDER. Tenderers shall prepare their TENDER without any knowledge of, comparison of figures with, or arrangement with any other person or firm preparing a tender for the same work.



TENDER FORM
22-012 Kinkade Pump Station Upgrades
Page 1 of 2

Date: _____

Company Name: _____

Address: _____

Telephone: _____ Email: _____

To: Regional District of Nanaimo
C/O Rob Wood
rwood@rdn.bc.ca

Having examined the Tender Documents, including any addenda, having viewed the work site, and having reviewed and complied with the Instructions to Bidders, we hereby offer to perform the Work set forth in the aforesaid documents for the Stipulated Contract Price. Prices include the Tenderer's labour, supervision, material, equipment, material costs, transportation costs, overhead and profit and shall represent the cost to the Regional District of Nanaimo (RDN) of such charges excluding GST which shall be shown separately.

Electrical Kiosk (Equipment Supply) \$ _____
Electrical Kiosk (Installation) \$ _____
Bypass Pumping/Flow Management \$ _____
Connection, Commissioning and Training \$ _____

Total Price \$ _____

GST (5%) \$ _____

Total Stipulated Contract Price \$ _____

Optional Work:

Supply New Automatic Transfer Switch (ATS) \$ _____



PROPOSED CONSTRUCTION START DATE

PROPOSED CONSTRUCTION END DATE (Substantial Completion no later than Sep. 30/22)

DRAFT CONTRACTOR SCHEDULE (Gantt/Bar Chart)

Attach to Tender Form

LIST OF TIME AND MATERIAL CHARGE OUT RATES FOR EXTRA WORK

Attach to Tender Form

ACCEPTANCE

- .1 The tender is open to acceptance for a period of sixty (60) calendar days from the date of bid closing.
- .2 We understand that the lowest or any Bid will not necessarily be accepted. The Owner may also elect not to proceed with the Project.
- .3 The RDN reserves the right to waive minor defects or irregularities in tenders.

Company: _____

Signature: _____
(Authorized Officer)

Printed: _____
(Authorized Officer)

REGIONAL DISTRICT OF NANAIMO

KINKADE PUMP STATION UPGRADES RFT 22-012

BETWEEN: _____ (the "Contractor")

AND: The Regional District of Nanaimo (the "REGIONAL DISTRICT")

THIS AGREEMENT WITNESSES that the Contractor and the REGIONAL DISTRICT agree as follows:

1. The Contractor shall provide all labour, Contractor's Plant and Equipment and materials required to perform the Work within the required time, as required by the Contract Documents, including:
 - (a) this executed Agreement;
 - (b) the General Conditions of Contract;
 - (c) any Addenda (attached Schedule 1);
 - (d) the Contractor Tender Form (attached Schedule 2);
 - (e) the original Contractor Supporting Information, if any (attached Schedule 3)
 - (f) the Contractor Work Schedule (attached Schedule 4)
 - (g) the Description of Work (attached Schedule 5);
 - (h) the Project Lists & Drawings (attached Schedule 6);
 - (i) the Specifications (attached Schedule 7);
 - (j) Other relevant documents such as but not limited to letters of clarification and reports or the like included by reference (attached Schedule 8).
2. Upon Substantial Completion, the REGIONAL DISTRICT shall pay the Contractor the Contract Price, as required by the Contract Documents, less an amount estimated by the REGIONAL DISTRICT to complete any Work on the Deficiency List prepared by the REGIONAL DISTRICT and less any holdback amounts required under the BC Builder's Lien Act.
3. The Contract Price shall be the sum in Canadian Dollars of the following:
 - (a) Up to the Tender Price set out in the accepted Tender Form and;
 - (b) Payments made on account of change orders, as may be required by the Contract Documents.

The Contract Price shall be the entire compensation owing to the Contractor by the REGIONAL DISTRICT for the Work and shall cover and include all supervision, labour, materials, Contractor's Plant and Equipment, overhead, profit, financing costs and all other costs and expenses whatsoever incurred in performing the Work.

Except for the amounts which the REGIONAL DISTRICT in good faith is disputing and except for any set off which the REGIONAL DISTRICT may claim and except for invoices (or portions of invoices) in respect of which the REGIONAL DISTRICT has requested and

REGIONAL DISTRICT OF NANAIMO

KINKADE PUMP STATION UPGRADES RFT 22-012

- not received supporting evidence, the REGIONAL DISTRICT shall pay invoices submitted to it for the Services within 30 days' receipt thereof.
4. The Contractor shall commence the Work within 7 Days after issuance of the Notice to Proceed from the REGIONAL DISTRICT, unless the Notice to Proceed states otherwise, and shall attain completion of the Work by September 30, 2022.
 5. The Contract Documents shall form a part of this Agreement as though recited in full.
 6. The Contract supersedes all prior negotiations, representations or agreements, whether written or oral and is the entire agreement between the REGIONAL DISTRICT and the Contractor with respect to the subject matter of this Agreement.
 7. Defined terms in this Agreement shall have the same meanings as set out in the General Conditions, except where the contrary is expressed.
 8. In entering into and executing this Agreement, the Contractor has relied on its own examination of the Site, access to the Site, and on all other data, matters and things requisite to the fulfilment of the Work, and on its own knowledge of existing services or utilities along or crossing or in the vicinity of the route or facility to be installed or constructed under this Contract, and not on any representation or warranty of the REGIONAL DISTRICT.
 9. The Contractor shall not assign the Contract, or any portion of the Contract, or any payments due or to become due under the Contract, without the express written consent of the REGIONAL DISTRICT.
 10. No action or failure to act by the REGIONAL DISTRICT or an authorized agent of the REGIONAL DISTRICT shall constitute a waiver of any right or duty afforded any of them under the Contract, or constitute an approval or acquiescence in any breach thereunder, except as may be specifically agreed in writing.
 11. This Agreement shall enure to the benefit of and be binding upon the REGIONAL DISTRICT and the Contractor and their respective heirs, executors, legal representatives, successors and permitted assigns. In the event of more than one person being the Contractor, the grants, covenants, provisos and claims, rights, powers, privileges and liabilities shall be construed and held to be several as well as joint.
 12. Time shall be of the essence of this Agreement.
 13. This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by electronic transmission in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as follows:

The Regional District of Nanaimo by its authorized signatory on _____ day of _____, 2022 (the date of Agreement):

SIGNED on behalf of the REGIONAL DISTRICT by:

Signature: _____

Name: _____

Title: _____

[CONTRACTOR'S NAME]

by its authorized signatory on _____ day of _____, 20__:

SIGNED on behalf of the Contractor by:

Signature: _____

Name: _____

Title: _____

GENERAL TERMS & CONDITIONS OF CONTRACT
KINKADE PUMP STATION UPGRADES 22-012

PART 1 LAW APPLICABLE

This Contract shall be construed under and according to the laws of the Province of British Columbia, Canada.

PART 2 PRIME CONTRACTOR DESIGNATION

The Contractor must be registered with WorkSafe BC and be in good standing with remittance up to date throughout the agreement and is designated as the Prime Contractor and shall fulfill the Prime Contractor responsibilities as defined in:

- a) *WorkSafeBC Occupational Health and Safety Regulation*, Notice of Project, Section 20.2, and Coordination of multiple employer workplaces, Section 20.3;
- b) *Workers Compensation Act* (BC), Coordination at multiple-employer workplaces, Part 2, Division 1, Sections 13 and 24; and
- c) General Requirements, Section 3.10 WorkSafeBC.

PART 3 QUALITY OF WORK AND MATERIALS

The whole of the materials and/or the Work, whether or not so stated herein, shall be done in the most substantial and professional manner with new materials, articles, equipment and work of the best quality and description and by employment of properly skilled trades and in strict conformity with and as required by this contract to the satisfaction of the REGIONAL DISTRICT whether or not so stated herein. Materials and equipment shall be the products of suppliers or manufacturers of established reputation engaged in the supply or manufacture of such materials or equipment.

Materials are to be installed or incorporated into the Work applied in accordance with the manufacturer's directions. Use the techniques and application best suited for the type of material being used.

PART 4 JUDGE OF WORK AND MATERIALS

The REGIONAL DISTRICT shall be the final judge of all work, materials, and plants in respect of both quality and quantity and their decisions of all questions in dispute with regard thereto will be final.

All materials shall be subject to inspection and test by and shall meet the approval of the REGIONAL DISTRICT.

In case any materials, equipment and supplies are defective in material or quality or otherwise not in conformity with the specifications of the contract, the REGIONAL DISTRICT shall have the right either to reject them or to require their correction.

Acceptance or rejection of the materials, equipment, supplies, etc. shall be made as promptly as practicable after delivery, but failure to inspect and accept or reject supplies shall not relieve the contractor from responsibility for such supplies as are not in accordance with the specifications.

PART 5 RECTIFICATION OF DAMAGE AND DEFECTS

The Contractor shall rectify any loss or damage for which, in the opinion of the REGIONAL DISTRICT, the Contractor is responsible, at no charge to the REGIONAL DISTRICT and to the satisfaction of the REGIONAL DISTRICT. In the alternative, the REGIONAL DISTRICT may repair the loss or damage and the Contractor shall pay to the REGIONAL DISTRICT the costs of repairing the loss or damage forthwith upon demand from the REGIONAL DISTRICT. Where, in the opinion of the REGIONAL DISTRICT, it is not practical or desirable to repair the loss or damage, the REGIONAL DISTRICT may estimate the cost of the loss or damage and deduct such estimated amount from the amount owing to the Contractor hereunder.

PART 6 WARRANTY AND GUARANTEE

The Work shall be warranted to be free of defects and shall be guaranteed by the Contractor for a period of one (1) year from the date of acceptance. On receipt of notice from the REGIONAL DISTRICT the Contractor shall promptly make all repairs arising out of defective work or any equipment or materials supplied by him.

The REGIONAL DISTRICT is hereby authorized to make such repairs if, ten (10) days after the giving of such notice to the Contract, the Contractor has failed to make or undertake with due diligence said repairs; provided, however, that in the case of an emergency, where, in the opinion of the REGIONAL DISTRICT delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and all expense in connection therewith shall be charged to the Contractor.

PART 7 ASSIGNMENT

The Contractor shall not assign, sub-contract or let out as task work any part of the Work, and shall not assign any interest herein or any right to payment hereunder without first having had and obtained the consent in writing of the REGIONAL DISTRICT; which consent the REGIONAL DISTRICT may withhold in its absolute discretion. If the REGIONAL DISTRICT should consent to any such assignment, sub-contracting or letting out as task work of all or any part of the Work, the Contractor shall by reason thereof be in no ways relieved from his responsibility for the fulfillment of the Work but shall continue to be responsible for the same in the same manner as if all the Work had been performed by the Contractor himself.

PART 8 TERMINATION

The REGIONAL DISTRICT may by written notice to the Contractor terminate the whole or any part of this contract in any one of the following circumstances:

- a) If the Contractor fails to perform the Work within the time specified herein or any extension thereof.
- b) If the Contractor fails to perform any of the other provisions of this contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms and in any of these circumstances, does not cure such failure within a period of ten (10) days, or such longer period as the REGIONAL DISTRICT may authorize, in writing, after receipt of notice from the REGIONAL DISTRICT specifying any such failure.
- d) In the event that the Contractor performs any act or does anything by which the REGIONAL DISTRICT shall incur any liability whatsoever.
- e) The REGIONAL DISTRICT may terminate the Agreement, without any cost or penalty or consequence whatsoever, if it concludes, acting reasonably on the information available to it, that the Contractor is in material non-compliance with, or has been convicted of a material offence or violation of, health, safety, labour or environmental laws.
- f) In the event that any creditor of the Contractor causes a writ of execution or similar writ or court order to be served upon the REGIONAL DISTRICT requiring the REGIONAL DISTRICT to pay to such creditor or to a sheriff or other public official or to the Court any portion of the consideration due to the Contractor under this Contract.
- g) In the event that the Contractor shall be adjudged bankrupt or if it should make a general assignment for the benefit of creditors or if it becomes insolvent or is appointed by a creditor or if it should take the benefit of any Act that may be in force for bankrupt or insolvent debtors.

Upon termination of the Contract as aforesaid, the REGIONAL DISTRICT shall have no obligation to the Contractor except for such labour and materials as have been supplied or performed up to the date of the termination of the Contract.

PART 9 STATUTES, MUNICIPAL BY-LAWS AND PERMITS

Unless otherwise noted, the Contractor shall take out all necessary permits and licenses required to permit the Contractor to perform its obligations under the Contract. The Contractor shall give all notices and comply with all REGIONAL DISTRICT regulations, all laws, by-laws, ordinances, rules, and regulations, whether federal, provincial, or municipal, relating to the business it carries on and the services provided pursuant to the Contract, including the Workers' Compensation Act and the Employment Standards Act.

PART 10 SITE INSPECTION

The Contractor shall make site inspections of all appropriate areas to determine their general condition and to ensure the fulfillment of the contract requirements.

PART 11 USE OF PREMISES

The Contractor shall abide by, and shall ensure its employees abide by, all appropriate regulations, including but not limited to regulations relating to fire, safety, parking, traffic control and health. The Contractor will ensure that all of its employees are aware of the applicable regulations.

PART 12 DAMAGE TO PERSON AND PROPERTY

The Contractor shall use due care that no persons are injured, no property damaged or lost, and no rights are infringed in the performance of the Work, and the Contractor shall be solely responsible for all loss, damages, costs and expenses in respect of any injury to persons, damage of property, or infringement of the rights of others incurred in the performance of the Work or caused in any other manner whatsoever by the Contractor, or its employees.

PART 13 CLEAN UP

The Contractor shall at all times conduct the work in an orderly and reasonably tidy manner and shall at suitable intervals remove any accumulation of rubbish or refuse materials. At no time shall any person employed by the Contractor or by any of his Subcontractors discard any litter or garbage on or adjacent to the site, except into a suitable container. Upon completion and before final acceptance of the work, the Contractor shall remove all rubbish, surplus, or discarded materials and equipment and shall leave the site in a clean and neat condition.

PART 14 CURRENCY OF PAYMENT

All reference to money in this Contract shall refer to and mean lawful money of Canada.

PART 15 DAMAGES FOR DELAY

If the work is not completed and/or the materials delivered before or upon the expiration of the time limited therefore all costs which the REGIONAL DISTRICT shall be put to by reason thereof shall be charged to the Contractor.

PART 16 PAYMENTS

The Contractor will be solely responsible for invoicing the REGIONAL DISTRICT ensuring to include the REGIONAL DISTRICT's Purchase Order number on all invoices to assure timely payment.

All invoices are subject to prior review and approval by the REGIONAL DISTRICT and approved invoices will be paid on a net 30 days' basis unless otherwise negotiated and agreed to in writing.

If the REGIONAL DISTRICT does not approve of the services or part of them which are the subject of the invoice, the REGIONAL DISTRICT shall advise the Contractor in writing of the reasons for non-approval and the Contractor shall remedy at no additional cost to the REGIONAL DISTRICT before the REGIONAL DISTRICT shall be obliged to pay the invoice or any part of it, as the case may be.

PART 17 CHANGE ORDERS

If for any reason it may become desirable during the course of the work to change the alignment, dimensions, or design, or to add to or to omit portions thereof, the REGIONAL DISTRICT reserves the right to issue change orders to give effect to such changes as may, in the opinion of the REGIONAL DISTRICT be necessary or desirable.

The change may or may not result in a change in the amount of the work. If the changes do, in the opinion of the REGIONAL DISTRICT, change the amount of the work, the contract price shall be adjusted. The adjustment for the contract price shall not exceed the actual cost of the Contractor's work for the change in the Work, plus an allowance for overhead and profit as follows:

- a) For Contractor, for overhead and profit, 15% of the actual cost of the Contractor's work;
- b) For Contractor, for overhead and profit, 10% of the amount for Subcontractor's work, being the actual cost of the Subcontractor's work plus the amount determined as set out in (c) below;
- c) For Subcontractor, for overhead and profit, 10% of the actual cost of the Subcontractor's work.

If a change in the Work results in a net decrease in the Contract Price, the amount of the credit shall be the net cost, without deduction for overhead and profit. When both additions and deletions covering related work or substitutions are involved in a change in the Work, the allowance for overhead and profit shall be calculated on the basis of the net increase, if any, with respect to that change in the Work.

PART 18 PROTECTION OF REGIONAL DISTRICT AGAINST CLAIMS

The Contractor shall assume the defense of and indemnify and hold harmless the REGIONAL DISTRICT and its officers, employees, and agents, from and against all claims relating to materials furnished and to inventions, copyrights, trademarks, or patents and rights thereto used by the Contractor in the execution of this contract and in subsequent use and/or operation by the REGIONAL DISTRICT.

PART 19 INSURANCE

Insurance Obtained by Contractor

General

The Contractor shall itself and cause each subcontractor to obtain and maintain, at its own expense, the insurance set out below until all conditions of the Contract have been fully complied with.

Commercial General Liability Insurance

Commercial General Liability Insurance providing third party bodily injury, death, and property damage coverage in an amount of **not less than \$5,000,000 per occurrence**, indicating that the REGIONAL DISTRICT is added as Additional Insureds. The policy shall include Premises and Operations Liability; Contractor's Protective Liability with respect to the Operations of sub-contractors; Completed Operations Liability; Contractual Liability; Non-Owned Automobile Liability; and a Cross Liability and/or Severability of Interest clause protecting each insured to the same extent as if they separately insured.

The policy shall also contain a clause providing that the REGIONAL DISTRICT will receive 30 days' notice of cancellation or of any material change in coverage which will reduce the extent of coverage provided to the REGIONAL DISTRICT.

The Contractor shall file with the REGIONAL DISTRICT, prior to the commencement of work, a certificate of insurance in a form acceptable to the REGIONAL DISTRICT evidencing this policy. The Contractor shall also file with the REGIONAL DISTRICT evidence of the renewal on this policy.

Pollution/Environmental Impairment Liability Insurance

Pollution/Environmental Impairment Liability Insurance in an amount **not less than \$2,000,000 per occurrence/\$5,000,000 aggregate**.

Automobile Third Party Liability Insurance

A Standard Owner's Form Automobile Policy for each vehicle used in the performance of the Contract and regulated by the Insurance (Motor Vehicle) Act or similar legislation. The Third-Party Legal Liability Limits are to be in an amount **not less than \$2,000,000 per occurrence**.

Contractor's Equipment Insurance

The Contractor shall maintain an All-Risk insurance policy covering all construction equipment, mobile equipment, miscellaneous equipment, tools, office contents and other miscellaneous property whether owned, leased or rented or for which the Contractor may be responsible, that is used in any way in connection with this Contract.

Other Insurance

The Contractor and subcontractors shall provide at their own cost any additional insurance which they are required by law to provide or which they consider necessary.

The Contractor is responsible for paying all deductibles for all policies.

Waiver of Subrogation

Each insurance policy obtained by the Contractor or any subcontractor shall include the following clause:

“Waiver of Subrogation

It is understood and agreed that in the event of a loss and upon payment of any claim hereunder, the insurer will waive its right of subrogation against the REGIONAL DISTRICT and any of their servants, agents, employees, parent, subsidiary, affiliated or related firms.”

PART 20 FORCE MAJEURE

Neither party shall be responsible for any delay or failure to perform its obligations under this agreement where such a delay or failure is due to fire, flood, explosion, war, embargo, governmental action, pandemic, epidemic, act of public authority, act of god or to any other cause beyond its control, except labour disruption. In the event force majeure occurs, the party who is delayed or fails to perform shall give prompt notice to the other party and shall take all reasonable steps to eliminate the cause. Should the force majeure event last longer than 30 calendar days, the REGIONAL DISTRICT may terminate this agreement immediately by written notice to the contractor without further liability, expense, or cost of any kind.

PART 21 DISPUTE RESOLUTION

- a) If the parties to this Agreement are unable to agree on the interpretation or application of any provision in the Agreement, or are unable to resolve any other issue relating to this Agreement, the parties agree to the following process in the order it is set out:
 - i. the party initiating the process will send written notice to the other party (the “Dispute Notice”); and
 - ii. the parties will promptly, diligently and in good faith, including the senior management of both parties, take all reasonable measures to negotiate an acceptable resolution to the disagreement or dispute.
- b) If the parties are unable to negotiate a resolution within 30 days of the Dispute Notice, the parties may request the assistance of a mediator agreed to by the parties within 30 days

written notice of a request to appoint a mediator by any party, failing which the mediator will be appointed by the B.C. International Commercial Arbitration Centre (BCICAC), and unless the parties agree otherwise, this mediation will follow BCICAC rules and will terminate 60 days after the appointment of the mediator.

- c) The parties will be responsible for their own costs under the dispute resolution process set out in this part 21.0.

PART 22 INDEPENDENT CONTRACTOR

The Contractor shall be, and in all respects be deemed to be, an independent contractor and nothing in this *Agreement* shall be construed to mean that the Contractor is an employee of the REGIONAL DISTRICT or that any agency, joint venture, or partnership exists between the *Contractor* and the *REGIONAL DISTRICT*.

SCHEDULE 1 – ADDENDA

SAMPLE

SCHEDULE 2 – CONTRACTOR TENDER FORM

SAMPLE

SCHEDULE 3 – CONTRACTOR SUPPORTING INFORMATION

Labour and Equipment Charge-Out Rates


SAMPLE

SCHEDULE 4 – CONTRACTOR WORK SCHEDULE

SAMPLE

SCHEDULE 5 – DESCRIPTION OF WORK

SAMPLE

 REGIONAL DISTRICT OF NANAIMO	<i>Request for Tenders No. 22-012</i> Kinkade Pump Station Upgrades <u>Description of Work</u>	Date: January 20, 2022 Revision: 0
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1. The site of the Work is the Regional District of Nanaimo's (RDN's) Kinkade Pump Station at 105 Kinkade Rd (Kinkade Road and McFeely Drive), Qualicum Beach, BC.

2. General Description

In general, the Work shall consist of replacing the electrical kiosk, installing new pumps and rails in the wet well, and replacing valves at the RDN's Kinkade Pump Station.

3. Definition of the Work

The Work shall consist of supplying all materials, equipment, temporary facilities, tools, labour, supervision, overhead, and everything required to accomplish the Work described and called for in the Contract Documents.

Electrical Kiosk Installation

The Work shall consist of removing the existing kiosk and replacing with a new shop-assembled and tested electrical Kiosk on the existing foundation, in accordance with the project drawings. A six-foot high chain-link fence, with a four-foot wide lockable gate, shall be installed around the conduit stub-up area, as shown in the appended sketch.

The project drawings stipulate the re-use of the existing Automatic Transfer Switch (ATS). A new appropriately rated ATS, installed and fully pre-commissioned as part of the new Electrical Kiosk, is included as Optional Work.


Wet Well Work

RDN Operations will install two (2) new RDN-supplied submersible pumps (3hp, 600V, 3PH/60Hz) and rails in the Wet Well immediately prior to installation and commissioning of the new electrical kiosk. The Work shall include coordination with RDN Operations, and connection and commissioning of the two new submersible pumps. Details of the new pumps are included as an appendix to this tender.

Bypass Pumping / Flow Management

The Work shall include implementing a flow management plan to enable the sanitary sewer system to function during installation and commissioning of the Work. The Contractor shall submit a flow management plan to the RDN for approval. The plan shall allow RDN Operations two (2) days (Monday to Friday) for removal and replacement of the submersible pumps in the wet well. The plan shall be approved prior to work commencing onsite. A suggested flow management plan follows:

1. RDN Operations to plug two upstream manholes on Kinkade Road and McFeely Drive, as shown in the appended sketch.
2. Contractor permitted to allow water levels to reach, but not exceed, 1.2m elevation at the two plugged manholes in order to use the gravity sanitary mains as short-term storage. Sewage can be discharged into a nearby manhole at the end of Buller Road. At minimum, the two plugged manholes must be pumped down to invert at 7am and 9pm each day.
3. RDN to remove and replace two pumps and associated hardware in pump station wet-well.
4. RDN to remove plugs at two upstream manholes to allow flow to enter pump station wet-well.

 REGIONAL DISTRICT OF NANAIMO	<i>Request for Tenders No. 22-012</i> Kinkade Pump Station Upgrades <u>Description of Work</u>	Date: January 20, 2022 Revision: 0
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5. Contractor to continue to maintain water level, as noted above in Item 2, at pump station wet-well during electrical work and commissioning.

For reference, system flows are approximately 70,000 litres per day and the gravity sanitary mains have approximately 57,000 litres of storage capacity.

4. Included in the Work

The Work shall include the supply of all materials, labour, supervision, plant equipment, and tools necessary to complete the Work described herein and shown on the drawings and standards. It shall generally consist of, but not specifically be limited to the following:

- 4.1. Supply all equipment, materials and consumables required to accomplish the Work, unless noted otherwise.
- 4.2. Supply skilled labour and supervision with the proper qualifications to accomplish the Work in a thoroughly substantial and workmanlike manner.
- 4.3. Issue of submittals, including but not limited to equipment and prefabricated materials, to the RDN for review and approval well in advance of construction.
- 4.4. Perform field measurements and investigation as required to ensure equipment fit.
- 4.5. Conduct all work at the Kinkade Pump Station site in accordance with RDN policies and procedures, applicable local bylaws, the BC Occupational Health and Safety Regulation and other applicable provincial and federal regulations, including but not limited to:
 - 4.5.1. WorkSafeBC personal protective clothing and equipment procedures;
 - 4.5.2. WorkSafeBC confined space entry procedures to address gas and other hazards;
 - 4.5.3. WorkSafeBC fall protection procedures;
 - 4.5.4. WorkSafeBC ladders, scaffolds and temporary work platforms procedures;
 - 4.5.5. WorkSafeBC cranes and hoists procedures;
 - 4.5.6. WorkSafeBC rigging procedures;
 - 4.5.7. RDN Wastewater Services Environmental Management System Contractor-Supplier package, including training in situations where the Work could have a significant impact on the environment. See appended copy of the Contractor-Supplier package.
- 4.6. Clean up all debris on a daily basis and leave the job site in a clean manner, prior to leaving the site.
- 4.7. Secure the construction site from access by the public and take precautions to prevent theft.
- 4.8. Provide temporary single and multi-phase electrical power supplies as required for all of the site work.

 REGIONAL DISTRICT OF NANAIMO	<i>Request for Tenders No. 22-012</i> Kinkade Pump Station Upgrades <u>Description of Work</u>	Date: January 20, 2022 Revision: 0
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- 4.9. Receive and keep secure Owner-supplied materials. Inspect all Owner-supplied materials to verify that they are not damaged and are complete and suitable for the intended purpose. Notify the RDN if any issues are found.
- 4.10. Perform and document quality assurance inspection and testing on the completed Work in accordance with the Contractor's standards.
- 4.11. Install equipment in accordance with the manufacturer's recommendations and requirements. Where manuals are not provided with Owner-supplied equipment, request copies from the RDN.
- 4.12. Provision of a process control narrative for programming of the station.
- 4.13. Provision of red-lined project Drawings indicating as-built details, for preparation of record drawings by the Engineer.
- 4.14. Electrical lockout for safe work, where required.
- 4.15. Coordination of all necessary permitting from and work by BC Hydro and/or other applicable authorities.
- 4.16. Provision of an Operation and Maintenance (O&M) Manual for the new Electrical Kiosk and its components.
- 4.17. Provision of O&M training for RDN Operations and Electrical & Instrumentation staff.

5. Not Included in the Work

- 5.1. Submersible pumps and accessories supply and installation. By RDN Operations.
- 5.2. Plugging and unplugging of two manholes upstream of the pump station for flow management purposes. By RDN Operations.

6. Project Schedule

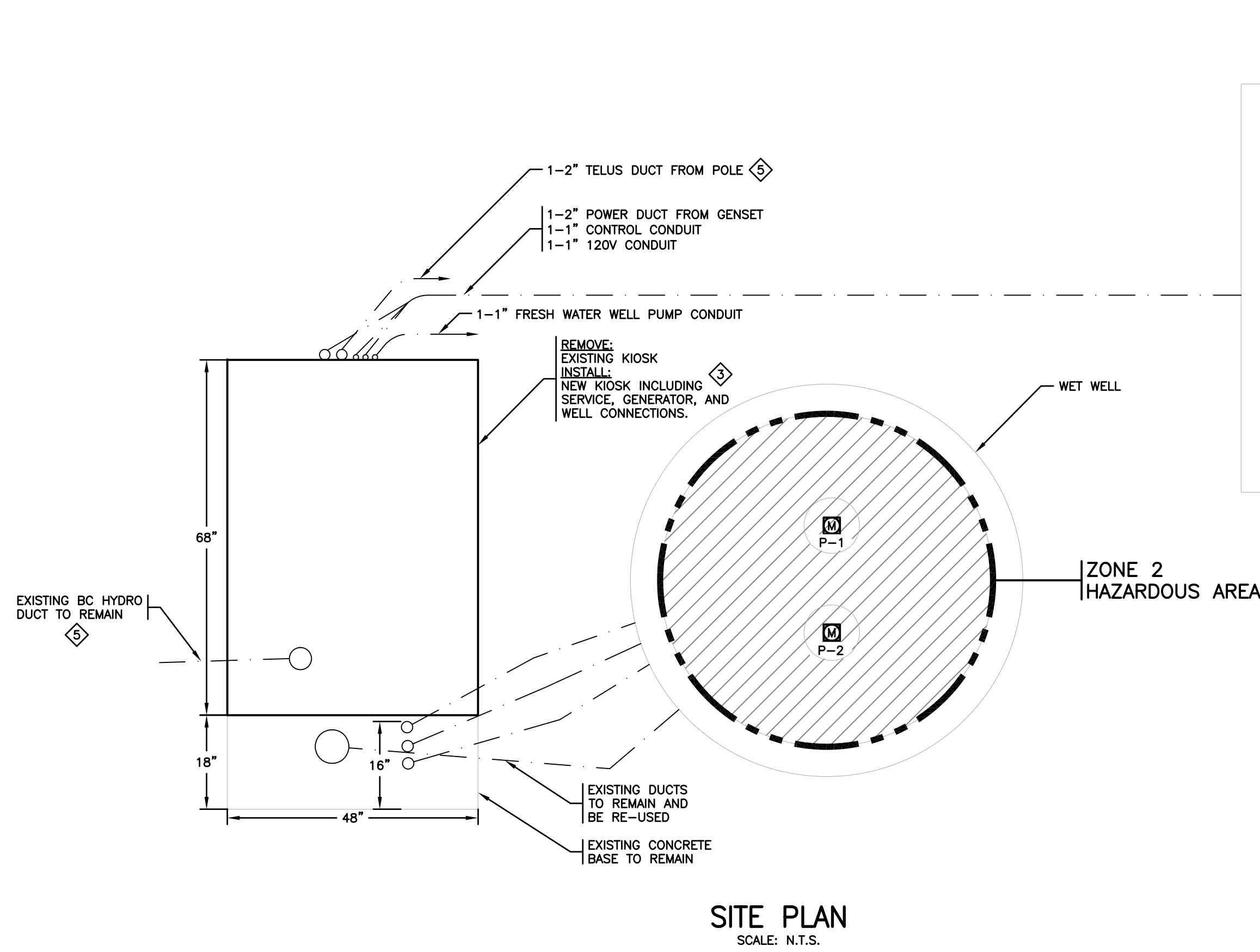
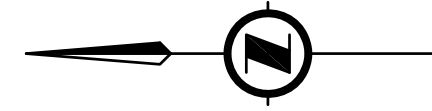
- 6.1. The Work shall be executed in accordance with the Contractor's proposed schedule, incorporating review and feedback from the RDN.
- 6.2. At a minimum, the following milestones/hold points shall be incorporated in the Contractor's schedule, along with the other tasks required to clearly present the Contractor's execution plan:
 - 6.2.1. Kiosk panel shop Factory Acceptance Test / Inspection (provide the RDN the opportunity to perform a shop inspection or review the assembled kiosk by other reasonable means, such as photographs).
 - 6.2.2. Pre-job coordination meeting with the RDN prior to demolition.
 - 6.2.3. Field inspection by the RDN post-demolition.
 - 6.2.4. Field inspection by the RDN prior to re-energization.
 - 6.2.5. Field commissioning, training, and equipment hand-over to RDN operations.
- 6.3. The duration of the period where the pump station is out of service should be minimized.

 REGIONAL DISTRICT OF NANAIMO	<i>Request for Tenders No. 22-012</i> Kinkade Pump Station Upgrades <u>Description of Work</u>	Date: January 20, 2022 Revision: 0
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- 6.4. Preparation work while the station is in normal operation can commence in accordance with the Contractor's proposed schedule.
- 6.5. The RDN retains the right to re-schedule this work dependent on unplanned operational requirements.
- 6.6. Substantial Completion by September 30, 2022.

SCHEDULE 6 – PROJECT LISTS & DRAWINGS

Title	Dwg.No.	Date	Rev
SITE PLAN ELECTRICAL LAYOUT & DETAILS	E-1	SEPT. 29, 2021	1
ELECTRICAL KIOSK	E-2	SEPT. 29, 2021	1
CONTROL CABINET WIRING DIAGRAM	E-3	SEPT. 29, 2021	1
ELECTRICAL SPECIFICATIONS	E-4	SEPT. 29, 2021	1



NOTES:

- EXISTING CONDUIT LOCATIONS TO BE CONFIRMED PRIOR TO KIOSK INSTALLATION.
- ALL KIOSK AND CONDUIT STUB-UP MEASUREMENTS TO BE CONFIRMED BY CONTRACTOR PRIOR TO KIOSK DESIGN AND FABRICATION TO ENSURE NEW KIOSK WILL MEET INSTALLATION REQUIREMENTS.

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	MOUNTING	DESCRIPTION	LAMP		REMARKS
					TYPE		
LED							
L1	LITELINE	LEDBAR46-40K	KIOSK SURFACE	KIOSK STRIP LIGHT	18W	LED	

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	VOLTS/PHASE/FREQ	HP	KW	FLA	MCA	MOCPP	DISC.	STARTER	CONTROL	NOTES
P-1	WELL PUMP	230/3/60	3						VFD	MULTISMART	1
P-2	WELL PUMP	230/3/60	3						VFD	MULTISMART	1
PF-1	HAZARDOUS VENTILATION FAN	120/1/60						15A-1P	VFD	CONTROL PANEL	1,2,3

- NOTES:**
- PROVIDE POWER POINT CONNECTION, STARTER AND DISCONNECT AS REQUIRED.
 - FAN TO BE EXPLOSION PROOF RATED AND MOUNTED INLINE WITH VENT TO WET WELL.
 - FAN & LOUVER OPENING TO BE SIZED TO MEET A MINIMUM OF 100 CFM.

ELECTRICAL CONTRACTOR MUST CONFIRM LOCATION, VOLTAGE, PHASE, AMPACITY OF ALL MECHANICAL EQUIPMENT BEFORE CONNECTION. REPORT ANY MAJOR DISCREPANCIES TO THE ELECTRICAL CONSULTANT. NO EXTRAS WILL BE ALLOWED FOR REMOVING INSTALLED CABLE AND BREAKERS FOR UNCOORDINATED MECHANICAL EQUIPMENT CONNECTION.

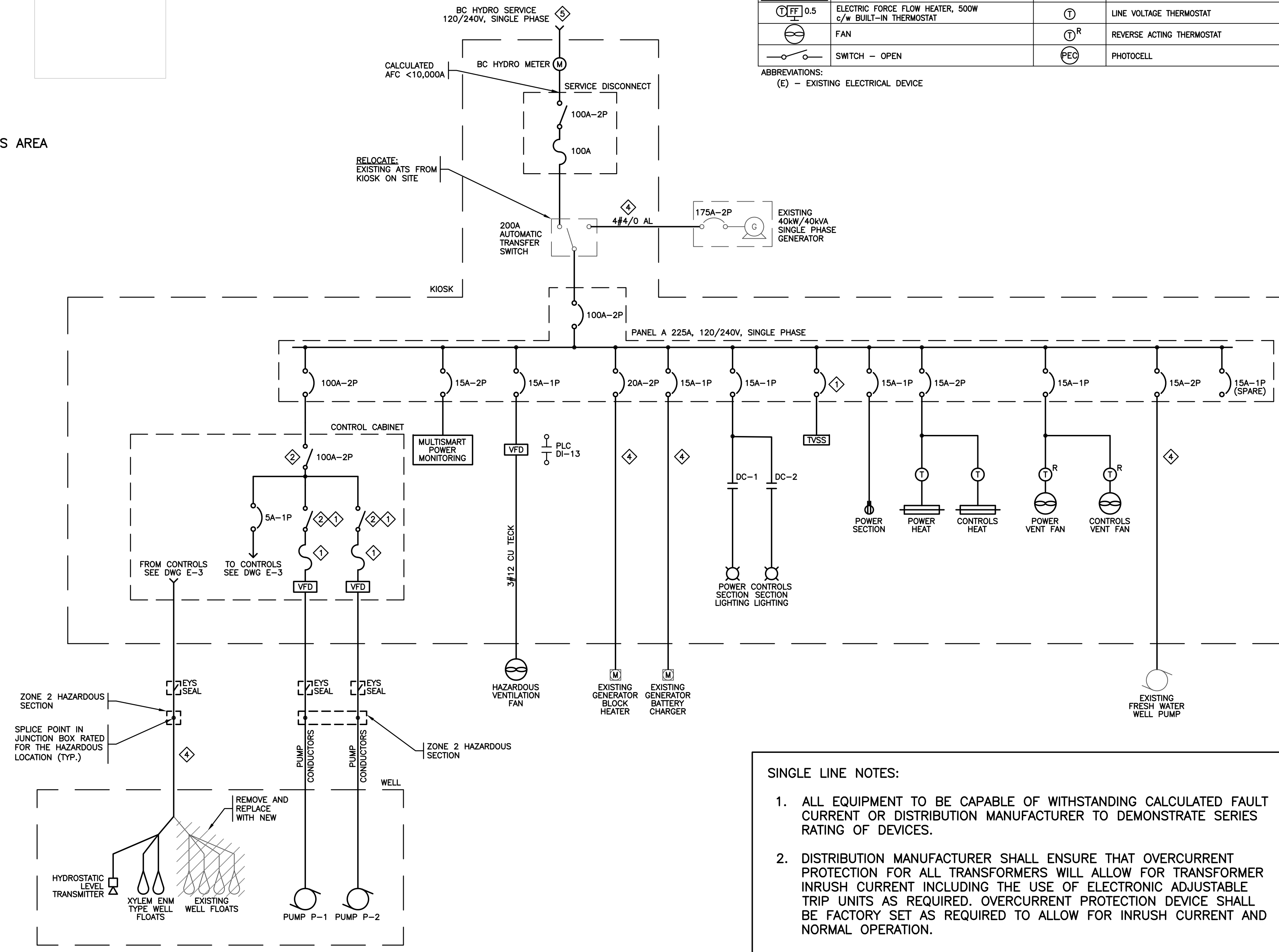
LOAD CALCULATION

- PUMPS: 2 @ 3 HP = 6,000 VA
- MOTOR IN-RUSH = 1,500 VA
- GENERATOR BLOCK HEATER = 2,000 VA
- GENERATOR BATTERY CHARGER = 500 VA
- KIOSK HEAT = 1,000 VA
- KIOSK RECEPTACLES & LIGHTING = 1,000 VA
- TOTAL VA = 12,000 VA
- AMPACITY: 12,000 VA / 240 V = 50 AMPS
- 80% AMPACITY: 50A x 1.25 = 63 AMPS
- SERVICE SIZE: 100 AMP, 120/240 VOLT, SINGLE PHASE

SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	POLE AND LUMINAIRE		OVERLOAD RELAY HEATER
	MECHANICAL EQUIPMENT CONNECTION		CONTROL RELAY
	CONDUIT, BURIED		METER
	OVERHEAD CONDUCTORS		BACK-UP GENERATOR
	MOTOR CONNECTION		COMBINATION OUTLET, 1 DUPLEX REC, 1 TEL, 1 DATA
	CONTACT - NORMALLY OPEN		TRANSFORMER
	CONTACT - NORMALLY CLOSED		MAN - MANUAL TRANSFER SWITCH AUTO - AUTOMATIC TRANSFER SWITCH
	FLOAT SWITCH - OPEN		CIRCUIT BREAKER
	TERMINAL BLOCK		HAND-OFF-AUTO SWITCH
	GROUND, GROUNDED SHIELD		HYDRO POLE c/w POLE MOUNTED TRANSFORMER
	CABLE PLUG & RECEPTACLE		JUNCTION BOX
	FUSE - RATING INDICATED		DUPLEX RECEPTACLE, 1 GANG, GROUND FAULT
	PUSH BUTTON		DOOR CONTACT
	SURFACE MOUNTED LIGHT		LINE VOLTAGE THERMOSTAT
	ELECTRIC FORCE FLOW HEATER, 500W c/w BUILT-IN THERMOSTAT		REVERSE ACTING THERMOSTAT
	FAN		PHOTOCELL
	SWITCH - OPEN		

ABBREVIATIONS:
(E) - EXISTING ELECTRICAL DEVICE



- SINGLE LINE NOTES:**
- ALL EQUIPMENT TO BE CAPABLE OF WITHSTANDING CALCULATED FAULT CURRENT OR DISTRIBUTION MANUFACTURER TO DEMONSTRATE SERIES RATING OF DEVICES.
 - DISTRIBUTION MANUFACTURER SHALL ENSURE THAT OVERCURRENT PROTECTION FOR ALL TRANSFORMERS WILL ALLOW FOR TRANSFORMER INRUSH CURRENT INCLUDING THE USE OF ELECTRONIC ADJUSTABLE TRIP UNITS AS REQUIRED. OVERCURRENT PROTECTION DEVICE SHALL BE FACTORY SET AS REQUIRED TO ALLOW FOR INRUSH CURRENT AND NORMAL OPERATION.

KEY NOTES:

- SIZE AS PER MANUFACTURERS RECOMMENDATIONS.
- LOCATED ON CONTROL CABINET FRONT PANEL.
- KIOSK SHOWN IS A MAXIMUM DIMENSION.
- EXISTING FEEDER TO BE REPLACED.
- COORDINATE SERVICE DISCONNECTION AND INSTALLATION WITH UTILITY.

NO.	DATE	TITLE
1	SEP 29 2021	ISSUED FOR TENDER
		REVISION

RB ENGINEERING LTD
ELECTRICAL CONSULTING ENGINEERS
44 1850 NORTHFIELD ROAD
NANAIMO, BC, V9S 3B3
TEL 250-756-4444
RBENGINEERING.CA

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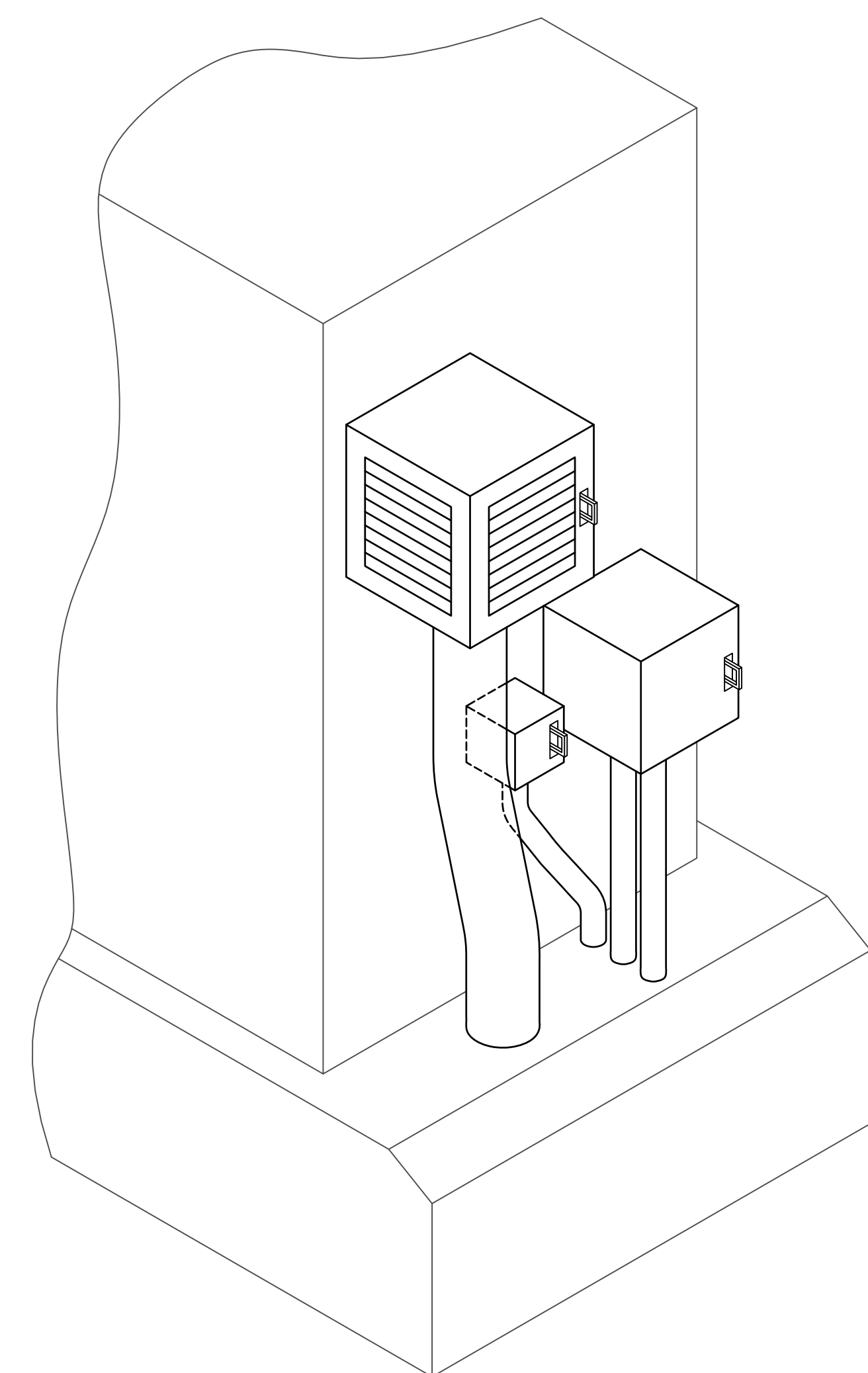
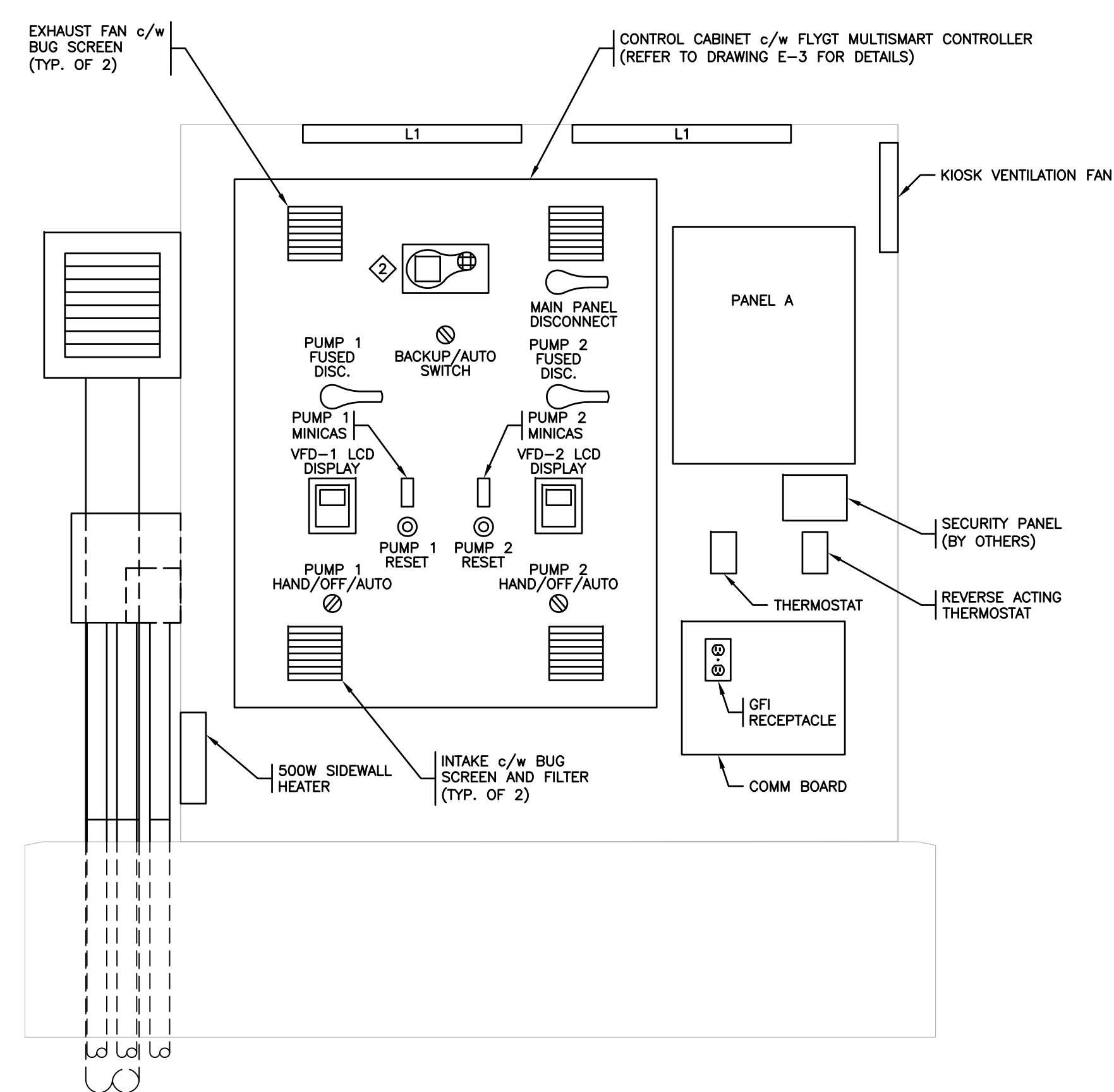
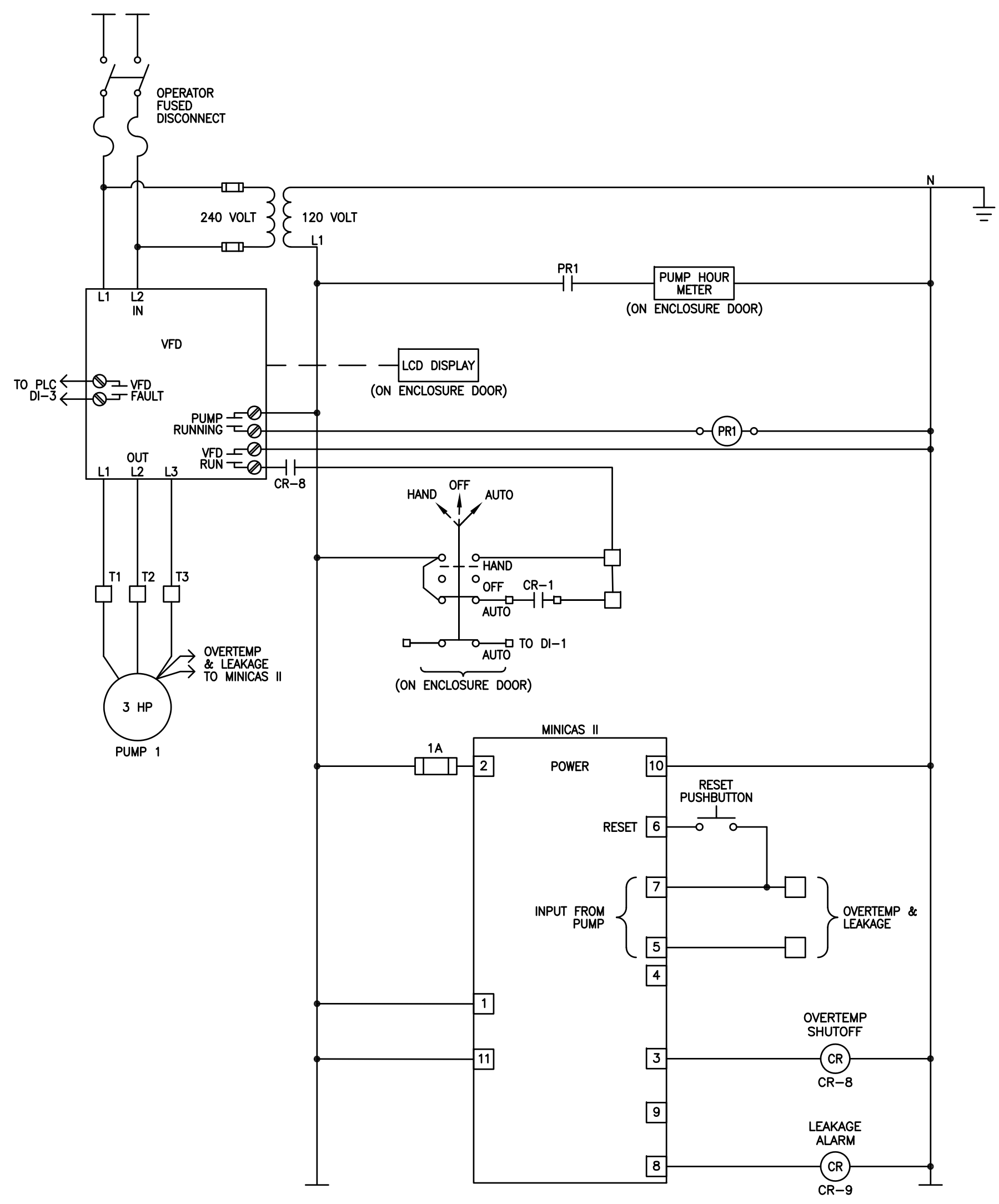
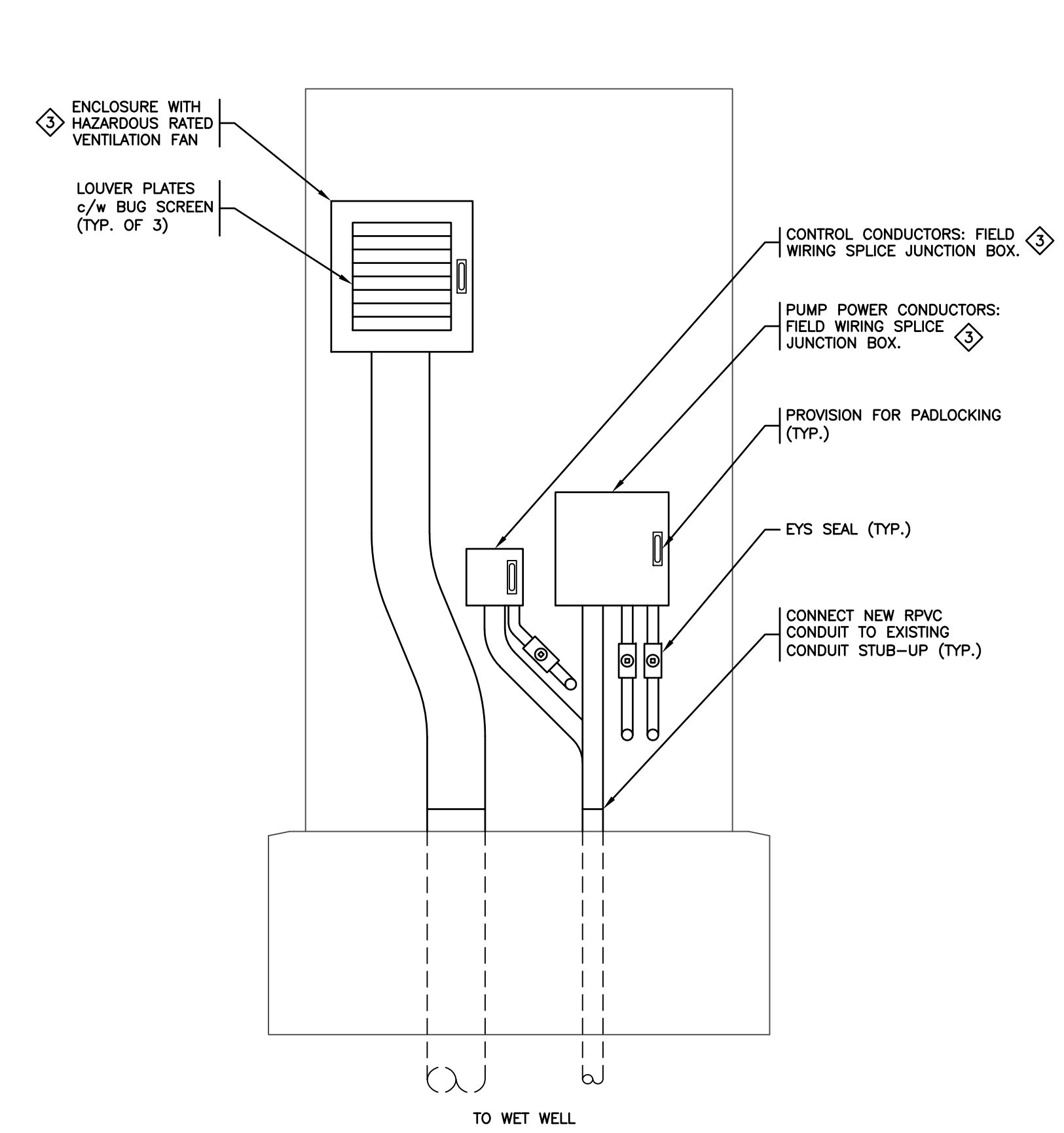
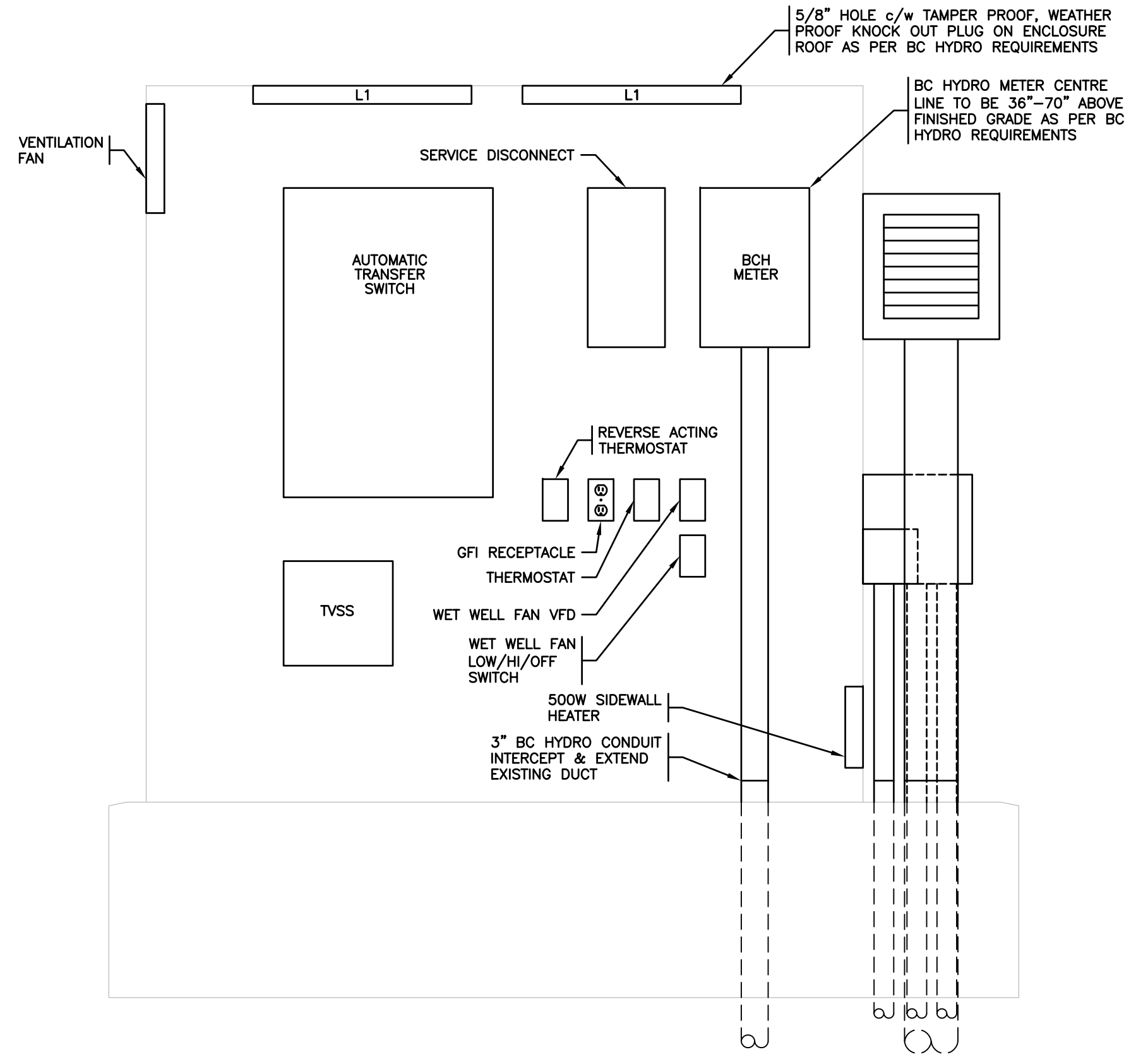
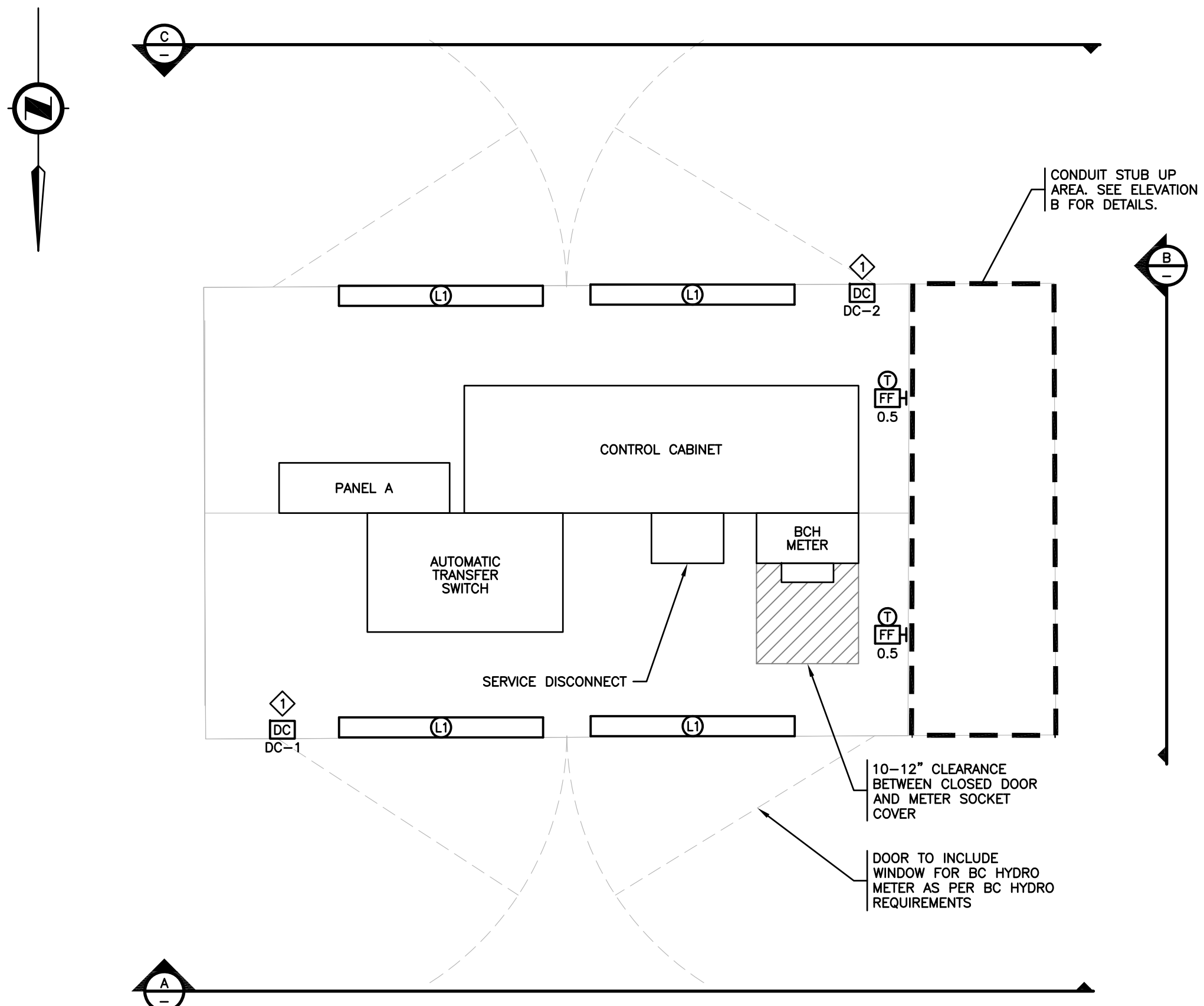


PROJECT
KINKADE PUMP STATION

TITLE
SITE PLAN ELECTRICAL LAYOUT & DETAILS

PROJECT NO.	19-3313	SEAL
DATE	JULY, 2020	
SCALE	N.T.S.	

DRAWING NO.
E-1



KEY NOTES:

- DOOR CONTACTS TO BE 2-POLE FOR BOTH LIGHTING AND PLC CONNECTIONS. WIRE ONE POLE TO CONTROL CABINET AND ONE POLE TO THE SECURITY CABINET. DOOR CONTACT TO BE LOCATED ON LATCHING/EXTERIOR DOOR.
- FLYGT MULTISMART DISPLAY MODULE TO BE MOUNTED TO SURFACE OF CONTROL PANEL. MOUNT GUI AND CABINET AS HIGH IN KIOSK AS POSSIBLE TO IMPROVE USABILITY.
- ENCLOSURE TO BE SUITABLE FOR HAZARDOUS ZONE 2 AS PER CANADIAN ELECTRICAL CODE.

NO.	DATE	TITLE	REVISION
1	SEP 29 2021	ISSUED FOR TENDER	

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ELECTRICAL CONSULTING ENGINEERS
#4 1850 NORTHFIELD ROAD NANAIMO, BC, V9S 3B3 TEL 250-756-4444 RBENGINEERING.CA

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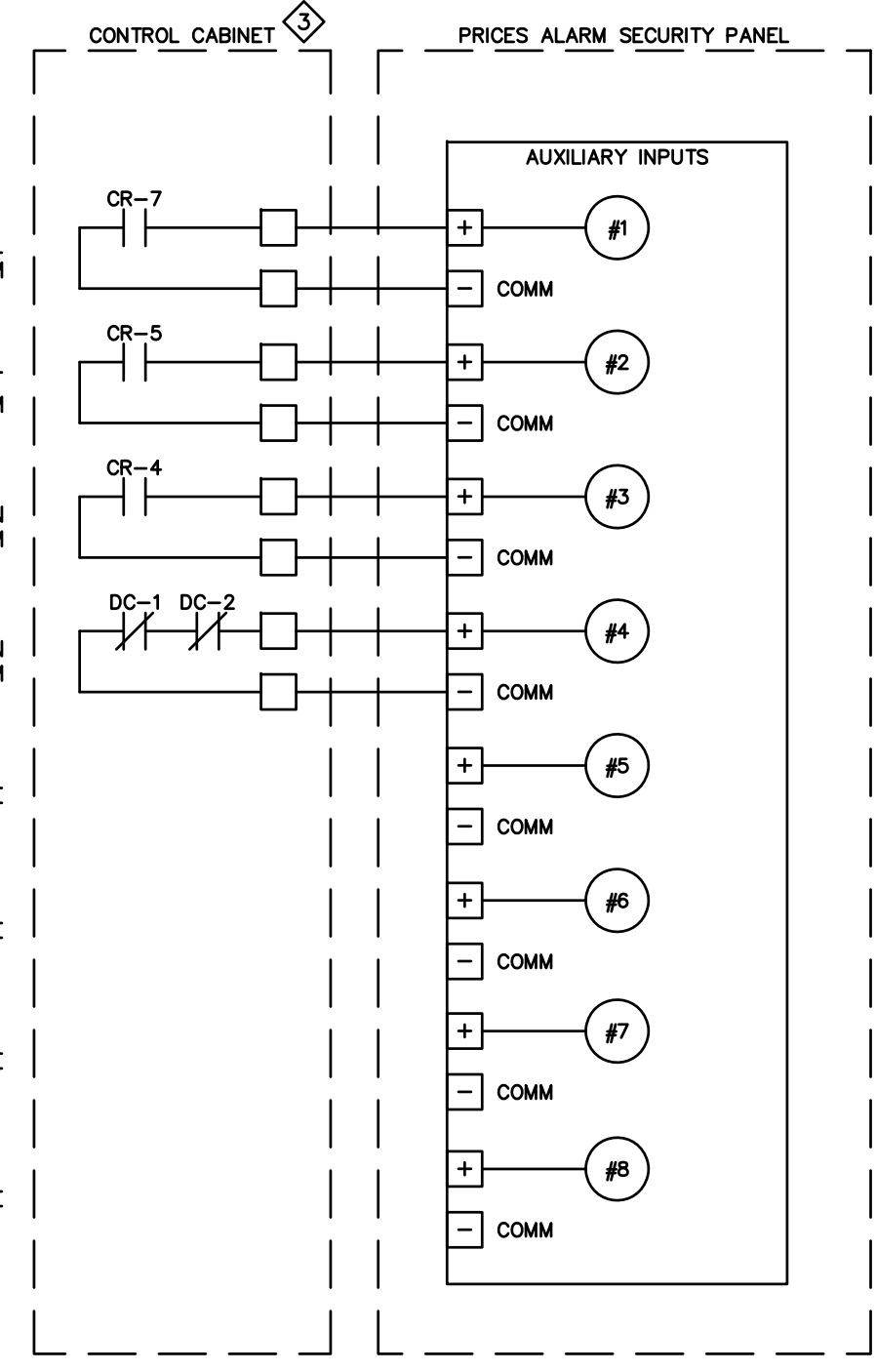
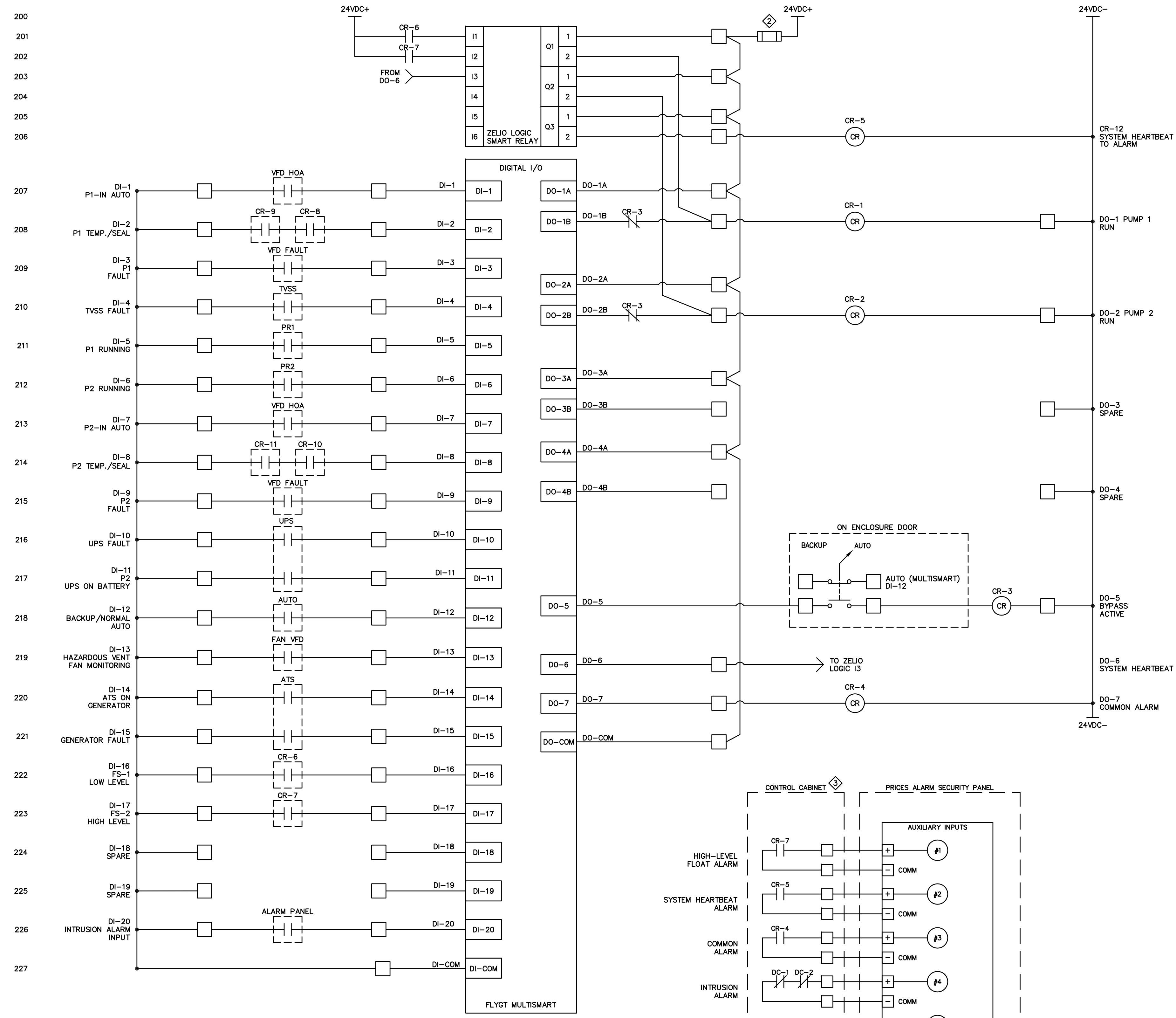
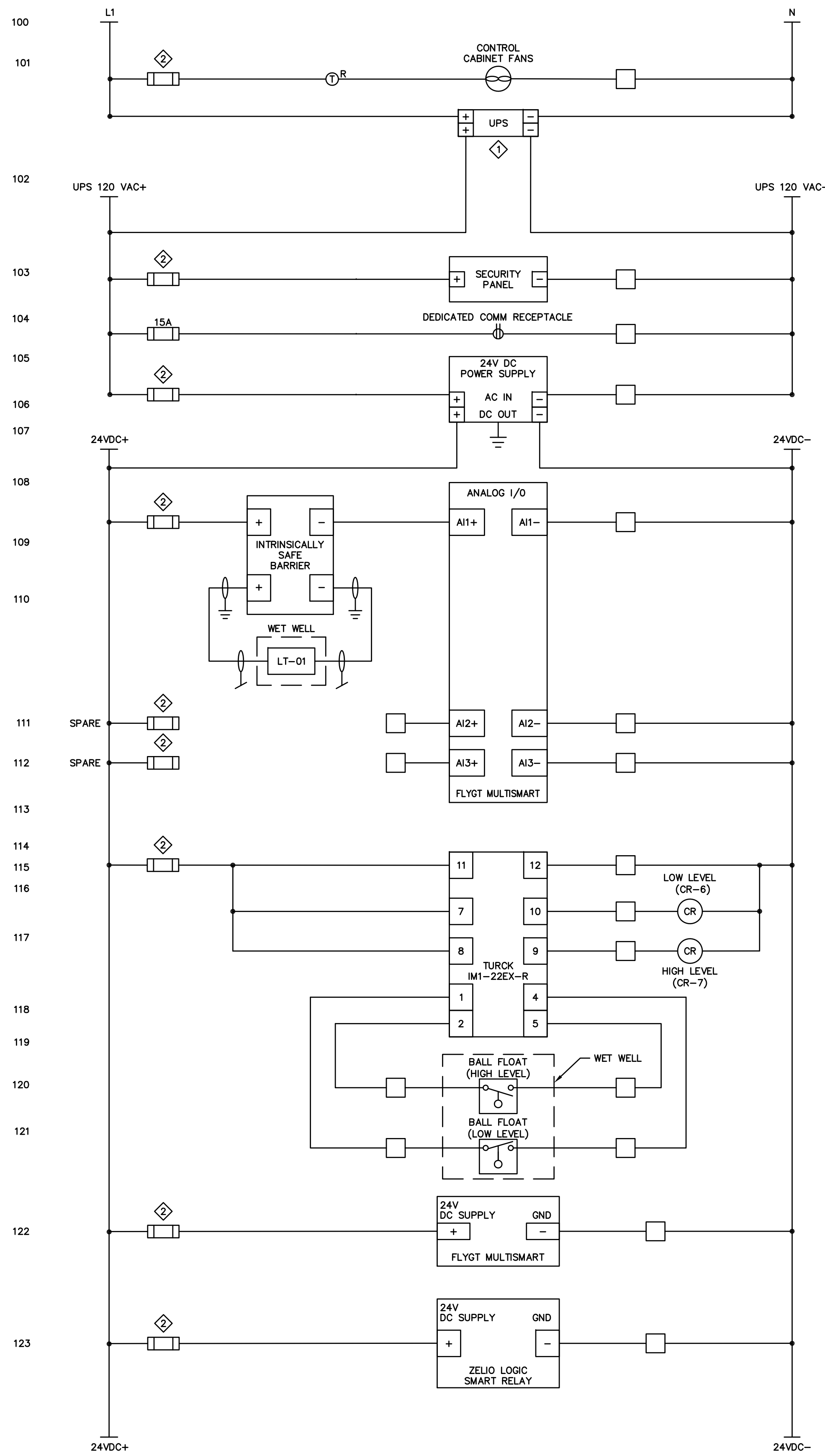


PROJECT
KINKADE PUMP STATION

TITLE
ELECTRICAL KIOSK

PROJECT NO. 19-3313	SCALE N.T.S.
DATE JULY, 2020	SEAL

DRAWING NO.
E-2



SECURITY DETAIL

KEY NOTES:
 ◆ UPS TO INCLUDE CONTACTS FOR CONTROL SYSTEM MONITORING.
 ◆ PROVIDE FUSING SIZED AS PER MANUFACTURER'S REQUIREMENTS.
 ◆ PROVIDE TERMINAL BLOCK STRIP IN CONTROL CABINET FOR SECURITY CONNECTION.

NO.	DATE	TITLE
1	SEP 29 2021	ISSUED FOR TENDER
REVISION		

RB ENGINEERING LTD
 ELECTRICAL CONSULTING ENGINEERS
 #4 1850 NORTHFIELD ROAD TEL 250-756-4444
 NANAIMO, BC, V9S 3B3 RBENGINEERING.CA

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PROJECT
KINKADE PUMP STATION

TITLE
CONTROL CABINET WIRING DIAGRAM

PROJECT NO. 19-3313	SEAL
DATE JULY, 2020	
SCALE N.T.S.	

DRAWING NO.
E-3

SCHEDULE 7 – SPECIFICATIONS

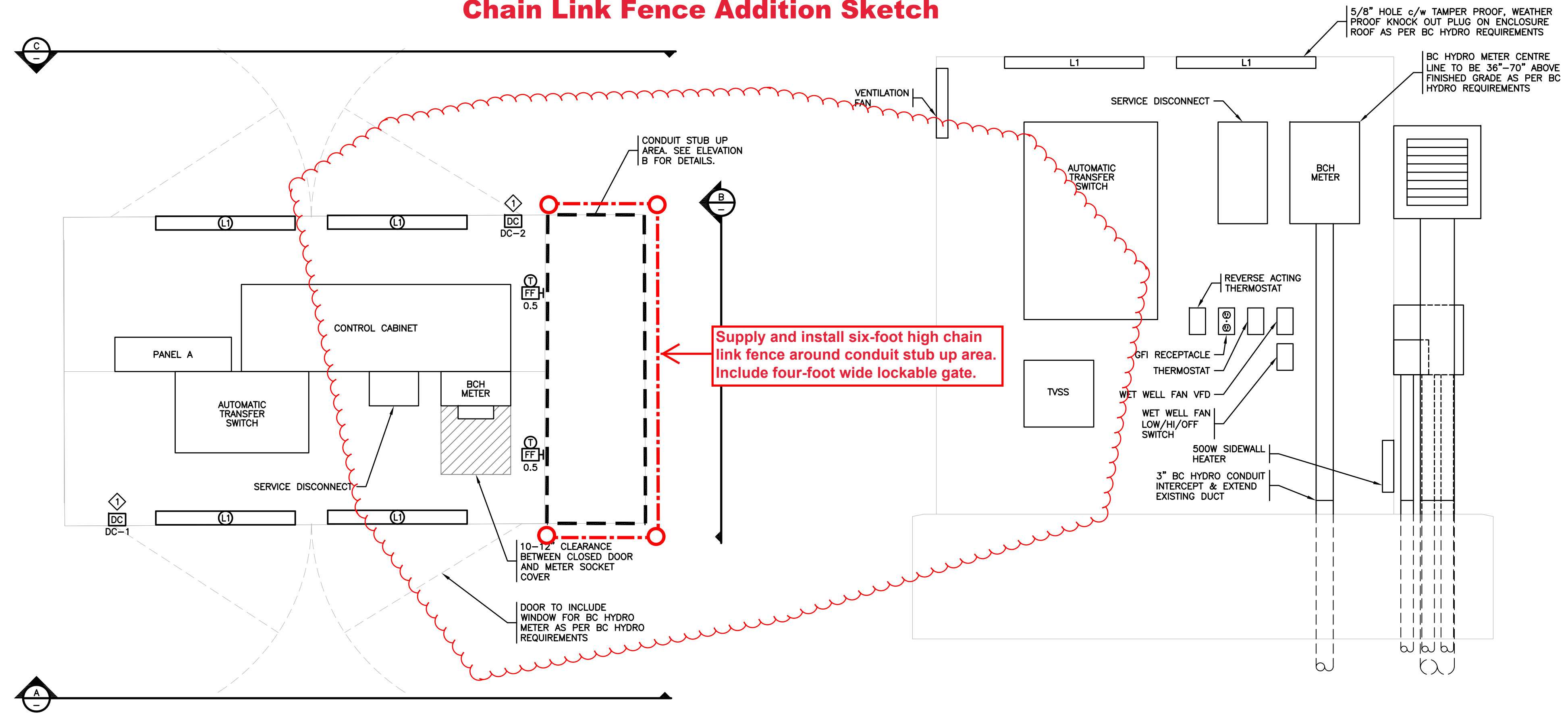
Title	Document No.	Date	Rev
N/A			

SAMPLE

SCHEDULE 8 – OTHER RELEVANT DOCUMENTS

Title	Ref. No.	Date	Rev
Chain link fence sketch			
Flow management plan sketch			
New submersible pumps technical data sheet			
RDN Contractor-Supplier Package			

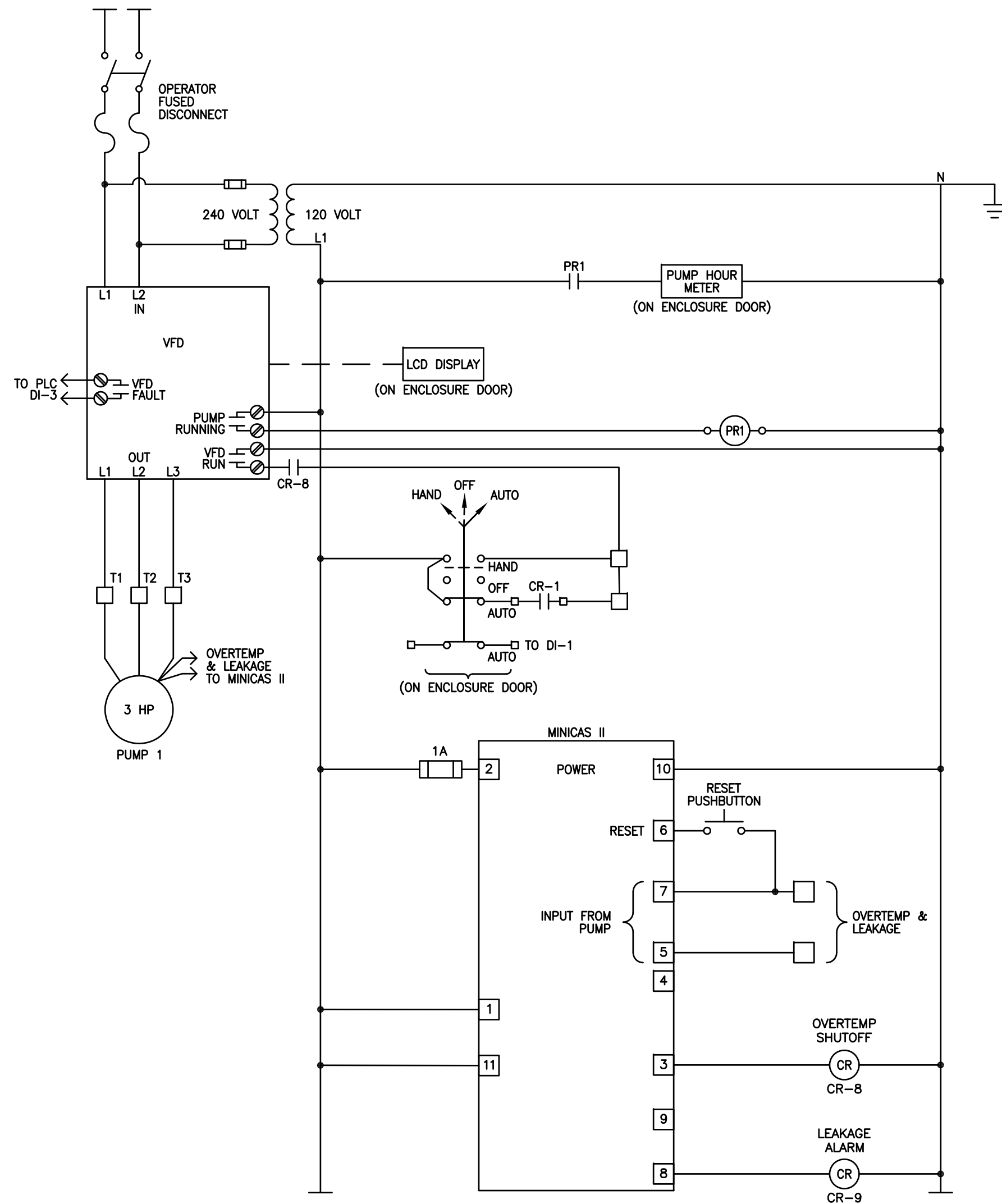
Chain Link Fence Addition Sketch



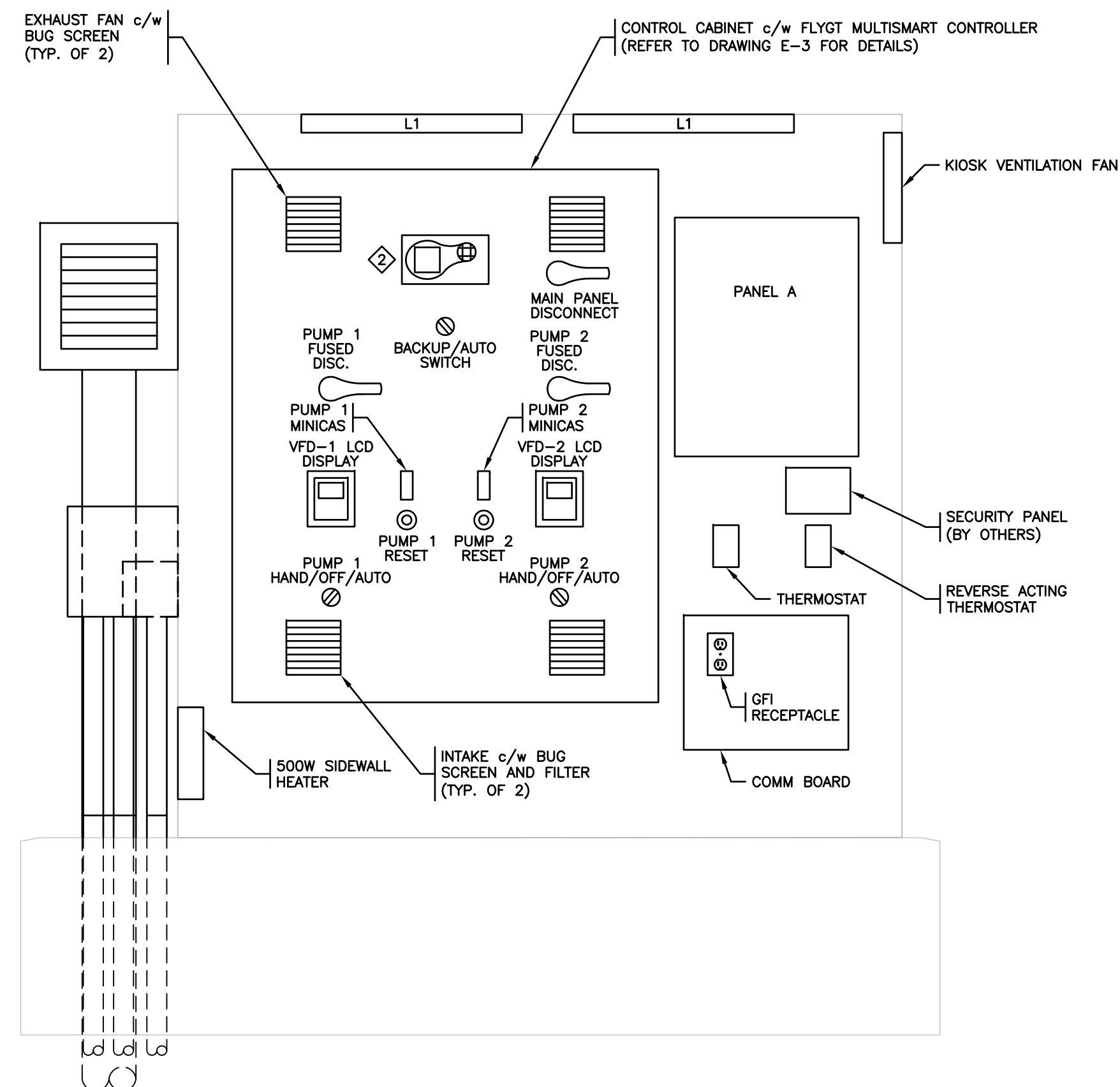
WELL KIOSK DETAIL
SCALE: N.T.S.

ELECTRICAL KIOSK CONTROLS SECTION ELEVATION
SCALE: N.T.S.

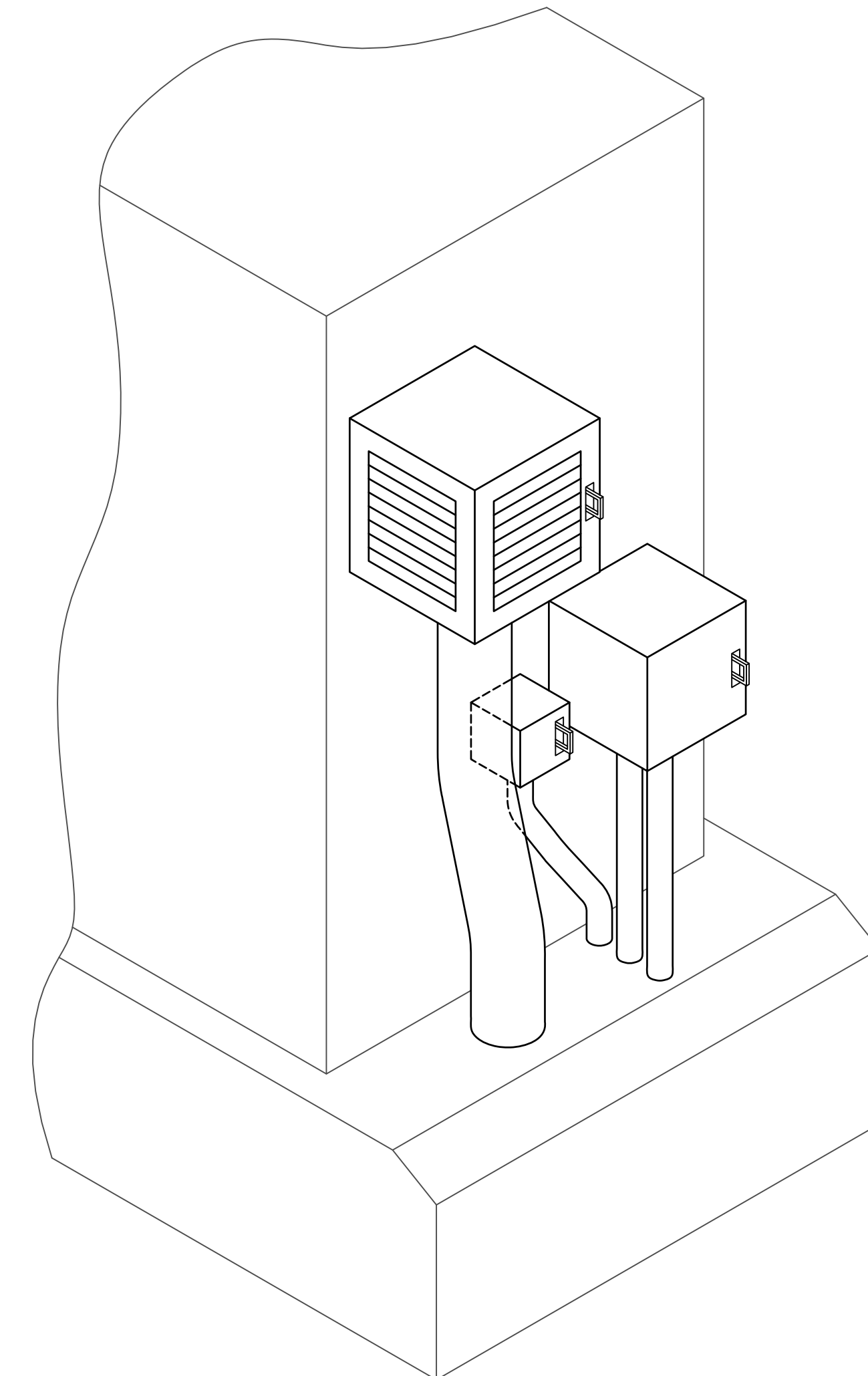
ELECTRICAL KIOSK EXTERIOR CONDUIT ENTRY ELEVATION
SCALE: N.T.S.



VFD CONTROL (TYPICAL)



ELECTRICAL KIOSK POWER SECTION ELEVATION
SCALE: N.T.S.



ELECTRICAL KIOSK EXTERIOR ISOMETRIC VIEW
SCALE: N.T.S.

KEY NOTES:

- 1. DOOR CONTACTS TO BE 2-POLE FOR BOTH LIGHTING AND PLC CONNECTIONS. WIRE ONE POLE TO CONTROL CABINET AND ONE POLE TO THE SECURITY CABINET. DOOR CONTACT TO BE LOCATED ON LATCHING/EXTERIOR DOOR.
- 2. FLYGT MULTISMART DISPLAY MODULE TO BE MOUNTED TO SURFACE OF CONTROL PANEL. MOUNT GUI AND CABINET AS HIGH IN KIOSK AS POSSIBLE TO IMPROVE USABILITY.
- 3. ENCLOSURE TO BE SUITABLE FOR HAZARDOUS ZONE 2 AS PER CANADIAN ELECTRICAL CODE.

- 4. CONTROL CONDUCTORS: FIELD WIRING SPLICE JUNCTION BOX.
- 5. PUMP POWER CONDUCTORS: FIELD WIRING SPLICE JUNCTION BOX.
- 6. PROVISION FOR PADLOCKING (TYP.)
- 7. EYS SEAL (TYP.)
- 8. CONNECT NEW RPVC CONDUIT TO EXISTING CONDUIT STUB-UP (TYP.)

- 9. ENCLOSURE WITH HAZARDOUS RATED VENTILATION FAN
- 10. LOUVER PLATES c/w BUG SCREEN (TYP. OF 3)

NO.	DATE	TITLE
1	SEP 29 2021	ISSUED FOR TENDER
REVISION		

RB ENGINEERING LTD
ELECTRICAL CONSULTING ENGINEERS
#4 1850 NORTHFIELD ROAD TEL: 250-756-4444
NANAIMO, BC, V9S 3B3 RBENGINEERING.CA

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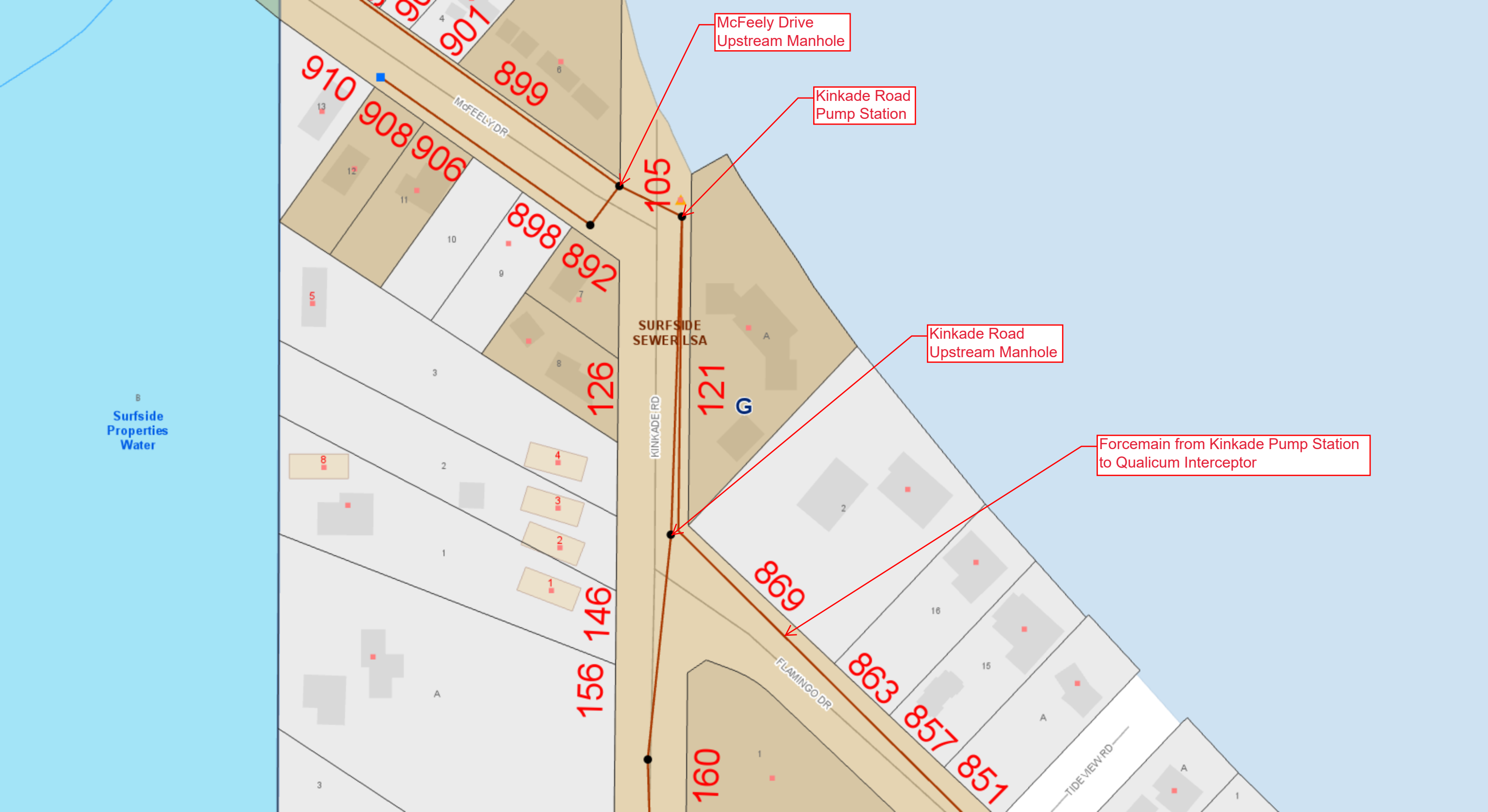
CLIENT
REGIONAL DISTRICT OF NANAIMO

PROJECT
KINKADE PUMP STATION

TITLE
ELECTRICAL KIOSK

PROJECT NO. 19-3313	SEAL
DATE JULY, 2020	
SCALE N.T.S.	

DRAWING NO.
E-2



McFeely Drive
Upstream Manhole

Kinkade Road
Pump Station

Kinkade Road
Upstream Manhole

Forcemain from Kinkade Pump Station
to Qualicum Interceptor

B
Surfside
Properties
Water

SURFSIDE
SEWER LSA

KINKADE RD

FLAMINGO DR

TIDE VIEW RD

910
908
906
McFEELY DR

899

105

898
892

126

121
G

156
146

160

869

863

857

851

NP 3085 MT 3~ Adaptive 462

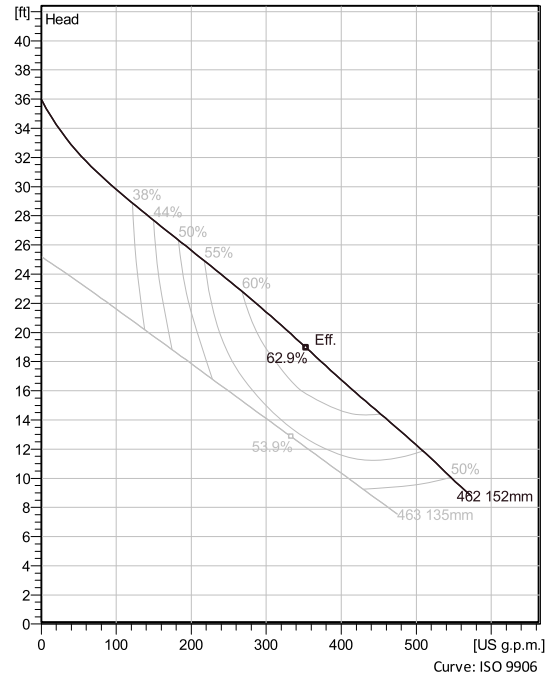
Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Possible to be upgraded with Guide-pin® for even better clogging resistance. Modular based design with high adaptation grade.



Technical specification



Curves according to: Water, pure ,4 °C,999.9 kg/m³,1.5692 mm²/s



Configuration

Motor number N3085.070 15-10-4AL-W 3hp	Installation type P - Semi permanent, Wet
Impeller diameter 152 mm	Discharge diameter 80 mm

Pump information

Impeller diameter 152 mm
Discharge diameter 80 mm
Inlet diameter 80 mm
Maximum operating speed 1695 rpm
Number of blades 2
Max. fluid temperature 40 °C

Materials

Impeller Hard-Iron™
Stator housing material Grey cast iron

Project	Created by xiaoyu Zhou	Last update	10/14/2020
Block	Created on 10/14/2020		

NP 3085 MT 3~ Adaptive 462

Technical specification



Motor - General

Motor number N3085.070 15-10-4AL-W 3hp	Phases 3~	Rated speed 1695 rpm	Rated power 3 hp
ATEX approved CSA	Number of poles 4	Rated current 3.3 A	Stator variant 63
Frequency 60 Hz	Rated voltage 600 V	Insulation class H	Type of Duty S1
Version code 070			

Motor - Technical

Power factor - 1/1 Load 0.84	Motor efficiency - 1/1 Load 77.2 %	Total moment of inertia 0.02 kg m ²	Starts per hour max. 30
Power factor - 3/4 Load 0.79	Motor efficiency - 3/4 Load 78.8 %	Starting current, direct starting 17 A	
Power factor - 1/2 Load 0.68	Motor efficiency - 1/2 Load 77.6 %	Starting current, star-delta 5.66 A	

Project
Block

Created by xiaoyu Zhou
Created on 10/14/2020

Last update 10/14/2020

NP 3085 MT 3~ Adaptive 462

Performance curve

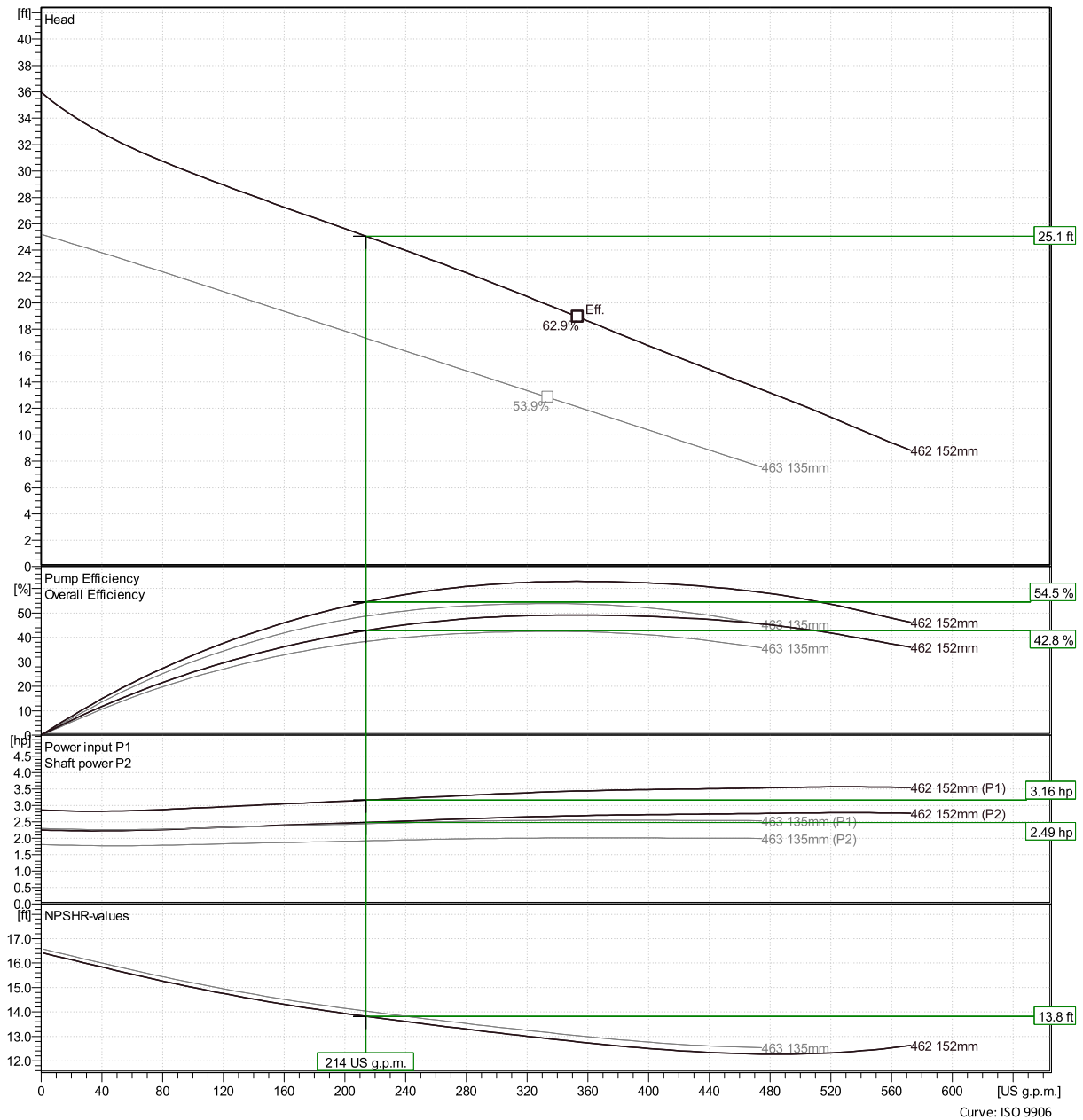


Duty point

Flow
214 US g.p.m.

Head
25.1 ft

Curves according to: Water, pure 4 °C, 999.9 kg/m³, 1.5692 mm²/s



Project	Created by xiaoyu Zhou	Last update	10/14/2020
Block	Created on 10/14/2020		

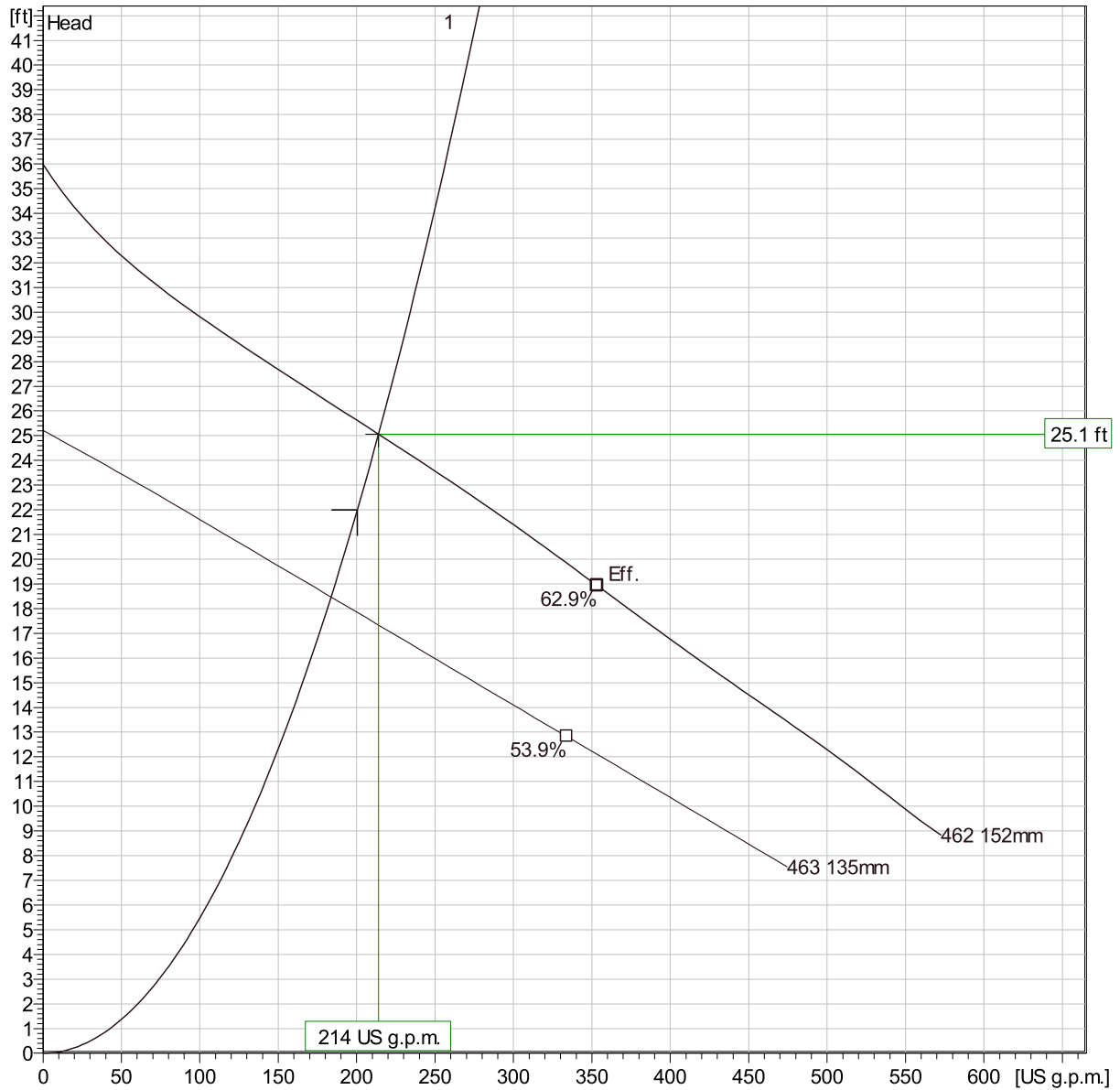
Curve: ISO 9906

NP 3085 MT 3~ Adaptive 462

Duty Analysis



Curves according to: Water, pure, 4 °C, 999.9 kg/m³, 1.5692 mm²/s



Operating characteristics

Pumps / Systems	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific Energy	NPSHre
1	214 US g.p.m.	25.1 ft	2.49 hp	214 US g.p.m.	25.1 ft	2.49 hp	54.5 %	0.0486 kWh/m	13.8 ft

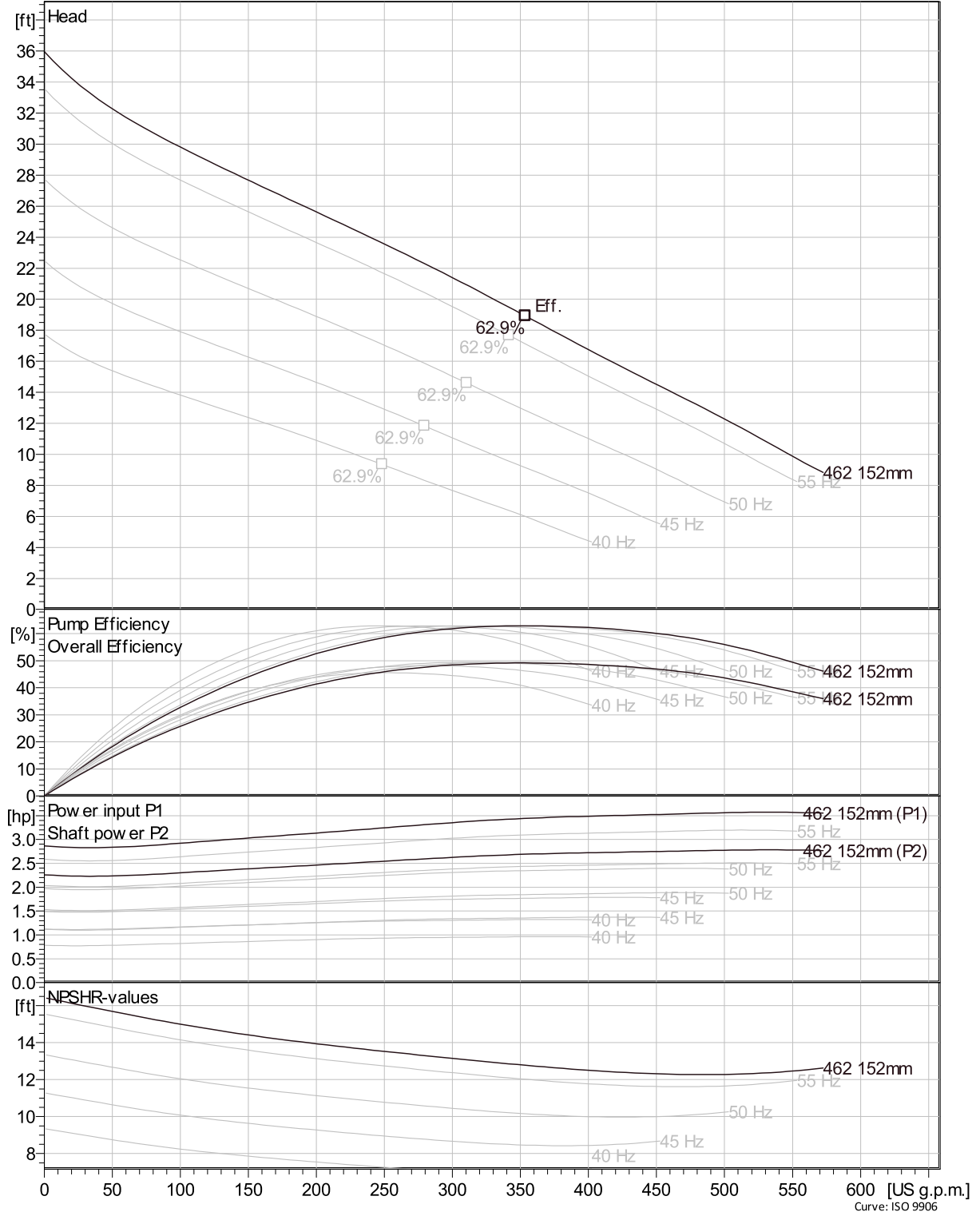
Project	Created by	xiaoyu Zhou	Last update	10/14/2020
Block	Created on	10/14/2020		

NP 3085 MT 3~ Adaptive 462

VFD Curve



Curves according to: Water, pure, 4 °C, 999.9 kg/m³, 1.5692 mm²/s

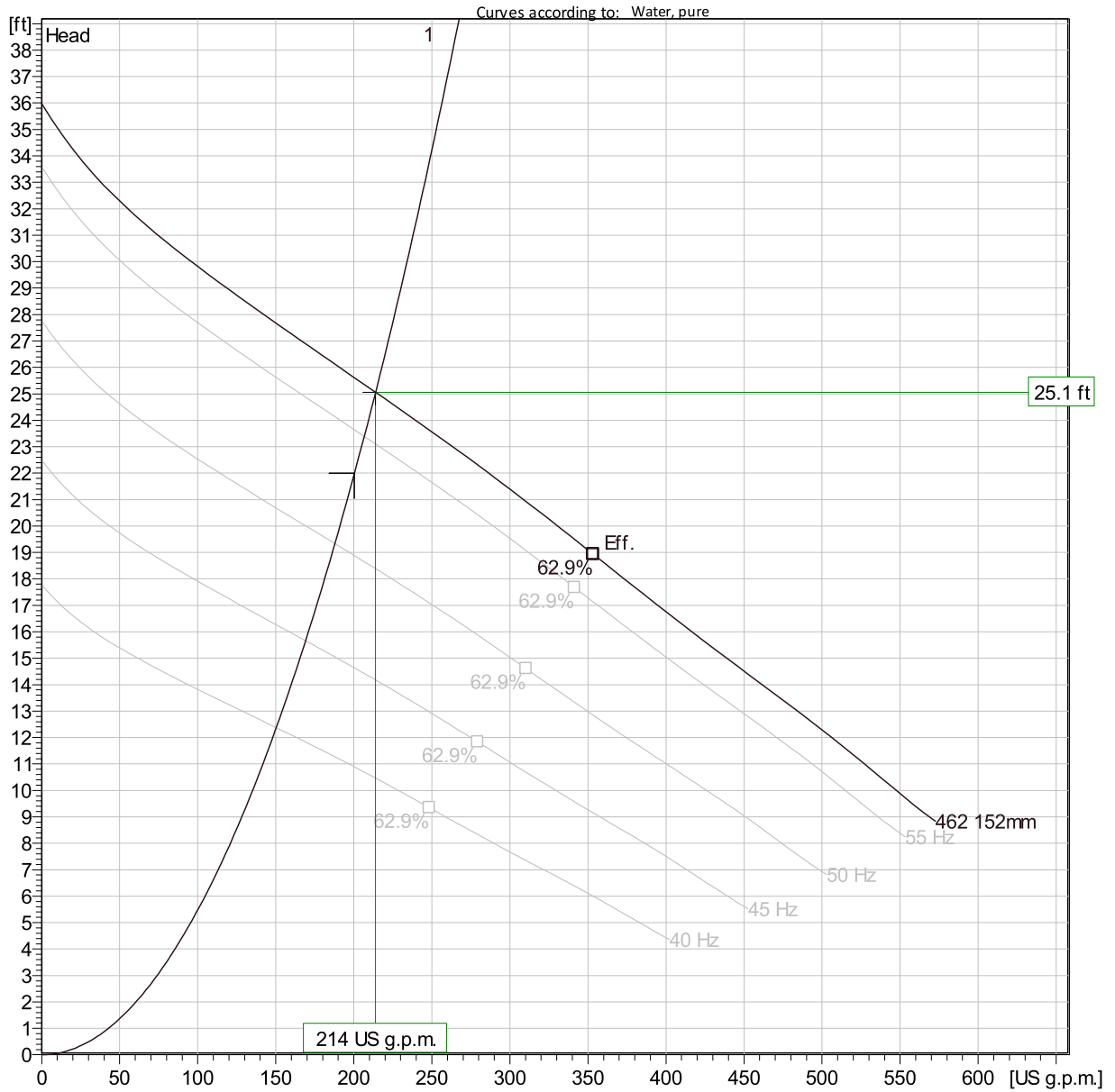


Project	Created by	xiaoyu Zhou	Last update	10/14/2020
Block	Created on	10/14/2020		

Curve: ISO 9906

NP 3085 MT 3~ Adaptive 462

VFD Analysis



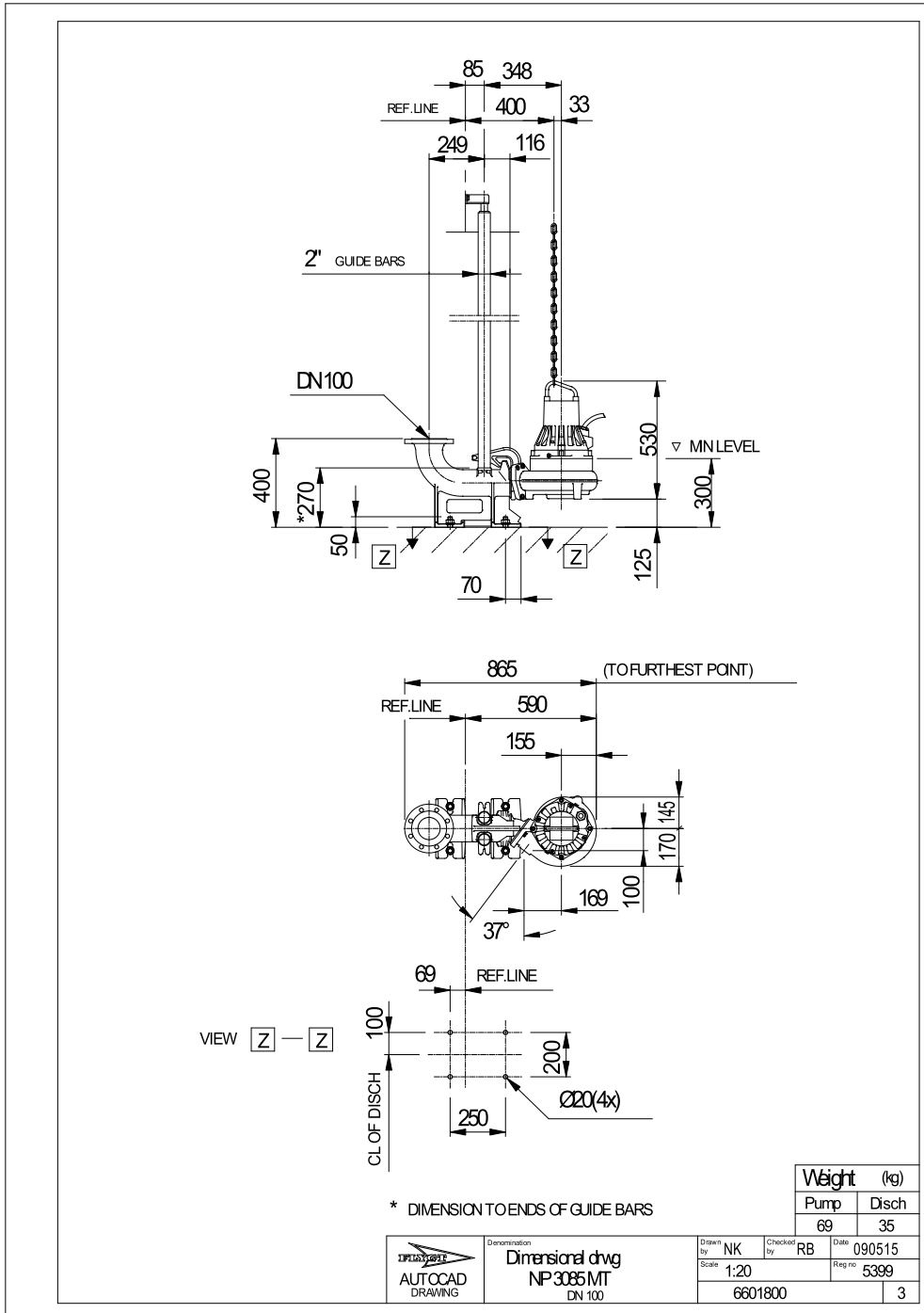
4 °C, 999.9 kg/m³, 1.5692 mm²/s

Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific Energy	NPSH _{re}
1	60 Hz	214 US g.p.m.	25.1 ft	2.49 hp	214 US g.p.m.	25.1 ft	2.49 hp	54.5 %	0.0486 kWh/rr	13.8 ft
1	55 Hz	197 US g.p.m.	21.2 ft	1.94 hp	197 US g.p.m.	21.2 ft	1.94 hp	54.5 %	0.041 kWh/m	12.1 ft
1	50 Hz	179 US g.p.m.	17.6 ft	1.46 hp	179 US g.p.m.	17.6 ft	1.46 hp	54.5 %	0.0342 kWh/rr	10.4 ft
1	45 Hz	161 US g.p.m.	14.2 ft	1.06 hp	161 US g.p.m.	14.2 ft	1.06 hp	54.5 %	0.0286 kWh/rr	8.78 ft
1	40 Hz	143 US g.p.m.	11.2 ft	0.747 hp	143 US g.p.m.	11.2 ft	0.747 hp	54.5 %	0.0241 kWh/rr	7.28 ft

Project	Created by	xiaoyu Zhou	Last update	10/14/2020
Block	Created on	10/14/2020		

NP 3085 MT 3~ Adaptive 462

Dimensional drawing



Project
Block

Created by xiaoyu Zhou
Created on 10/14/2020

Last update

10/14/2020



Wastewater Services Communication Procedures

Document #:	WWS-COM-10.1
Revision #:	16
Effective Date:	30 January 2020
Reviewed by:	L. Mueller, EMS Coordinator
Approved by:	I. Lundman, Operations Sup't

WWS-COM-10.1 Contractor-Supplier Package

The purpose of this package is to convey the requirements of Regional District of Nanaimo Wastewater Services' (WWS) Environmental Management System (EMS) to contractors and suppliers. This package is applicable to all wastewater treatment facilities and pump stations.

As a contractor or supplier to WWS, you have a responsibility to comply with all provisions identified in the Contract Documents regarding Environmental Protection. Where Contract Documents do not exist, the service provider will comply with Sections Two, Three and Four.

Please retain a copy for your records.

<p>PACKAGE CONTENTS:</p> <p>1.0 General Overview: ISO 14001</p> <ul style="list-style-type: none"> 1.1 Environmental Management System (EMS) 1.2 Environmental Policy and ISO Clause 1.3 Environmental Aspects and Impacts 1.4 Environmental Objectives and Targets 1.5 Environmental Management Programs (EMPs) <p>2.0 Operating Procedures</p> <p>3.0 Emergency Preparedness and Response Procedures</p> <p>4.0 Environmental Specifications</p> <ul style="list-style-type: none"> 4.1 Air Emissions 4.2 Cleaning Equipment 4.3 Dust Control 4.4 Energy Consumption 4.5 Hazardous Materials 4.6 Noise 4.7 Sensitive Areas 4.8 Spills 4.9 Surface Water Control 4.10 Waste Management - Solid Non-Hazardous Waste <p>5.0 Attachments</p> <ul style="list-style-type: none"> Environmental Policy ISO Clause
--

I, _____ of _____
(please print name) (please print company name)

acknowledge that I have received a Contractor-Supplier Package (ISO 14001 Contractor Supplier Environmental Performance Requirements) containing the materials listed above.

(Date)

(Supplier/Contractor Employee's Signature)

(Date)

(WWS Project Manager's Signature)

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1.0 GENERAL OVERVIEW: ISO 14001

1.1 Environmental Management System (EMS)

- An EMS is the part of an organization's management system, used to develop and implement its environmental policy and manage its environmental aspects.
- It includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources.

1.2 Environmental Policy and ISO Clause

- An Environmental Policy is a statement by the organization of its overall intentions and direction related to its environmental performance. It provides a framework for action and for the setting of environmental objectives and environmental targets.
- It is a driver for implementing and maintaining our EMS and reflects commitment to continual improvement, legal compliance and prevention of pollution
- The Environmental Policy is posted at each of the WWS wastewater treatment facilities and pump stations, and is available on the RDN website: www.rdn.bc.ca
- Uncontrolled copy of the Environmental Policy attached (Section 5.0 of this package)
- Uncontrolled copy of WWS' ISO Clause (Section 5.0 of this package)

1.3 Environmental Aspects and Impacts

- Environmental Aspect: element of an organization's activities, products or services that can interact with the environment.
- Environmental Impacts: any changes to the environment whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
- Environmental impacts include:
 - Air Pollution and Odour
 - Depletion of Natural Resources (Energy Use)
 - Landfill (Garbage)
 - Noise
 - General Repairs-Construction (Sensitive Areas)
 - Sewage Bypass (Leak/Spill)
 - Treatment Disposal (Hazardous Waste)

1.4 Environmental Objectives and Actions

- Environmental Objective: overall environmental goal consistent with the environmental policy, that an organization sets itself to achieve.
- Environmental Target: a detailed performance requirement that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
- Objective and Targets are set to minimize environmental impacts.
- Any legal requirements that must be met by the organization (i.e. permit requirements) help create the objectives and targets.

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2.0 OPERATING PROCEDURES

- All WWS wastewater treatment facilities have Operating Procedure Manuals.
- Procedures applicable to contractors and suppliers will be supplied by the WWS Project Manager at pre-construction meetings or prior to the work commencing.
- Contractors and Suppliers will be required to sign a Procedure Checklist acknowledging that they have received copies of applicable procedures at a pre-construction meeting or prior to commencing work on site.
- The WWS Project Manager will ensure that a site induction is completed prior to work commencing as per the ISO Clause attached. (Section 5.0 of this package)

3.0 EMERGENCY PREPAREDNESS AND RESPONSE PROCEDURES

- All WWS wastewater treatment facilities have Emergency Preparedness and Response Procedure Manuals.
- Procedures applicable to contractors and suppliers will be supplied by the WWS Project Manager at pre-construction meetings or prior to the work commencing.
- Contractors and Suppliers will be required to sign a Procedure Checklist acknowledging that they have received copies of applicable procedures at a pre-construction meeting or prior to commencing work on site.
- The WWS Project Manager will ensure that a site induction is completed prior to work commencing as per the ISO Clause (Section 5.0 of this package).

4.0 ENVIRONMENTAL SPECIFICATIONS

Contractors and suppliers must abide by the following environmental specifications while working on site, as applicable.

4.1 Air Emissions

- Contractors and Suppliers will ensure that excess vehicle idling is minimized.
- Contractors will ensure that their staff are trained in the proper use and handling of all materials and chemicals to ensure air emissions/odours are minimized.
- No open burning of waste materials is permitted.

4.2 Cleaning Equipment

- Do not clean equipment in streams/rivers or lakes.
- Clean construction equipment prior to entering roadways.
- Do not clean equipment in locations where debris can gain access to sewers, watercourses or aquifers.

4.3 Dust Control

- Transport dusty materials in covered haulage vehicles.
- Public roadways shall be kept clean and free of mud.

4.4 Energy Consumption

- Contractors and Suppliers will use energy efficient equipment when undertaking any work on a job site, where practical.
- Contractors and Suppliers staff will turn off lights and equipment when not in use and where practical when on a job site.

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4.5 Hazardous Materials

- Hazardous materials brought on site and removed shall be managed in accordance with current MOE Regulations current at the time of work.
- Governing Ministry of Labour Regulations respecting protection of works, remedial handling and disposition of Designated Substances encountered shall be followed.
- Do not empty fuel, lubricants, herbicides, pesticides, fungicides, paint materials, solvents or other chemicals into sewers or watercourses (only legally acceptable disposal methods are acceptable).

4.6 Noise

- Use vehicles and equipment with efficient muffling devices.
- Provide and use devices that will minimize noise levels in construction areas.
- Minimize noise resulting from activities while on-site whenever practical.

4.7 Sensitive Areas

- Inform WWS staff in writing of the particular schedule for each river crossing, channelizing or other work in the designated sensitive areas.
- Avoid encroachment on unique natural areas and establish boundary protection and signage to avoid encroachment.
- Do not disturb habitats of rare or endangered species. Agree and implement mitigative measures with WWS staff.
- Protect wetland sites used as feeding or breeding areas by migratory fowls or as habitats for other animals and establish boundary protection and signage to avoid such encroachment.
- Schedule construction in sensitive areas so that there will be minimal interference with water uses including fish migration or spawning, or disruption of incubation periods for eggs.
- Keep removal of vegetation to a minimum.
- Contain and deposit on land all aquatic plants uprooted or cut prior to or during construction.

4.8 Spills

- If requested, the contractor will provide to the WWS Project Manager for approval an Environmental Plan which addresses spill prevention, and spill response and communication.
- The contractor will be provided with a WWS Spill Response procedure in the event an Environmental Plan is not requested by WWS. If the contractor is provided with a WWS Spill Response procedure, the contractor will be required to follow instructions assigned to 'operator' in the procedure.
- Spill containment must be provided for any equipment containing fuel.
- Be prepared at all times to intercept, clean up and dispose of any spillage that may occur whether on land or water.
- Keep all materials required for clean-up of spills readily accessible on-site (e.g. spill kit)
- The contractor must dispose of all spillage and contaminated material the contractor generates. Contaminated material may not be stored on site.
- Report spills to EMBC at 1-800-663-3456 as per the *BC Spill Reporting Regulation*, which applies for the purposes of the *BC Environmental Management Act*.
- Notify WWS staff immediately if there are any spills and provide the EMBC confirmation number, where one has been provided.
- Results of all spill investigations must be forwarded to the WWS Project Manager and Chief Operator of the facility at which the spill occurred.

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- Reporting of releases is also a requirement of federal and other provincial legislation, including the Canadian Environmental Protection Act, and the Transportation of Dangerous Goods Act.

4.9 Sediment and Erosion Control

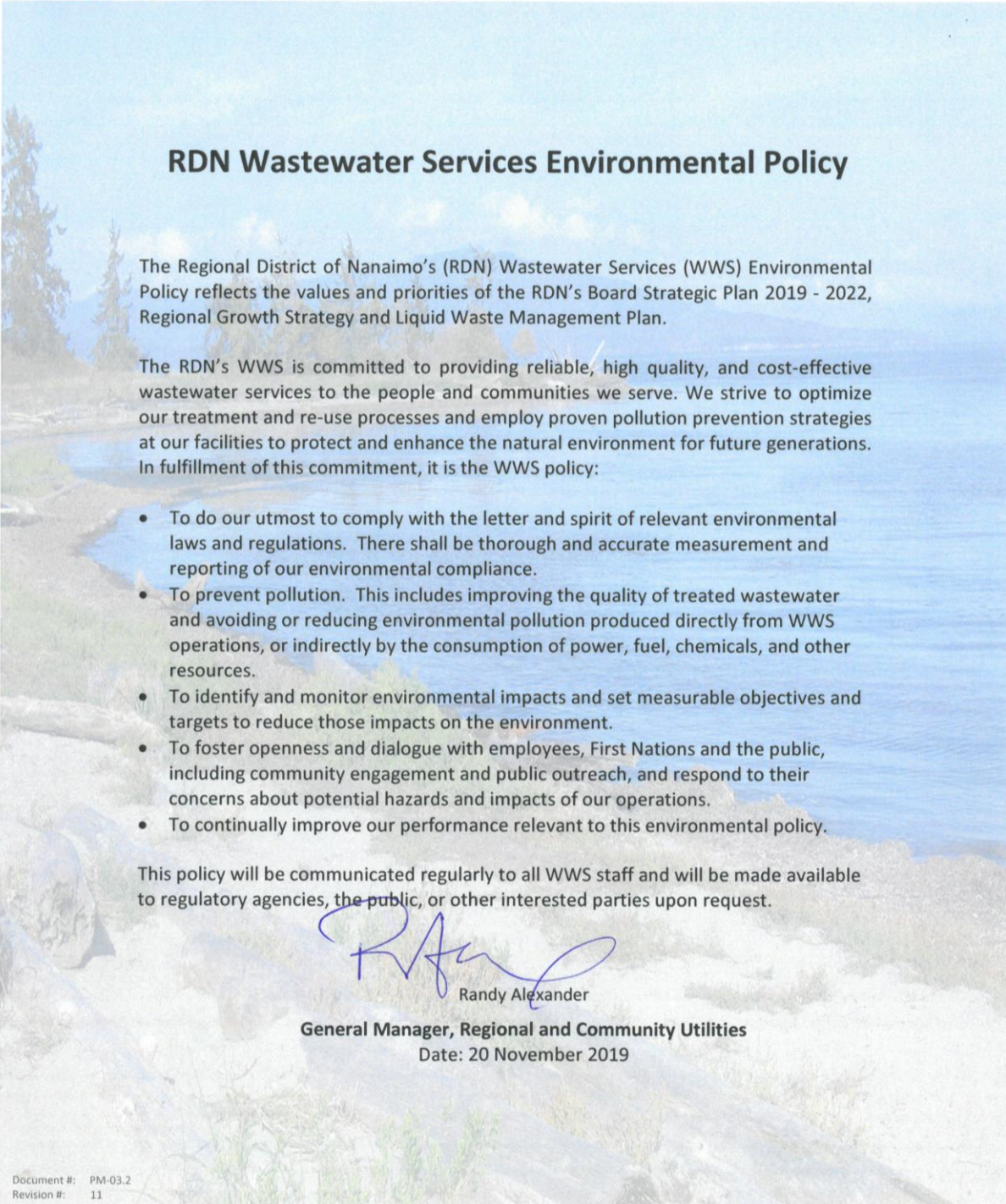
- The contractor, where ground work is required, will follow the project's sediment and erosion control plans.
- If no sediment and erosion control plan is in place the following procedures should be used:
 - Control all surface water and groundwater including rainfall and run-off. Ensure that erosion is controlled and that flooding of excavations or damage to structures does not occur.
 - Intercept surface drainage as far back from excavations as practical by means of ditches, berms or other interception methods as may be required for effective control.
 - Direct pumped water or run-off to settling ponds or sediment basins prior to discharge to adjacent storm sewers or watercourses as per provincial and federal regulations
 - The contractor is to discharge only to RDN approved discharge point(s).
 - Intercept and divert concentrated run-off from unstable areas under sheet flow conditions, as directed by the Engineer.
 - Do not direct any flow of water across or over pavements, except through approved pipes or properly constructed troughs.
 - Keep gutters and drainage ditches open at all times to provide adequate surface drainage.
 - Maintain all existing storm sewers clean and free of deleterious materials and blockages.
 - Provide splash pads where water is discharged to the watercourse.
 - Dispose of water so as not to be injurious to public health or safety, to property or to any part of work completed or under construction.
- The contractor must follow any other requirements identified in the contract document with WWS.

4.10 Waste Management – Solid Non-Hazardous Waste

- No open burning is permitted.
- All wastes generated by contractors will be cleaned-up and disposed of as per BC Ministry of Environment Regulations.
- Whenever possible Contractors and Suppliers should utilize recycling opportunities for the disposal of waste.

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5.0 ATTACHMENTS

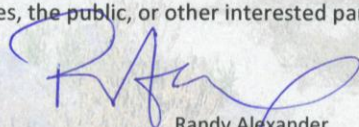
RDN Wastewater Services Environmental Policy

The Regional District of Nanaimo's (RDN) Wastewater Services (WWS) Environmental Policy reflects the values and priorities of the RDN's Board Strategic Plan 2019 - 2022, Regional Growth Strategy and Liquid Waste Management Plan.

The RDN's WWS is committed to providing reliable, high quality, and cost-effective wastewater services to the people and communities we serve. We strive to optimize our treatment and re-use processes and employ proven pollution prevention strategies at our facilities to protect and enhance the natural environment for future generations. In fulfillment of this commitment, it is the WWS policy:

- To do our utmost to comply with the letter and spirit of relevant environmental laws and regulations. There shall be thorough and accurate measurement and reporting of our environmental compliance.
- To prevent pollution. This includes improving the quality of treated wastewater and avoiding or reducing environmental pollution produced directly from WWS operations, or indirectly by the consumption of power, fuel, chemicals, and other resources.
- To identify and monitor environmental impacts and set measurable objectives and targets to reduce those impacts on the environment.
- To foster openness and dialogue with employees, First Nations and the public, including community engagement and public outreach, and respond to their concerns about potential hazards and impacts of our operations.
- To continually improve our performance relevant to this environmental policy.

This policy will be communicated regularly to all WWS staff and will be made available to regulatory agencies, the public, or other interested parties upon request.



Randy Alexander
General Manager, Regional and Community Utilities
Date: 20 November 2019

Document #: PM-03.2
Revision #: 11

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ISO CLAUSE

Whereas the Regional District of Nanaimo's Wastewater Services (WWS) is operating to the ISO 14001:2015 standard, it is a condition of this contract that the Contractor comply with the WWS' Environmental Management System (EMS).

As per PM-08.0 Element 7.2 Competence and Element 7.3 Awareness, paragraph 5.11 of the WWS' EMS Policy and Procedure Manual:

1. Any contracted personnel whose activities can create a significant impact (as defined by the WWS' EMS) on the environment are required to undergo training. Such training will require one session of approximately one half hour.
2. While the Regional District of Nanaimo (the RDN) will provide the initial training to a representative Contractor, it is the responsibility of the Contractor to train the Contractor's own personnel, as well as any personnel of the Contractor's Subcontractor who will be working on a site of WWS.
3. The Contractor hereby warrants that it will provide any ISO 14001 related training which the RDN deems necessary to the Contractor's own personnel and any personnel of the Contractor's Subcontractor and will forward records thereof to the RDN at no additional charge to the RDN.