

REQUEST FOR PROPOSAL

RFP # 22-14

WWTP Tertiary Filter PLC Replacement Project

City of Ann Arbor
Public Services Area/Wastewater Treatment Services Unit



Due Date: March 3, 2022 by 2:00 p.m. (local time)

Issued By:

City of Ann Arbor
Procurement Unit
301 E. Huron Street
Ann Arbor, MI 48104

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SECTION I - GENERAL INFORMATION

A. OBJECTIVE

The City of Ann Arbor is seeking the services of a firm to upgrade four programmable logic controllers (PLCs) in the Wastewater Treatment Plant (WWTP) Tertiary Filter Building. The current PLCs are Allen-Bradley PLC 5/40 and we intend to replace them with Allen-Bradley ControlLogics model 1756-L73 with minimum 8MB of memory. If the Consultant has reason to suggest an alternative PLC model for Ann Arbor's needs, please provide pricing and explanation for the alternate. The PLCs require replacement due to their age and the lack of availability of replacement parts needed to keep them in service. Three PLCs are associated with operation of the Tertiary Filters and one is located in the Filter Control Room. The firm is to perform an evaluation of the existing PLCs and provide, install and integrate the new PLCs with the existing Factory TalkView SE v.12 HMI control system. For the control strategy, the consultant will utilize the existing PLC programming files and obtain preferences and opinions from plant supervisors.

B. QUESTIONS AND CLARIFICATIONS / DESIGNATED CITY CONTACTS

All questions regarding this Request for Proposal (RFP) shall be submitted via e-mail. Questions will be accepted and answered in accordance with the terms and conditions of this RFP.

All questions shall be submitted on or before February 15, 2022 at 5:00 p.m., and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to Chris Englert, Engineer WWTSU – cenglert@a2gov.org

RFP Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer - CSpencer@a2gov.org

Should any prospective offeror be in doubt as to the true meaning of any portion of this RFP, or should the prospective offeror find any ambiguity, inconsistency, or omission therein, the prospective offeror shall make a written request for an official interpretation or correction by the due date for questions above.

All interpretations, corrections, or additions to this RFP will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the prospective offeror's responsibility to ensure they have received all addenda before submitting a proposal. Any addendum issued by the City shall become part of the RFP, and must be incorporated in the proposal where applicable.

C. PRE-PROPOSAL MEETING

A MANDATORY pre-proposal meeting will be held:

WHEN: February 10, 2022 at 11:00 a.m.

WHERE: Ann Arbor Wastewater Treatment Plant, Maintenance Building, 49 Old Dixboro Rd, Ann Arbor, Michigan 48104

The meeting is mandatory. Any proposal submitted by a party not attending and signing the roster at the pre-bid meeting will not be opened or considered for award. The purpose of this meeting is to discuss the project with prospective offerors and to answer any questions concerning RFP 22-14. Any questions and answers furnished in the pre-proposal meeting will not be official until verified in writing through an addendum.

D. PROPOSAL FORMAT

To be considered, each firm must submit a response to this RFP using the format provided in Section III. No other distribution of proposals is to be made by the prospective offeror. An official authorized to bind the offeror to its provisions must sign the proposal in ink. Each proposal must remain valid for at least ninety days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the offeror's ability to meet the requirements of the RFP. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the proposal.

E. SELECTION CRITERIA

Responses to this RFP will be evaluated using a point system as shown in Section III. A selection committee comprised of staff from the City will complete the evaluation.

The fee proposals will not be reviewed at the initial evaluation. After initial evaluation, the City will determine top proposals, and open only those fee proposals. The City will then determine which, if any, firms will be interviewed. During the interviews, the selected firms will be given the opportunity to discuss their proposal, qualifications, past experience, and their fee proposal in more detail. The City further reserves the right to interview the key personnel assigned by the selected offeror to this project. If the City chooses to interview any respondents, the interviews will be tentatively held the **week of March 14, 2022**. Offeror must be available on these dates.

All proposals submitted may be subject to clarifications and further negotiation. All agreements resulting from negotiations that differ from what is represented within the RFP or in the proposal response shall be documented and included as part of the final contract.

F. SEALED PROPOSAL SUBMISSION

All proposals are due and must be delivered to the City on or before March 3, 2022 at 2:00 p.m. (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each respondent must submit in a sealed envelope

- **one (1) original proposal**
- **three (3) additional proposal copies**
- **one (1) digital copy of the proposal preferably on a USB/flash drive as one file in PDF format**

Each respondent must submit in a single separate sealed envelope marked Fee Proposal

- **two (2) copies of the fee proposal**

The fee proposal and all costs must be separate from the rest of the proposal.

Proposals submitted must be clearly marked: **“RFP No. 22-14 – WWTP Tertiary Filter PLC Replacement”** and list the offeror’s name and address.

Proposals must be addressed and delivered to:
City of Ann Arbor
c/o Customer Service
301 East Huron Street
Ann Arbor, MI 48107

All proposals received on or before the due date will be publicly opened and recorded on the due date. No immediate decisions will be rendered.

Hand delivered bids may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule/entrance of City Hall. The City will not be liable to any prospective offeror for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal. Offerors are responsible for submission of their proposal. Additional time will not be granted to a single prospective offeror. However, additional time may be granted to all prospective offerors at the discretion of the City.

A proposal may be disqualified if the following required forms are not included with the proposal:

- **Attachment C - City of Ann Arbor Non-Discrimination Declaration of Compliance**
- **Attachment D - City of Ann Arbor Living Wage Declaration of Compliance**

- **Attachment E - Vendor Conflict of Interest Disclosure Form of the RFP Document**

Proposals that fail to provide these forms listed above upon proposal opening may be deemed non-responsive and may not be considered for award.

Please provide the forms outlined above (Attachments C, D and E) within your narrative proposal, not within the separately sealed Fee Proposal envelope.

All proposed fees, cost or compensation for the services requested herein should be provided in the separately sealed Fee Proposal envelope only.

G. DISCLOSURES

Under the Freedom of Information Act (Public Act 442), the City is obligated to permit review of its files, if requested by others. All information in a proposal is subject to disclosure under this provision. This act also provides for a complete disclosure of contracts and attachments thereto.

H. TYPE OF CONTRACT

A sample of the Professional Services Agreement is included as Appendix A. Those who wish to submit a proposal to the City are required to review this sample agreement carefully. **The City will not entertain changes to its Professional Services Agreement.**

The City reserves the right to award the total proposal, to reject any or all proposals in whole or in part, and to waive any informality or technical defects if, in the City's sole judgment, the best interests of the City will be so served.

This RFP and the selected offeror's response thereto, shall constitute the basis of the scope of services in the contract by reference.

I. NONDISCRIMINATION

All offerors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Attachment C shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

J. WAGE REQUIREMENTS

The Attachments provided herein outline the requirements for payment of prevailing wages or of a "living wage" to employees providing service to the City under this

contract. The successful offeror must comply with all applicable requirements and provide documentary proof of compliance when requested.

K. CONFLICT OF INTEREST DISCLOSURE

The City of Ann Arbor Purchasing Policy requires that the consultant complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected offeror unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Conflict of Interest Disclosure Form is attached.

L. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the offeror prior to the execution of a Professional Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a proposal, offeror agrees to bear all costs incurred or related to the preparation, submission, and selection process for the proposal.

M. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

N. PROPOSAL PROTEST

All proposal protests must be in writing and filed with the Purchasing Manager within five (5) business days of the award action. The offeror must clearly state the reasons for the protest. If an offeror contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the offeror to the Purchasing Manager. The Purchasing Manager will provide the offeror with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee, whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by the offeror to initiate contact with anyone other than the Designated City Contacts provided herein

that the offeror believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

O. SCHEDULE

The proposals submitted should define an appropriate schedule in accordance with the requirements of the Proposed Work Plan in Section III.

The following is the schedule for this RFP process.

Activity/Event	Anticipated Date
Pre Bid Meeting (Mandatory)	February 10, 2022 at 11:00 a.m.
Written Question Deadline	February 15, 2022, 5:00 p.m.
Addenda Published (if needed)	February 17, 2022
Proposal Due Date	March 3, 2022, 2:00 p.m.(LocalTime)
Tentative Interviews (if needed)	Week of March 14, 2022
Selection/Negotiations	March 2022
Expected City Council Authorizations	April 2022
Notice to Proceed	May 2022

The above schedule is for information purposes only and is subject to change at the City's discretion.

P. IRS FORM W-9

The selected offeror will be required to provide the City of Ann Arbor an IRS form W-9.

Q. RESERVATION OF RIGHTS

1. The City reserves the right in its sole and absolute discretion to accept or reject any or all proposals, or alternative proposals, in whole or in part, with or without cause.
2. The City reserves the right to waive, or not waive, informalities or irregularities in of any proposal if determined by the City to be in its best interest.
3. The City reserves the right to request additional information from any or all offerors.
4. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested within RFP.
5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.
6. The City reserves the right to select one or more consultants to perform services.
7. The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a

proposal indicates acceptance by the firm of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted.

8. The City reserves the right to disqualify proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within RFP.

R. ENVIRONMENTAL COMMITMENT

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.

SECTION II - SCOPE OF SERVICES

1. Background

The City of Ann Arbor Wastewater Treatment Plant (WWTP) currently uses PLCs to operate and control twelve sand filters used for tertiary treatment of wastewater. The existing PLCs are Allen-Bradley PLC 5/40E. The processors are connected to the Factory TalkView SE v.12 Process Instrumentation & Control System (PICS) for process control. There are four PLC panels in the Tertiary Filter Building. One PLC is located in Control Panel CP 70 in the Tertiary Filter Building Control Room and three PLCs referred to as Filter Processor Panels FPP-A, FPP-B, and FPP-C are located in the filter floor hallway.

The existing PLC-5/40E PLCs and touch screens are becoming obsolete and expensive to maintain. This project will remove the four existing PLC-5/40E PLCs and associated IO modules, IO racks, terminal blocks, cabling system connected to the existing IO module and provide four new ControlLogix controllers which can support PlantPAX 3.0, with associated IO modules, terminal blocks and cabling system. This work also includes programming the new controllers utilizing current ControlLogix controller programming standard and prefer utilizing RSLogix 5000 V20.1 because that is our latest firmware are used, connecting with the existing Factory TalkView SE v.12 HMI, and modifying or recreating tertiary process screens, alarms and data logging to the existing Historian server. Add all new ControlLogix controller to our existing Asset Centre. All four new processors will tie to the existing network switch located inside the CP 70 panel in the Tertiary Filter Building Control Room.

2. Objective

General scope of work is to furnish and install all components necessary to make a complete and-operable system. All work shall be coordinated with the Owner to minimize disruptions in operation. Programming shall be completed offline prior to removing any existing components. The final transition to the upgraded system shall be completed in one 8-hour workday. Existing infrastructure shall be maintained throughout the project and shall be capable of being reinstalled with full functionality in the event the upgrade cannot be completed in one work day.

Photos of the four existing PLCs are provided for reference in Attachment A. Panel drawings for CP 70, located in the Tertiary Filter Building Control Room, are also provided for reference in Attachment A. Note, that only one of the two PLCs shown on CP 70 panel drawings provided in Attachment A remains. One PLC was removed and not replaced approximately 10 years ago.

3. Requirements

This Project shall include the following requirements:

- Remove and replace the existing PLCs and remove the touch screens and provide covers over the touch screen cutouts. Remote access into the City of Ann Arbor's PICS system will not be allowed. All work is to be performed onsite when connected to the City system for upgrading and programming. During PLC installation, programming and startup, six of the 12 tertiary filters must remain in service at all times.
- The Consultant shall be Rockwell Certified or engage the services of a Rockwell Certified Integrator to perform the work.
- The Consultant shall submit a proposed schedule for PLC replacement, programming and startup services that includes the number of meetings with City of Ann Arbor staff. Also, as part of their proposal, the Consultant shall submit a list of expectations for City of Ann Arbor staff in terms of work tasks and estimated level of effort during PLC replacement work.
- The Consultant shall provide WWTP staff a minimum of seven days' written notice prior to removing a PLC and receive authorization by the City of Ann Arbor before work can proceed.
- Prospective Consultants are to provide a Work Plan that includes the project approach and project requirements per Section III of this RFP.

Consultant's Proposal

In keeping with the objective, the description, the requirements, and the Consultant's tasks as previously indicated in this RFP, the Consultants submitting proposals shall outline in detail the manner in which the Consultant shall work with the City to fulfill the City's needs.

The outline at a minimum shall address:

- A. Staffing and personnel.
- B. Communication and coordination.
- C. Compatibility with the City's standards, goals, and objectives.
- D. Working relationship between the Consultant and City staff.
- E. Information which will assist the City to determine the Consultant's capability of performing the work.

SECTION III - MINIMUM INFORMATION REQUIRED

PROPOSAL FORMAT

Offerors should organize Proposals into the following Sections:

- A. Professional Qualifications
- B. Past Involvement with Similar Projects
- C. Proposed Work Plan
- D. Fee Proposal (include in a separate sealed envelope clearly marked "Fee Proposal")
- E. Authorized Negotiator
- F. Attachments

The following describes the elements that should be included in each of the proposal sections and the weighted point system that will be used for evaluation of the proposals.

A. Professional Qualifications – 20 points

1. State the full name and address of your organization and, if applicable, the branch office or other subsidiary element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, or corporation. If as a corporation, include whether it is licensed to operate in the State of Michigan.
2. Include the name of executive and professional personnel by skill and qualification that will be employed in the work. Show where these personnel will be physically located during the time they are engaged in the work. Indicate which of these individuals you consider key to the successful completion of the project. Identify only individuals who will do the work on this project by name and title. Resumes and qualifications are required for all proposed project personnel, including all subcontractors. Qualifications and capabilities of any subcontractors must also be included.
3. State history of the firm, in terms of length of existence, types of services provided, etc. Identify the technical details that make the firm uniquely qualified for this work.

B. Past involvement with Similar Projects – 30 points

The written proposal must include a list of specific experience in the project area and indicate proven ability in implementing similar projects for the firm **and** the individuals to be involved in the project. A complete list of client references must be provided for similar projects recently completed. The list shall include the firm/agency name, address, telephone number, project title, and contact person.

C. Proposed Work Plan – 30 points

Provide a detailed and comprehensive description of how the offeror intends to provide the services requested in this RFP. This description shall include, but not be limited to: how the project(s) will be managed and scheduled, how and when data and materials will be delivered to the City, communication and coordination, the working relationship between the offeror and City staff, and the company's general philosophy in regards to providing the requested services.

Offerors shall be evaluated on the clarity, thoroughness, and content of their responses to the above items.

D. Fee Proposal - 20 points

Fee schedules shall be submitted in a separate, sealed, envelope as part of the proposal. Fee quotations are to include the names, title, hourly rates, overhead factors, and any other relevant details. The proposal should highlight key staff and positions that would likely be involved with projects. Offerors shall be capable of justifying the details of the fee proposal relative to personnel costs, overhead, how the overhead rate is derived, material and time.

E. Authorized Negotiator

Include the name, phone number, and e-mail address of persons(s) in your organization authorized to negotiate the agreement with the City

F. Attachments

Legal Status of Offeror, Conflict of Interest Form, Living Wage Compliance Form, and the Non-Discrimination Form should be returned with the proposal.

These elements should be included as attachments to the proposal submission.

PROPOSAL EVALUATION

1. The selection committee will evaluate each proposal by the above-described criteria and point system (A through C) to select a short-list of firms for further consideration. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for an interview. The committee may contact references to verify material submitted by the offerors.
2. The committee then will schedule interviews with the selected firms if necessary. The selected firms will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan and fee proposal.

3. The interview must include the project team members expected to complete a majority of work on the project, but no more than six members total. The interview shall consist of a presentation of up to thirty minutes (or the length provided by the committee) by the offeror, including the person who will be the project manager on this contract, followed by approximately thirty minutes of questions and answers. Audiovisual aids may be used during the oral interviews. The committee may record the oral interviews.
4. The firms interviewed will then be re-evaluated by the above criteria (A through D), and adjustments to scoring will be made as appropriate. After evaluation of the proposals, further negotiation with the selected firm may be pursued leading to the award of a contract by City Council, if suitable proposals are received.

The City reserves the right to waive the interview process and evaluate the offerors based on their proposals and fee schedules alone and open fee schedules before or prior to interviews.

The City will determine whether the final scope of the project to be negotiated will be entirely as described in this RFP, a portion of the scope, or a revised scope.

Work to be done under this contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents.

Any proposal that does not conform fully to these instructions may be rejected.

PREPARATION OF PROPOSALS

Proposals should have no plastic bindings but will not be rejected as non-responsive for being bound. Staples or binder clips are acceptable. Proposals should be printed double sided on recycled paper. Proposals should not be more than 20 sheets (40 sides), not including required attachments and resumes.

Each person signing the proposal certifies that they are a person in the offeror's firm/organization responsible for the decisions regarding the fees being offered in the Proposal and has not and will not participate in any action contrary to the terms of this provision.

ADDENDA

If it becomes necessary to revise any part of the RFP, notice of the addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or the City of Ann Arbor web site www.A2gov.org for all parties to download.

Each offeror must acknowledge in its proposal all addenda it has received. The failure of an offeror to receive or acknowledge receipt of any addenda shall not relieve the offeror of the responsibility for complying with the terms thereof. The City will not be bound by oral responses to inquiries or written responses other than official written addenda.

SECTION IV - ATTACHMENTS

Attachment A – PLC Photos, Process Instrumentation and Control System Screens, and Panel Drawings.

Attachment B - Legal Status of Offeror

Attachment C – Non-Discrimination Ordinance Declaration of Compliance Form

Attachment D – Living Wage Declaration of Compliance Form

Attachment E – Vendor Conflict of Interest Disclosure Form

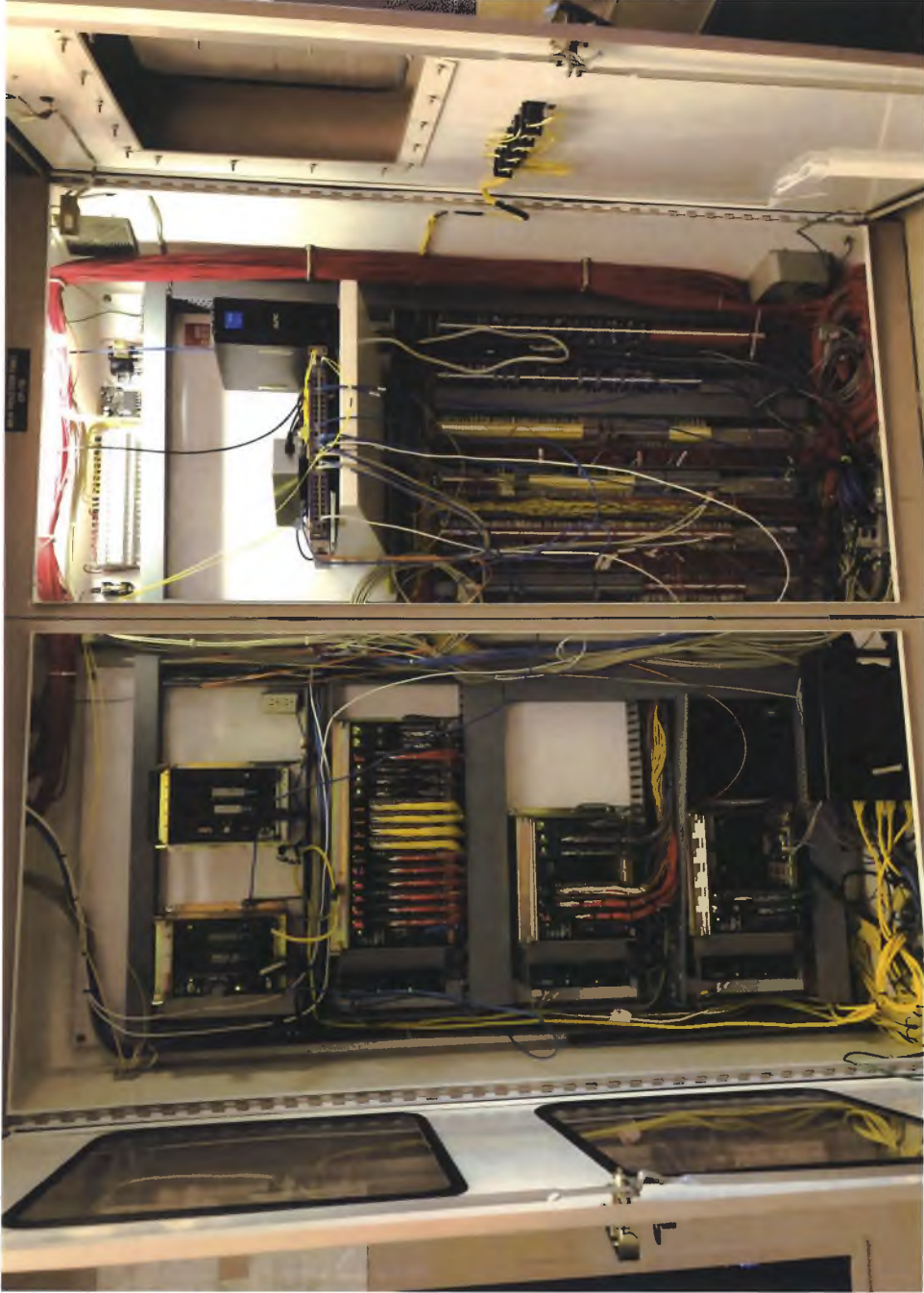
Attachment F – Non-Discrimination Ordinance Poster

Attachment G – Living Wage Ordinance Poster

ATTACHMENT A



PLC – CP 70



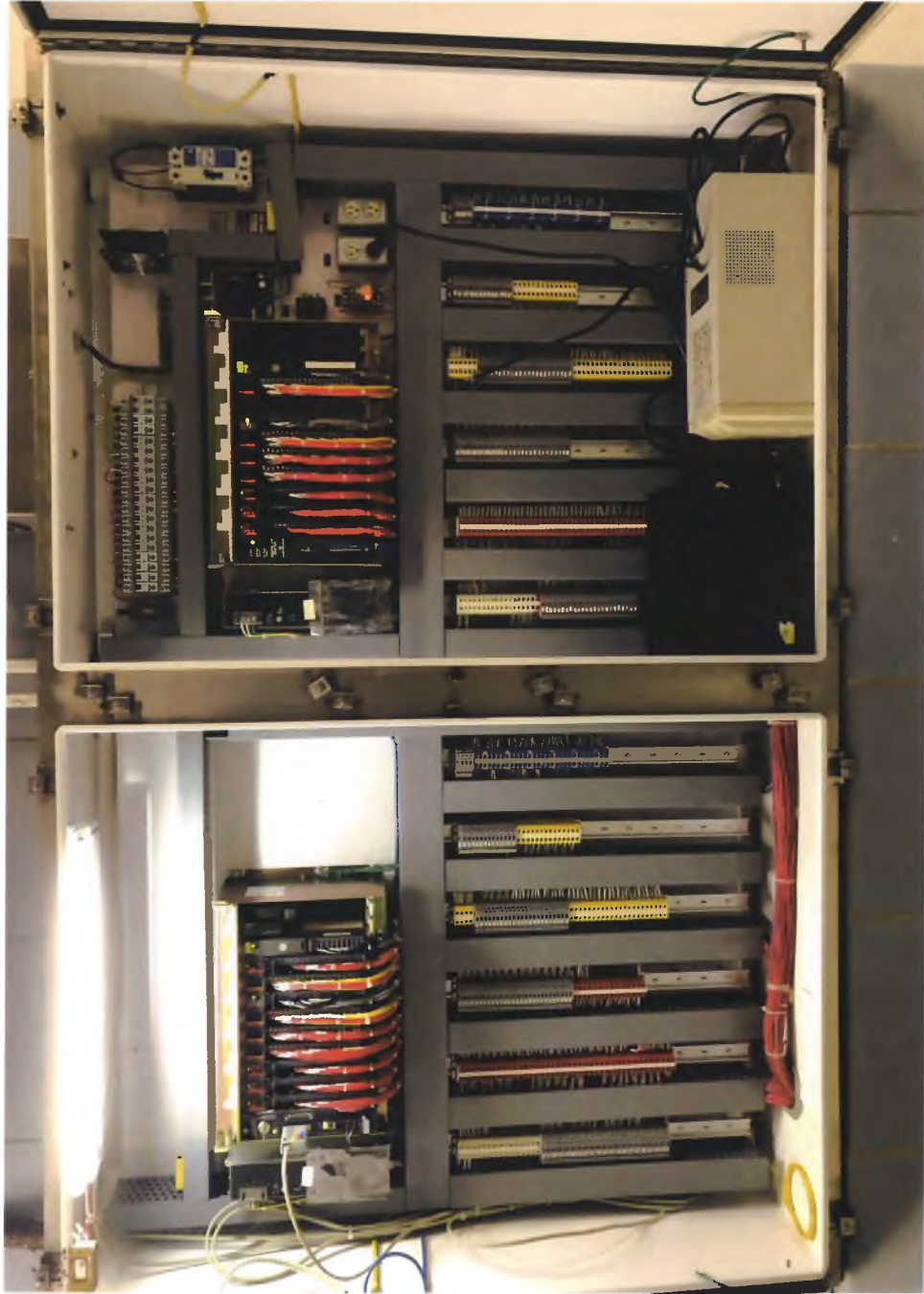
PLC – CP 70



FPP - A



FPP-A



FPP-B




FPP-C

Communication Status

PLANT GATE

3:15:56 PM

CP-70



PLC1

Running ●

Panel Power Status (Fed from MCC-P)

CP70 Feed


CP70 UPS Status

Rack 1 Fault

Rack 2 Fault

Rack 3 Fault

Rack 4 Fault



PLC2

Running ●

Panel Power Status (Fed from MCC-P)

CP70 Feed

CP70 UPS Status


Rack 1 Fault

Rack 2 Fault

Rack 3 Fault

Rack 4 Fault

FPPA



Running ●

PLC Battery Status @@@@

Panel Power Status (Fed from MCC-Q) @@@@

FPPA UPS Status @@@@

OIC 3 UPS Status @@@@

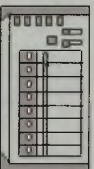
Rack 0 Fault

Rack 1 Fault

Rack 2 Fault

Rack 3 Fault

FPPB



Running ●

PLC Battery Status @@@@

Panel Power Status (Fed from MCC-N) @@@@

FPPB UPS Status @@@@

OIC 4 UPS Status @@@@


Rack 0 Fault

Rack 1 Fault

Rack 2 Fault

Rack 3 Fault

FPPC



Running ●

PLC Battery Status @@@@

Panel Power Status (Fed from MCC-M) @@@@

FPPC UPS Status @@@@

OIC 5 UPS Status @@@@

Rack 0 Fault

Rack 1 Fault

Rack 2 Fault

Rack 3 Fault

PLC 1 Primary ●

PLC 1 Secondary ●

PLC 2 Primary ●

PLC 2 Secondary ●

AREA MENU

ALARM

MENU

< >

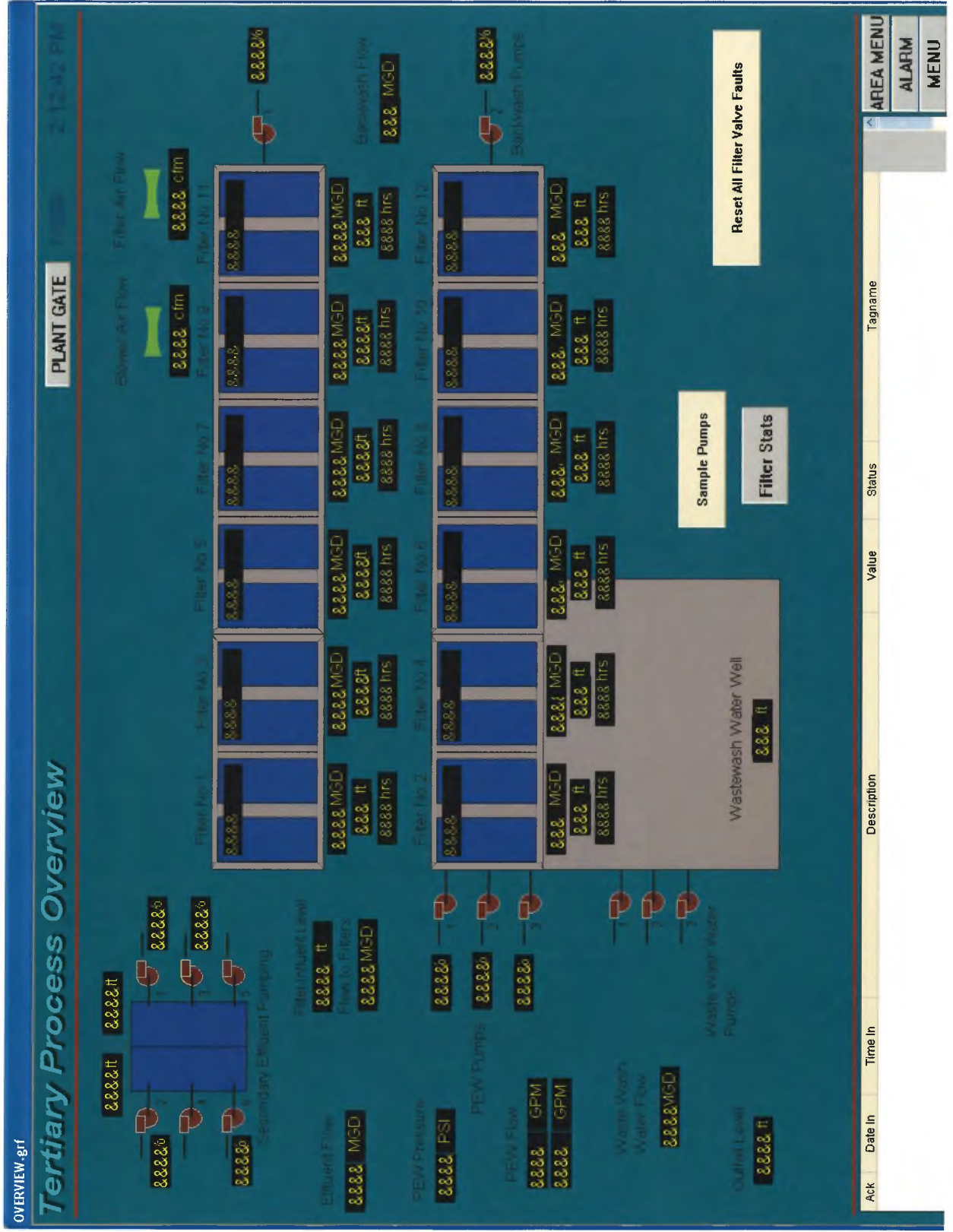
Ack	Time In	Time Last	Node	Tagname	Status	Value	Description
Total Alarms: 0							

Sort: Time In, Descending

Filter: Off

Run

Tertiary Filters



Filter No. 1 Control

PLANT GATE

2:03 PM

1 2 3 4 5 6 7 8 9 10 11 12

Filter Mode

- In Service
- Auto Backwash Ready
- Out of Service

Initiate Auto Backwash

Stop Backwash

Valve Control **8888**

Auto BW Ready Setpoints

Backwash Status

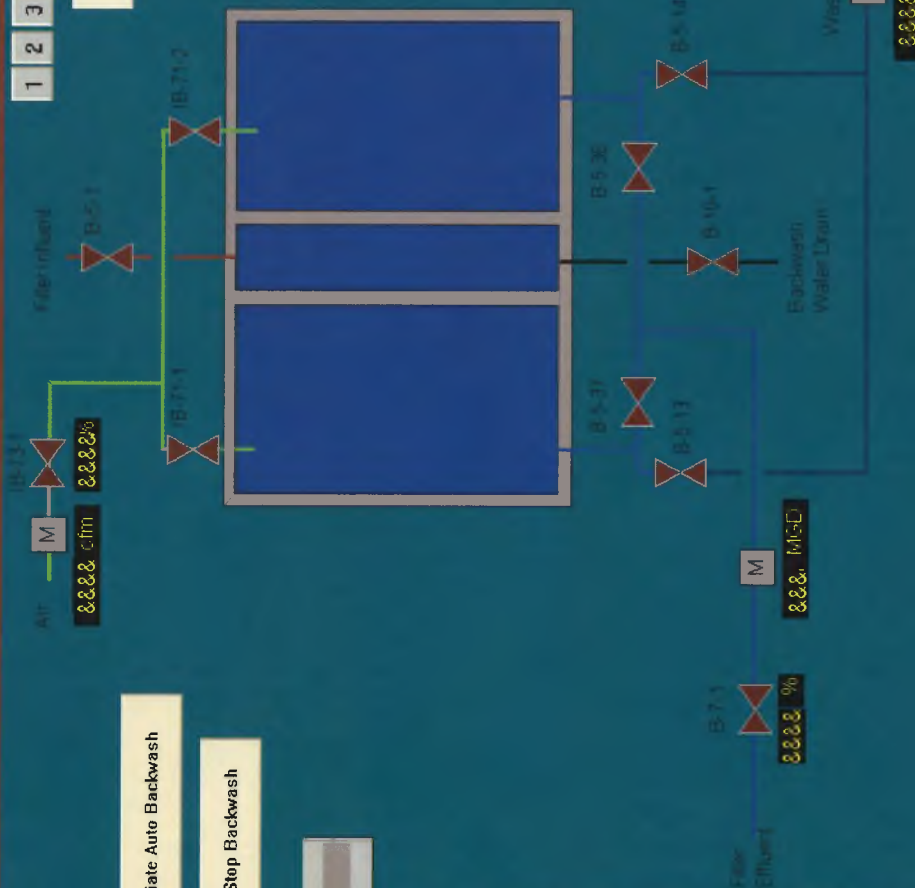
- Water Level Drop
- Air/Water Wash Left Cell
- Water Wash Left Cell
- Air/Water Wash Right Cell
- Water Wash Right Cell
- Backwash Sequence Complete

Backwash Control Settings

Headloss **8888** ft
 Runtime **8888** hrs
 Backwash Turbidity **8888** %Trans
 Multiwash Time **8888** min
 Water Wash **8888** min

Filter 1 Trend

Valve Fault Reset



Ack	Date In	Time In	Description	Value	Status	Tagname

AREA MENU
 ALARM MENU
 MENU
 < v >

North Filters Control

PLANT GATE

2:13:34 PM

Effluent Flow
Headloss
Runtime

Filter No 1	Filter No 3	Filter No 5	Filter No 7	Filter No 9	Filter No 11
Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs	Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs	Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs	Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs	Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs	Flow: &&&& MGD Headloss: &&&& feet Runtime: &&&& hrs
In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>	In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>	In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>	In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>	In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>	In Service: <input type="radio"/> Auto Backwash Ready: <input type="radio"/> Out of Service: <input type="radio"/>
Control: &&&& MGD	Control: &&&& MGD	Control: &&&& MGD	Control: &&&& MGD	Control: &&&& MGD	Control: &&&& MGD

Effluent Valve
Control

Effluent Valve Level: &&&& ft
Flow to Filters: &&&& MGD

All Effluent Valves in Setpoint Mode

All Effluent Valves in Level Mode

Reset All Filter Valve Faults

South Filter Control Screen

Manual Backwash Procedure

Ack	Date In	Time In	Description	Value	Status	Tagname

AREA MENU
ALARM
MENU
< v >

South Filters Control

PLANT GATE

2:13:22 PM

Filter No 2
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Filter No 4
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Filter No 6
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Filter No 8
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Filter No 10
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Filter No 12
&&&&

&&&& MGD
&&&& feet
&&&& hrs

In Service
 Auto Backwash Ready
 Out of Service

&&&& &&&& MGD

Effluent Flow
Headloss
Runtime

Effluent Valve
Control

Filter Inflow Valve
&&&& ft
Flow to Filter
&&&& MGD

All Effluent Valves in Setpoint Mode

All Effluent Valves in Level Mode

Reset All Filter Valve Faults

North Filter Control Screen

Manual Backwash Procedure

Ack	Date In	Time In	Description	Value	Status	Tagname

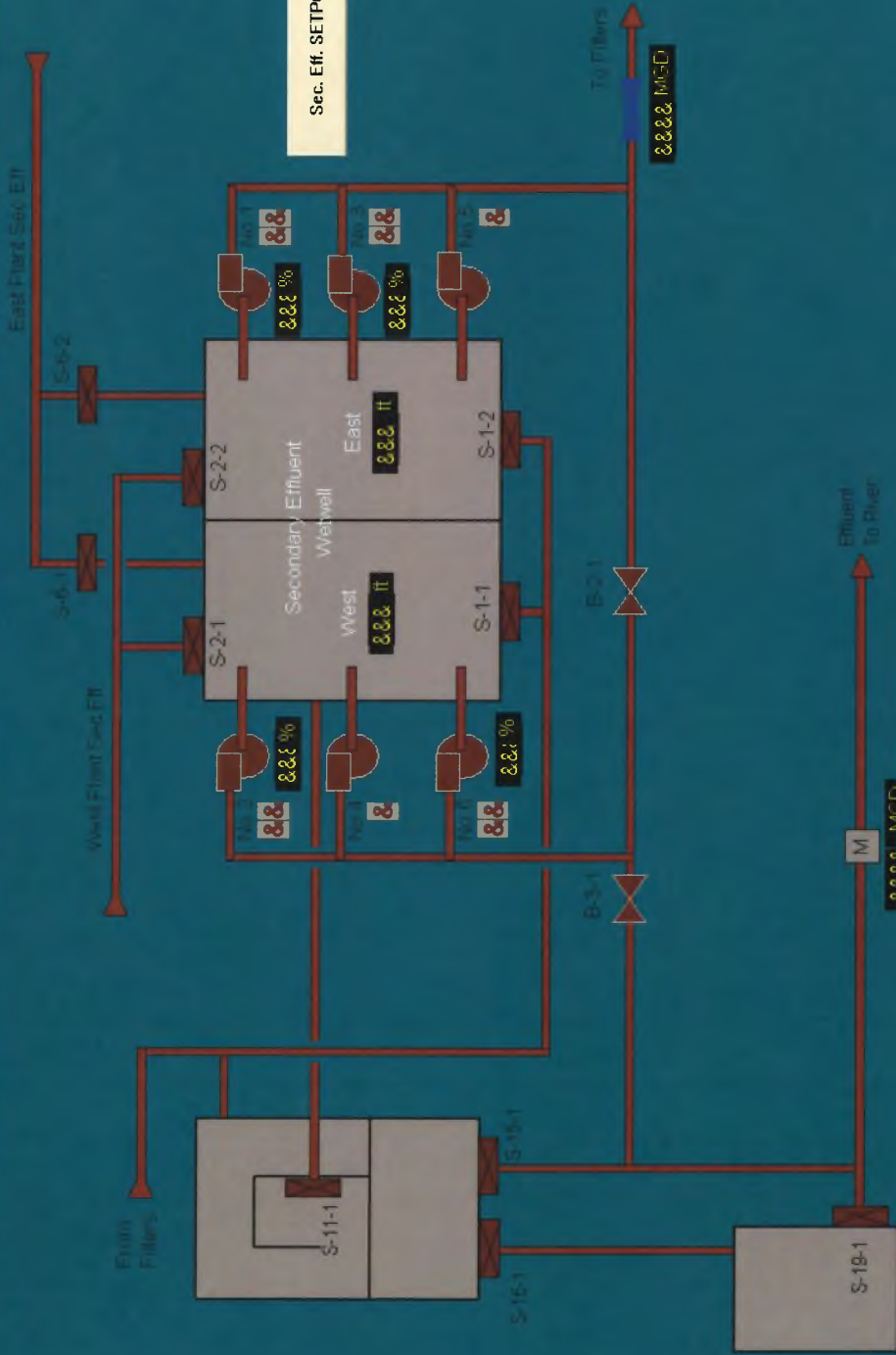
AREA MENU
ALARM
MENU
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SECEFF1.grf

Secondary Effluent Pumping

PLANT GATE

2/14/07 PM



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Tagname			
Value			
Status			
Description			
Time In			
Ack			

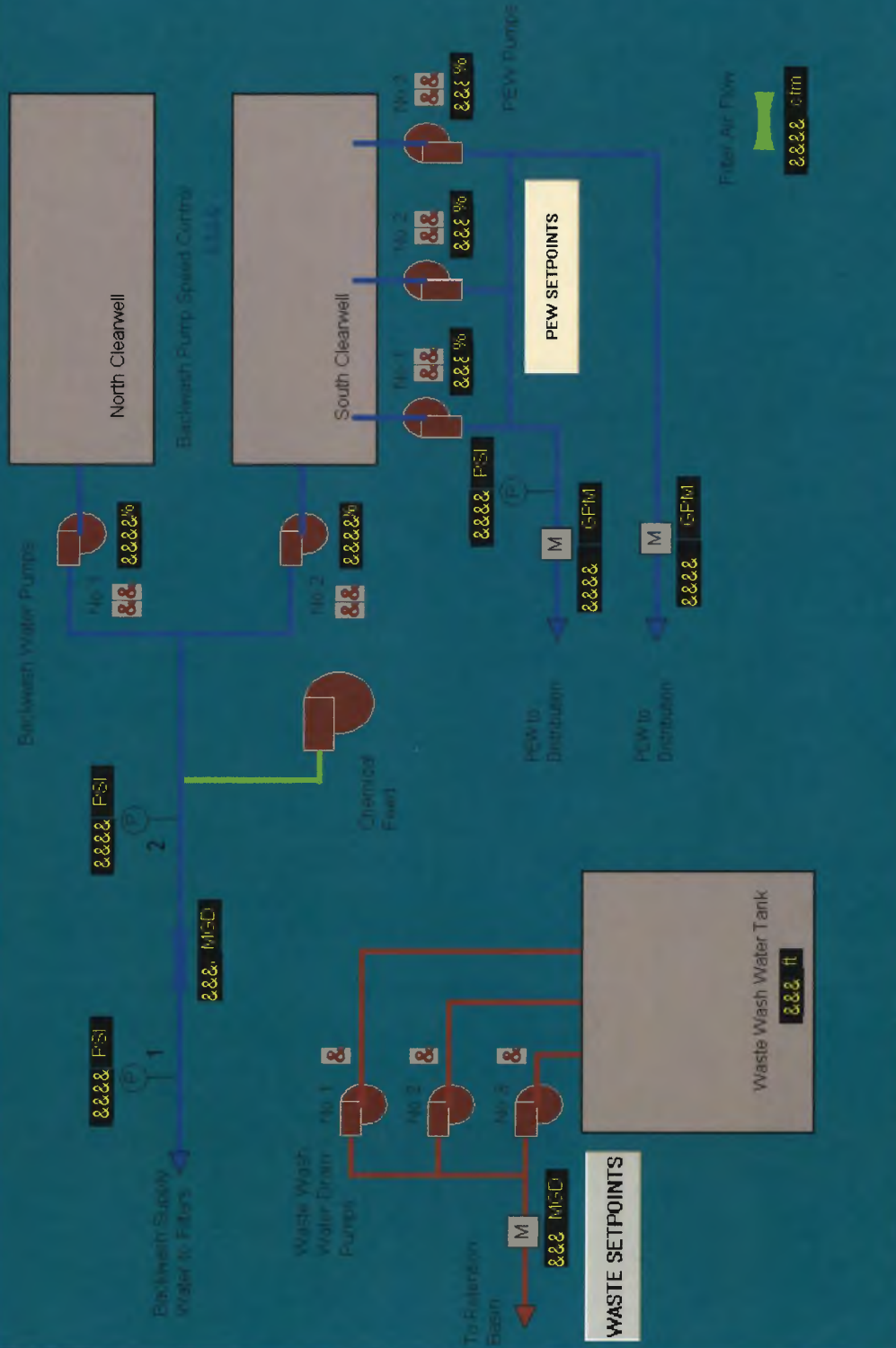
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PEW and Backwash Pumping

PLANT GATE

11/05

2:14:29 PM



Area Menu	Alarm	Menu	<	v	>	
Ack	Date In	Time In	Description	Value	Status	Tagname

CITY OF ANN ARBOR,, MICHIGAN WWTP
TERTIARY FILTER RENOVATIONS

CONTRACT No. 0106.059-S-1

ENGINEER : McNAMEE, PORTER & SEELEY INC. ANN ARBOR, MI.

CONTRACTOR : WEBB ELECTRIC CO. FARMINGTON HILLS, MI.

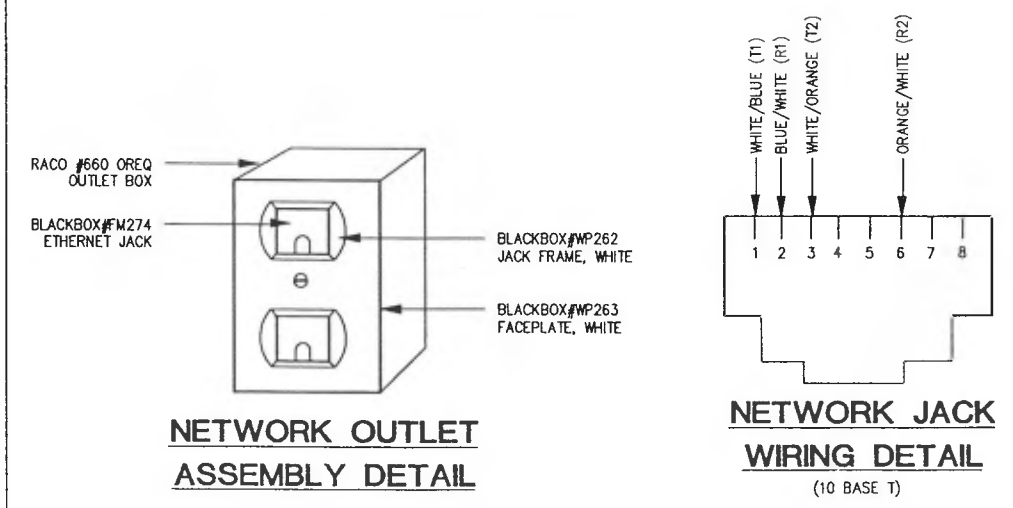
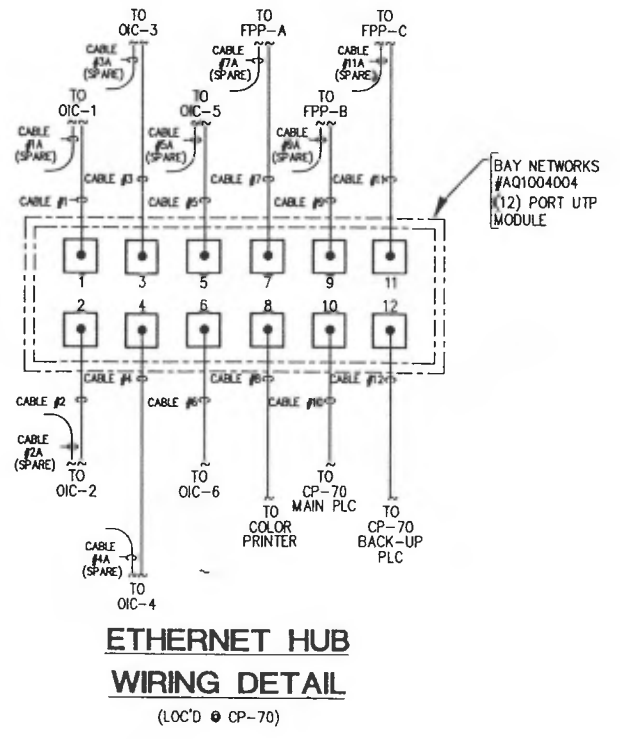
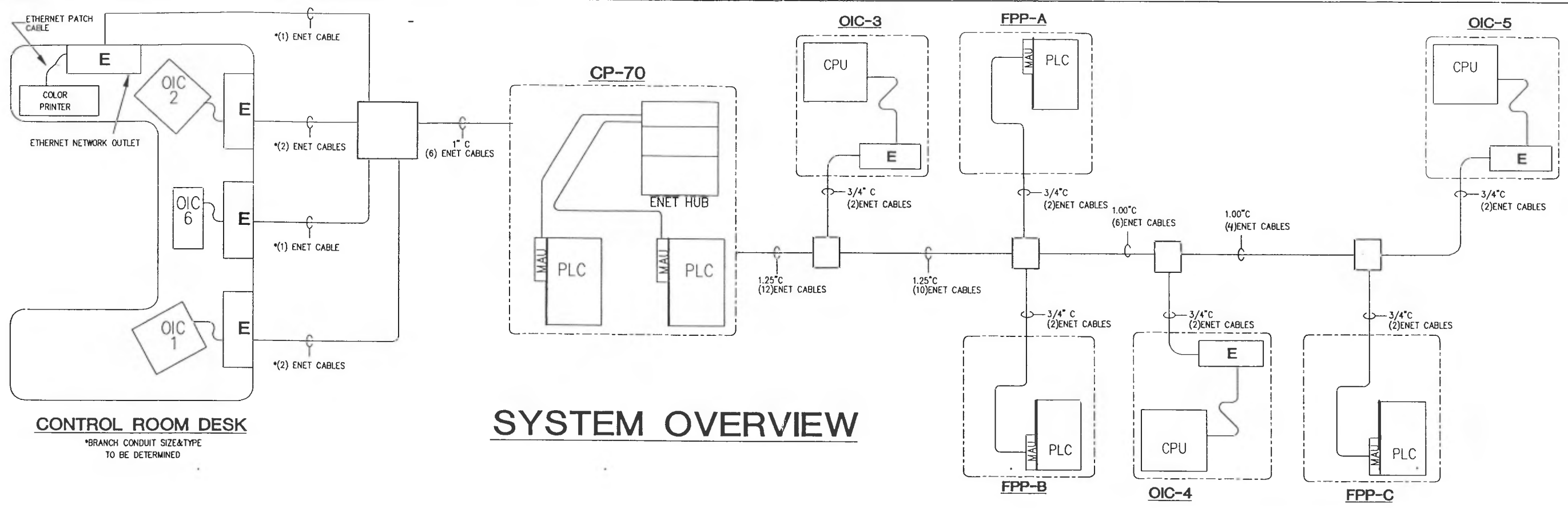
MECHANICAL : J.F. CAVANAUGH CO.,INC. FARMINGTON HILLS, MI.

INSTRUMENTATION : AGGRESSIVE SYSTEMS, INC.
& CONTROLS FARMINGTON HILLS, MICHIGAN

DRAWING INDEX	
SHEET NO.	DESCRIPTION
7249-00	TITLE PAGE WITH DWG. INDEX
7249-01	ETHERNET SYSTEM OVERVIEW
7249-02	PLC SYSTEM OVERVIEW
	CONTROL PANEL CP-70
7249A-01	PANEL LAYOUTS
4249A-02	SUBPLATE LAYOUT
7249A-03	BILL OF MATERIAL & TERMINAL ROTATION
7249A-04	PLC PROCESSOR DETAIL & NOTES
7249A-05	120VAC POWER WIRING
7249A-06	PLC-4 WIRING RACK-1, SLOT-0,1,2
7249A-07	PLC-4 WIRING RACK-1, SLOT-3,4,5
7249A-08	PLC-4 WIRING RACK-1, SLOT-6,7 AND RACK-2, SLOT-0
7249A-09	PLC-4 WIRING RACK-2, SLOT-1,2,3
7249A-10	PLC-4 WIRING RACK-2, SLOT-4,5,6,7
7249A-11	(OWNER'S PICS) PLC-4 WIRING RACK-3, SLOT-0,1,2
7249A-12	(OWNER'S PICS) PLC-4 WIRING RACK-3, SLOT-3,4,5
7249A-13	(OWNER'S PICS) PLC-4 WIRING RACK-3, SLOT-6,7
7249A-14	PLC-4 WIRING RACK-4, SLOT-0,1,2
7249A-15	PLC-4 WIRING RACK-4, SLOT-3,4,5,6,7
7249A-16	ANALOG LOOP WIRING
7249A-17	ANALOG LOOP WIRING
	CONTROL PANEL FPP-A
7249A-01	PANEL LAYOUTS
7249A-02	SUBPLATE LAYOUTS
7249A-03	BILL OF MATERIAL & TERMINAL ROTATION
7249A-04	120VAC POWER WIRING
7249A-05	PLC-1 WIRING RACK-0, SLOT-0,1,2
7249A-06	PLC-1 WIRING RACK-0, SLOT-3,4,5
7249A-07	PLC-1 WIRING RACK-0, SLOT-6,7 AND RACK-1, SLOT-0

DRAWING INDEX	
SHEET NO.	DESCRIPTION
7249B-08	PLC-1 WIRING RACK-1, SLOT-0,1,2,3
7249B-09	PLC-1 WIRING RACK-1, SLOT-4,5,6
7249B-10	PLC-1 WIRING RACK-1, SLOT-7 AND RACK-2, SLOT-0,1
7249B-11	PLC-1 WIRING RACK-2, SLOT-2,3,4
7249B-12	PLC-1 WIRING RACK-2, SLOT-5,6,7
7249B-13	ANALOG LOOP WIRING
	CONTROL PANEL FPP-B
7249C-01	PANEL LAYOUTS
7249C-02	SUBPLATE LAYOUTS
7249C-03	BILL OF MATERIAL & TERMINAL ROTATION
7249C-04	120VAC POWER WIRING
7249C-05	PLC-2 WIRING RACK-0, SLOT-0,1,2
7249C-06	PLC-2 WIRING RACK-0, SLOT-3,4,5
7249C-07	PLC-2 WIRING RACK-0, SLOT-6,7 AND RACK-1, SLOT-0
7249C-08	PLC-2 WIRING RACK-1, SLOT-1,2,3
7249C-09	PLC-2 WIRING RACK-1, SLOT-4,5,6
7249C-10	PLC-2 WIRING RACK-1, SLOT-7 AND RACK-2, SLOT-0,1
7249C-11	PLC-2 WIRING RACK-2, SLOT-2,3,4
7249C-12	PLC-2 WIRING RACK-2, SLOT-5,6,7
7249C-13	ANALOG LOOP WIRING
	CONTROL PANEL FPP-C
7249D-01	PANEL LAYOUTS
7249D-02	SUBPLATE LAYOUTS
7249D-03	BILL OF MATERIAL & TERMINAL ROTATION
7249D-04	120VAC POWER WIRING
7249D-05	PLC-3 WIRING RACK-0, SLOT-0,1,2
7249D-06	PLC-3 WIRING RACK-0, SLOT-3,4,5
7249D-07	PLC-3 WIRING RACK-0, SLOT-6,7 AND RACK-1, SLOT-0
7249D-08	PLC-3 WIRING RACK-1, SLOT-1,2,3

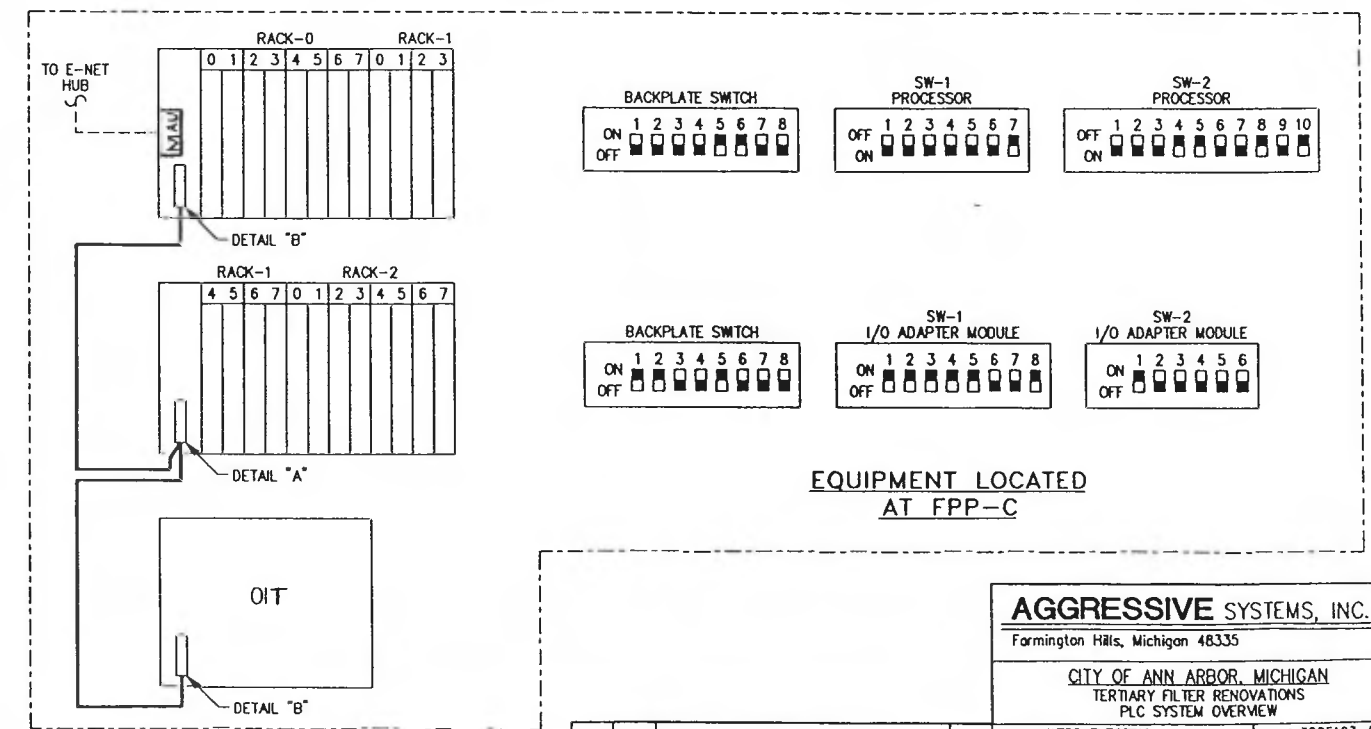
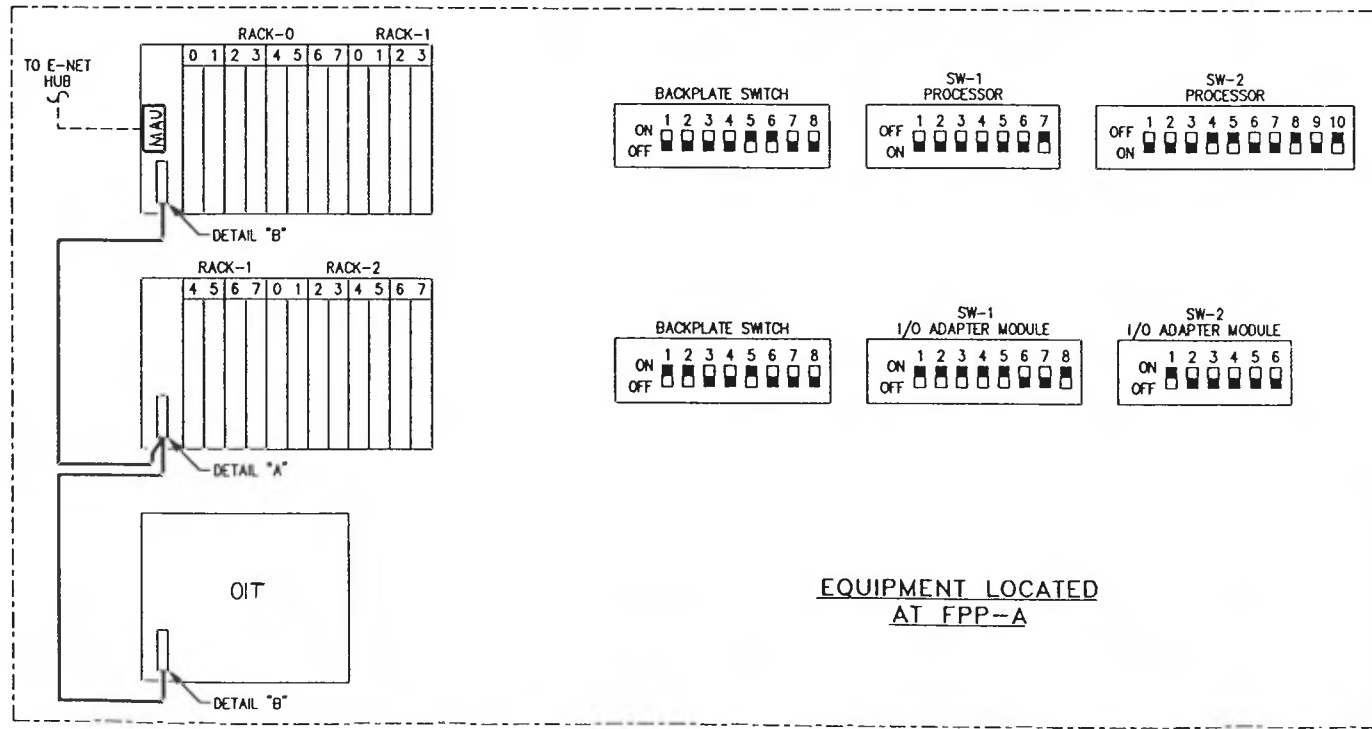
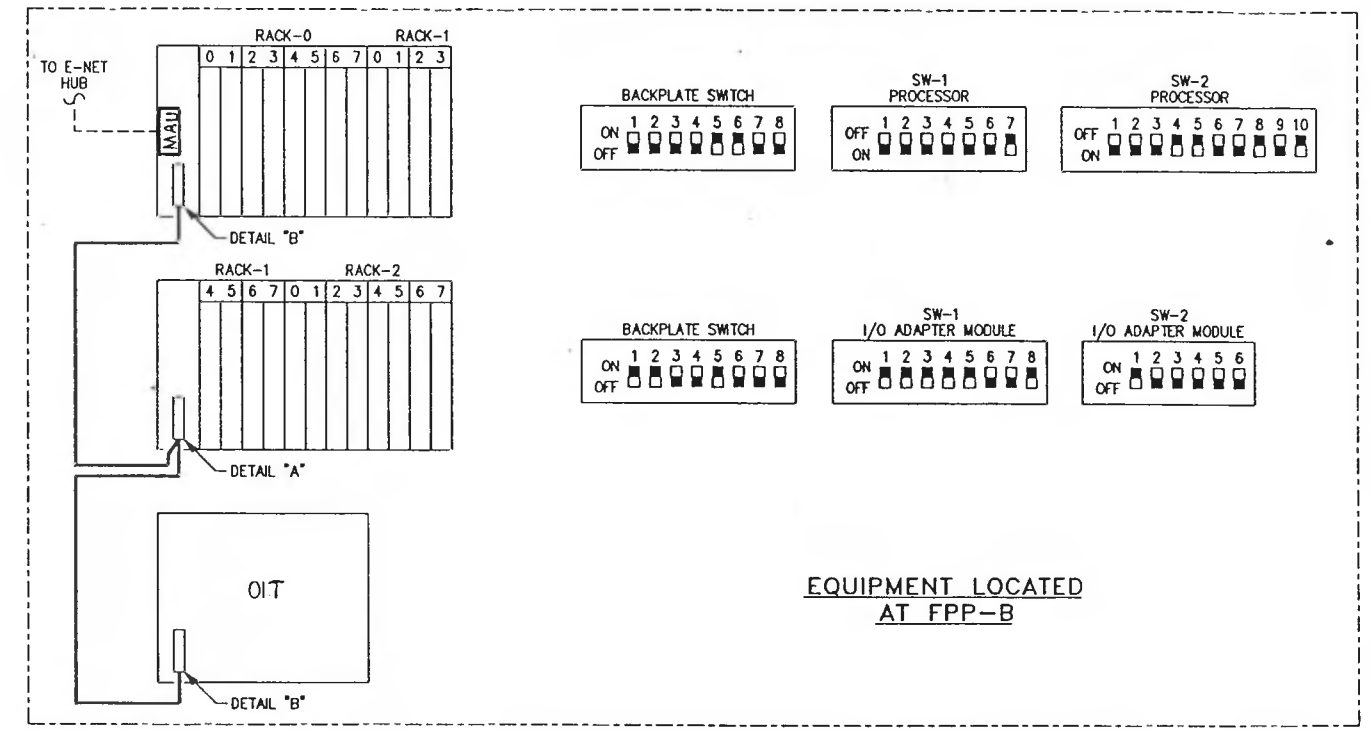
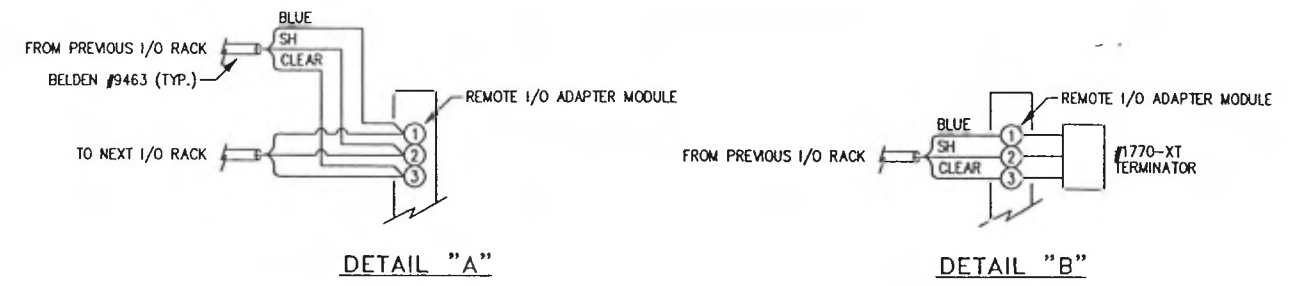
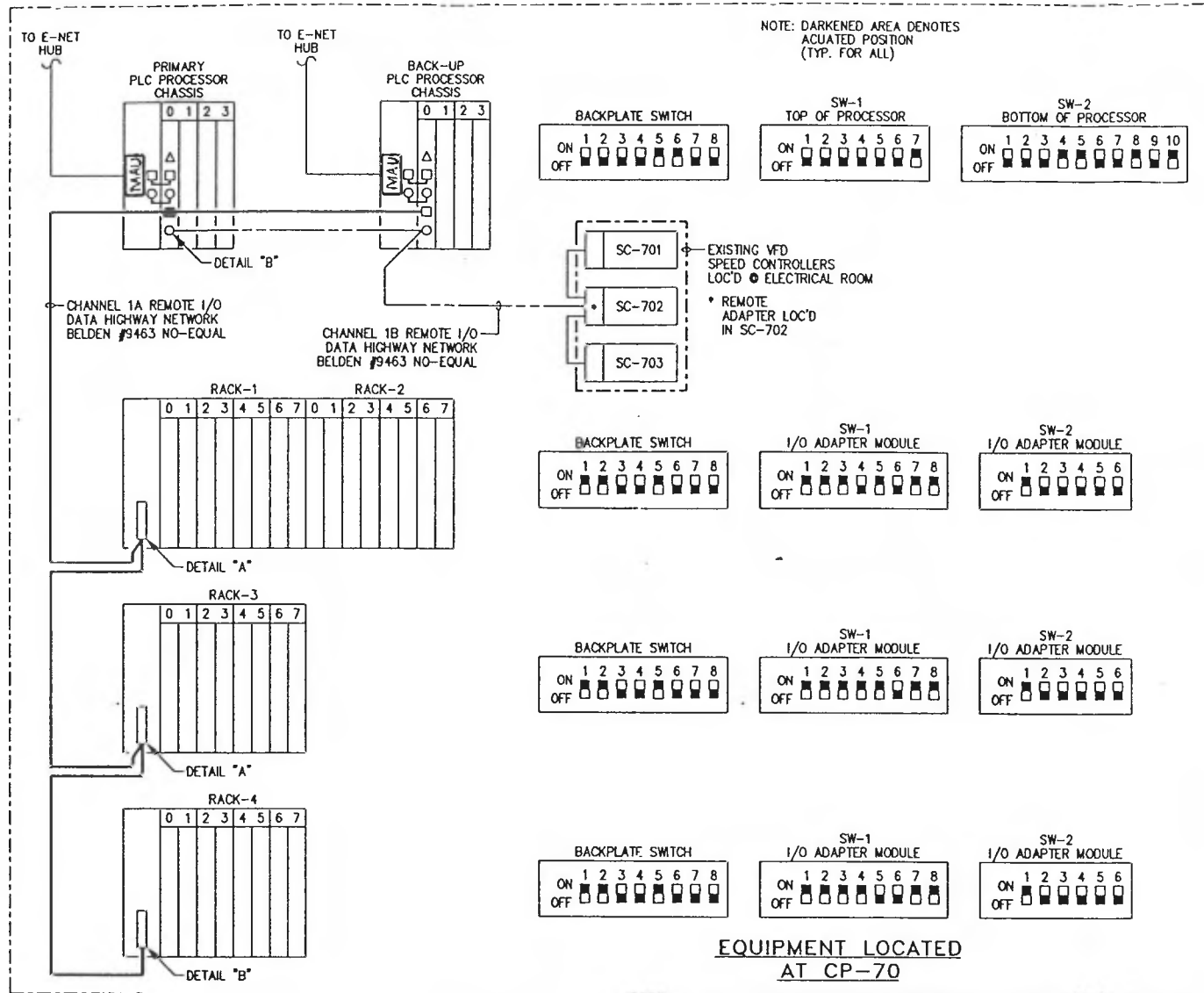
DRAWING INDEX	
SHEET NO.	DESCRIPTION
7249D-09	PLC-3 WIRING RACK-1, SLOT-4,5,6
7249D-10	PLC-3 WIRING RACK-1, SLOT-7 AND RACK-2, SLOT-0,1
7249D-11	PLC-3 WIRING RACK-2, SLOT-2,3,4
7249D-12	PLC-3 WIRING RACK-2, SLOT-5,6,7
7249D-13	ANALOG LOOP WIRING
7249D-14	ANALOG LOOP WIRING
	CONTROL PANEL OIC-3
7249E-01	PANEL LAYOUTS/BILL OF MATERIALS
7249E-02	WIRING
	CONTROL PANEL OIC-4
7249F-01	PANEL LAYOUTS/BILL OF MATERIALS
7249F-02	WIRING
	CONTROL PANEL OIC-5
7249G-01	PANEL LAYOUTS/BILL OF MATERIALS
7249G-02	WIRING



AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335

CITY OF ANN ARBOR MICHIGAN
 TERTIARY FILTER RENOVATIONS
 ETHERNET SYSTEM OVERVIEW

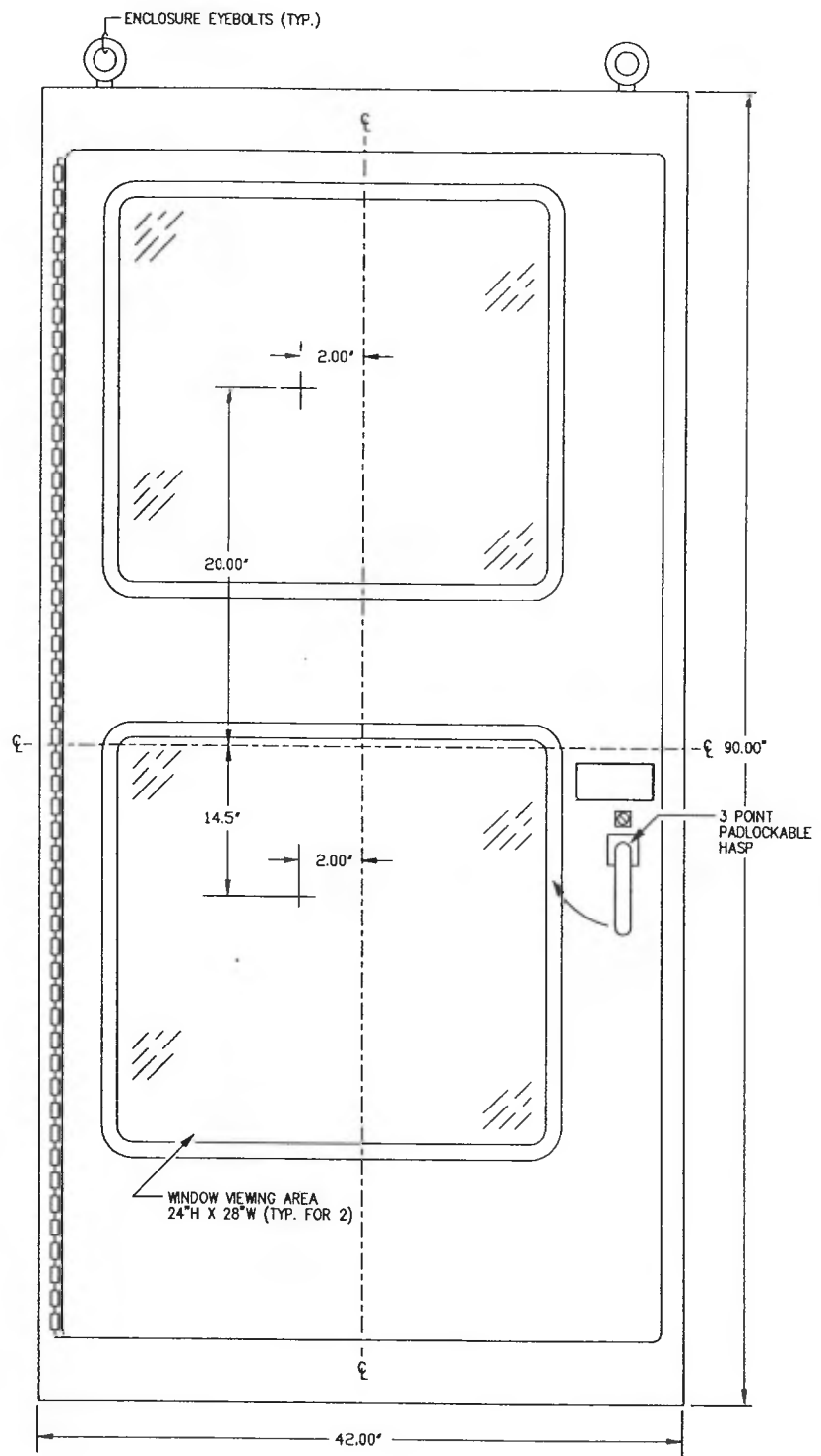
CUSTOMER: WEBB ELECTRIC		P.O. NO. 3885103-0006	
DRWN: C.J.	SCALE: NONE	SHEET NO.:	DWG NO. 7249
CHKD: BB	DATE: 6/30/98	01	
SYM	DATE	REVISIONS	BY



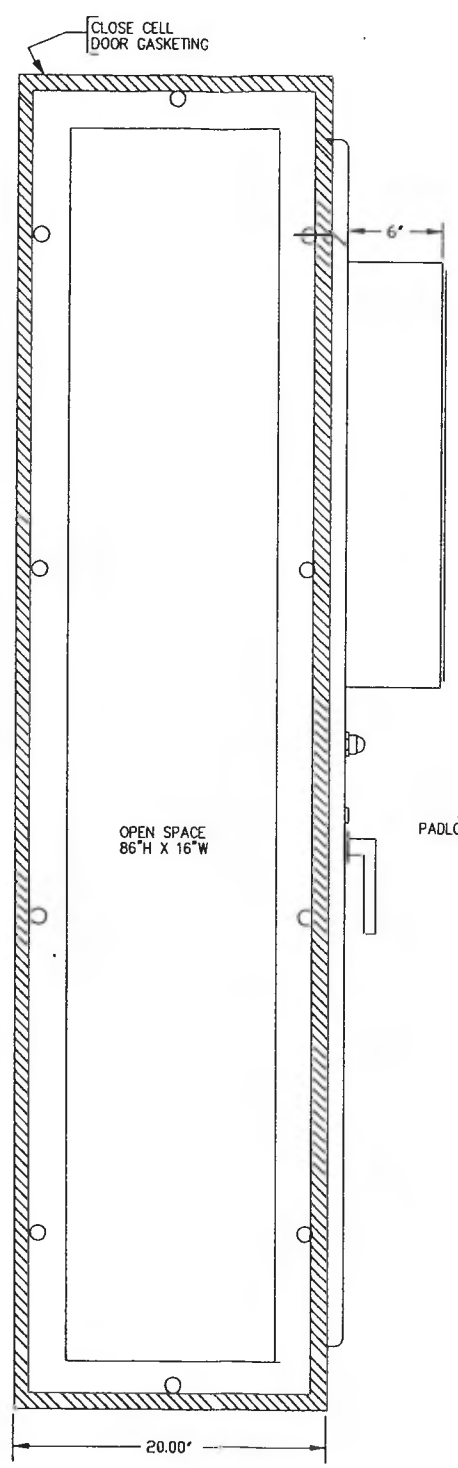
AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335

CITY OF ANN ARBOR, MICHIGAN
 TERTIARY FILTER RENOVATIONS
 PLC SYSTEM OVERVIEW

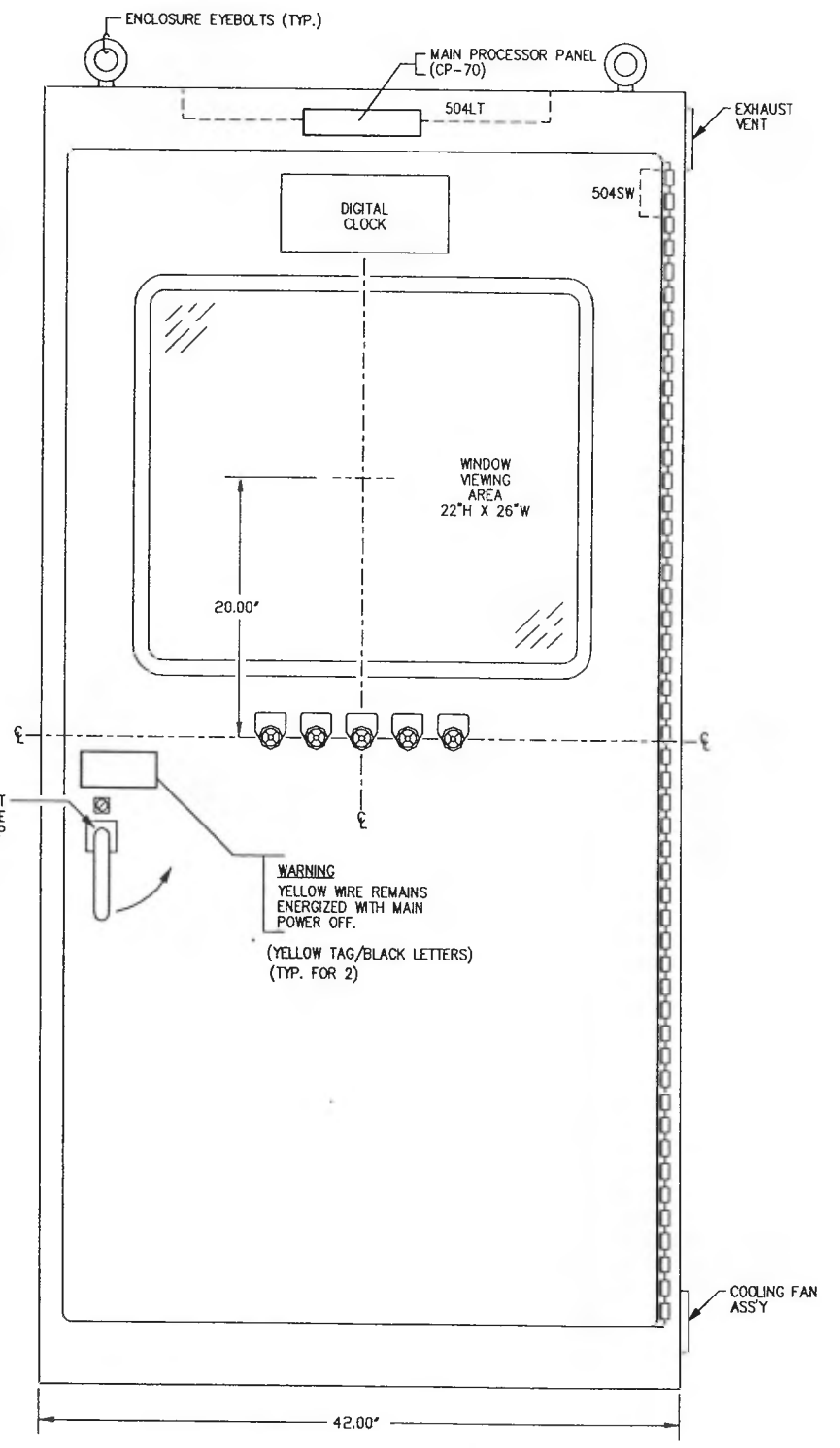
DATE	6/98	REVISED PER APPROVAL	CUSTOMER	WEBB ELECTRIC	DWG. NO.	3885103-0006	
BY	DR	REVISIONS	BY	CHECKED BR	SHEET NO.	02	
				DATE	3/16/98	DWG. NO.	7249



NEMA 12 ENCLOSURE "A" ①
 90"H X 42"W X 20"D
 PAINT: OUT: GRAHAM #8823W WARM SHADOW TEXTURED POLYURETHANE
 IN: GLOSS WHITE ENAMEL



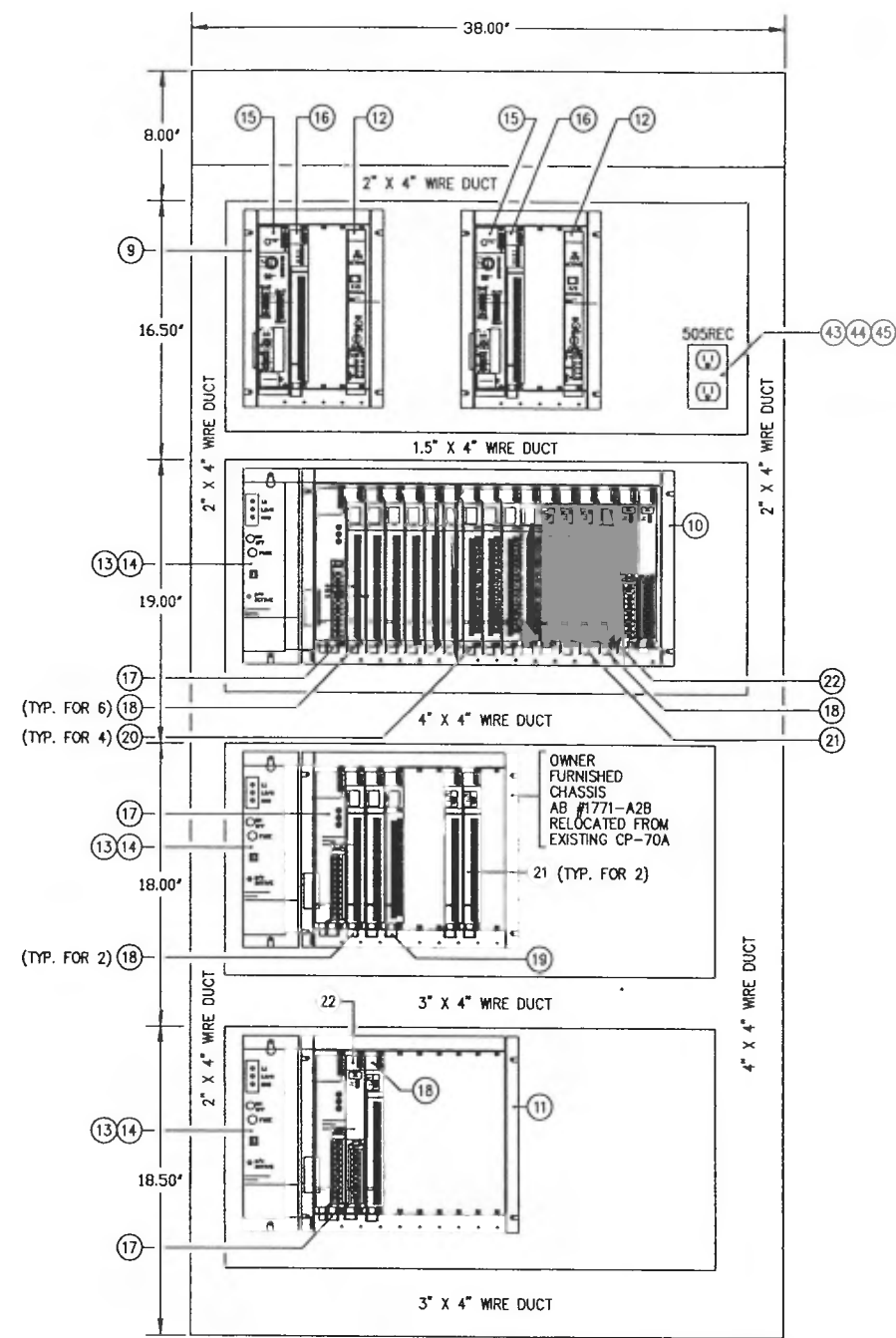
ENCL. "B" LEFT SIDE
 (TO MATE WITH ENCLOSURE "A" RIGHT SIDE)



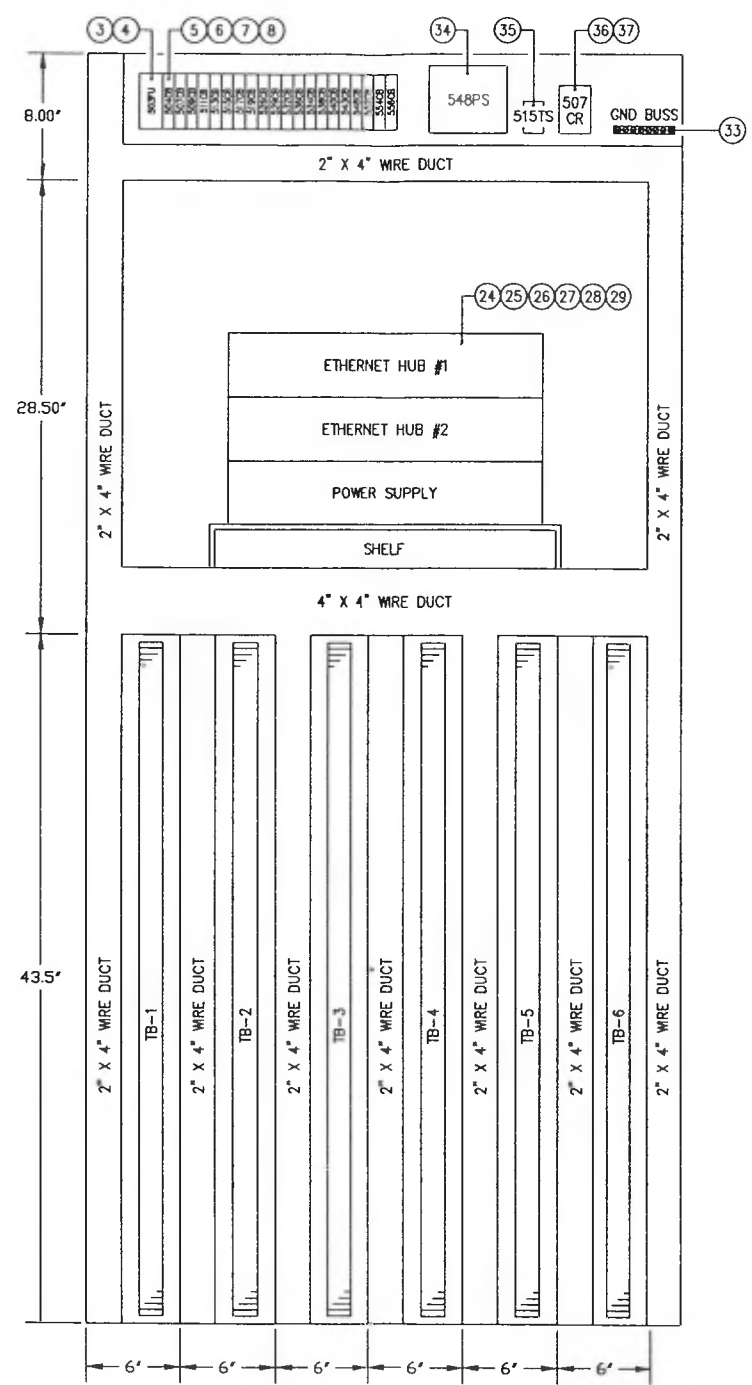
NEMA 12 ENCLOSURE "B" ①
 90"H X 42"W X 20"D
 PAINT: OUT: GRAHAM #8823W WARM SHADOW TEXTURED POLYURETHANE
 IN: GLOSS WHITE ENAMEL

AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335
 CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
 TERTIARY FILTER RENOVATIONS
 CP-70 CONTROL PANEL ENCLOSURE LAYOUT

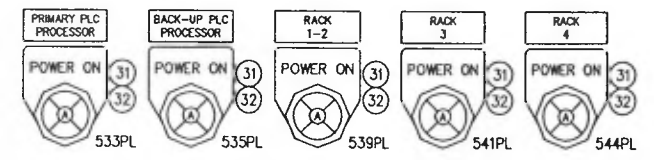
9/98	AS-SHIPED	CS	CUSTOMER	WEBB ELECTRIC	P.O. NO.	38851030006
8/18/98	REVISED PER APPROVAL	CJ	DRAWN	CD	SCALE	3/16"
SYM	DATE	REVISIONS	BY	CHECKED	BB	DATE 3/26/98
						SHEET NO 01
						ENCL NO 7249A



SUBPLATE "A" ②
 80"H X 38"W
 PAINT: GLOSS WHITE ENAMEL



SUBPLATE "B" ②
 80"H X 38"W
 PAINT: GLOSS WHITE ENAMEL

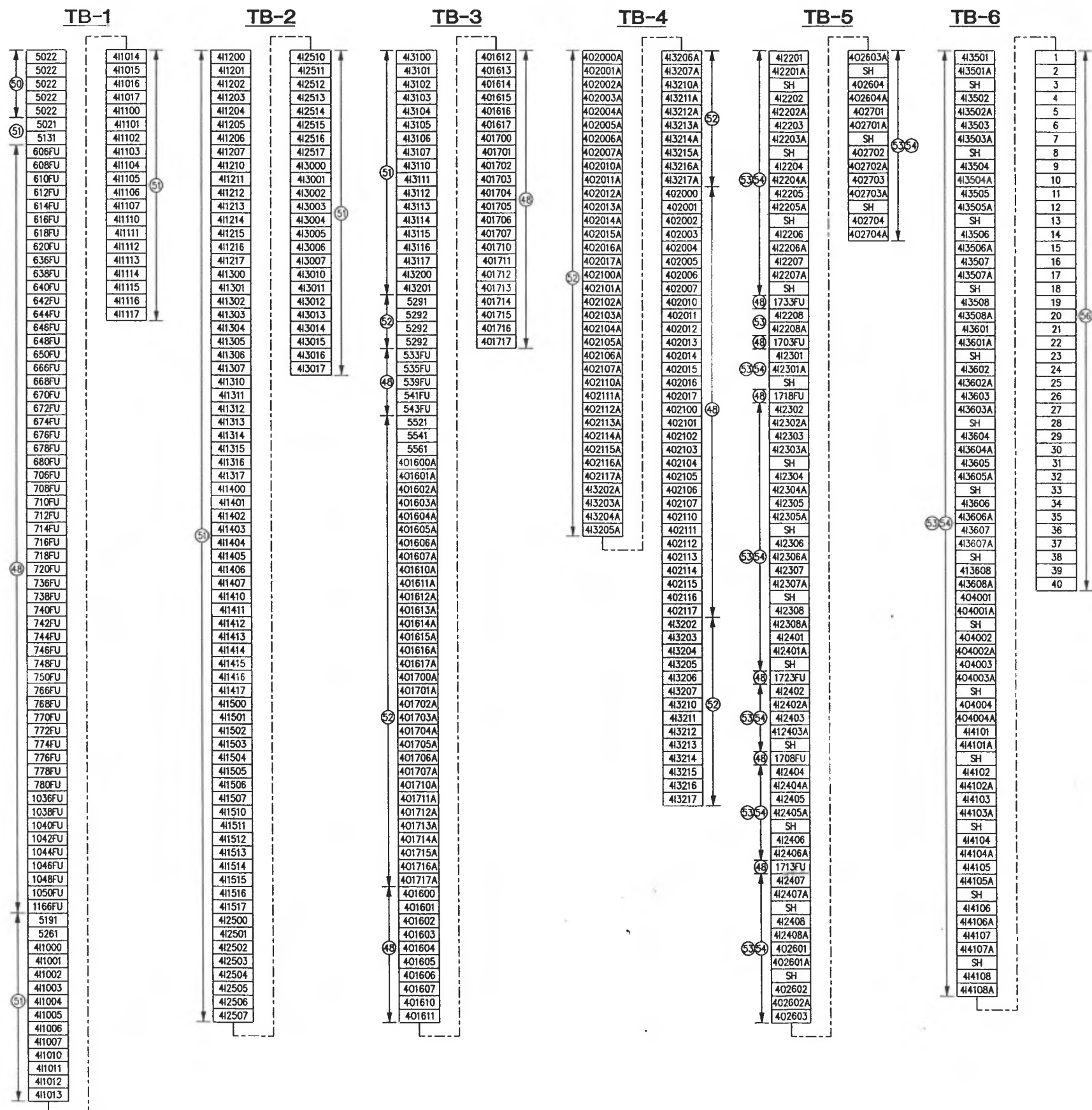


PB LAYOUT
 HALF SCALE

AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335

CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
 TERTIARY FILTER RENOVATIONS
 CP-70 CONTROL PANEL SUBPLATE LAYOUT

9/96	AS-SHIPED	CS	CUSTOMER	WEBB ELECTRIC	P.O. NO.	38851030006
A	8/5/98	REVISOR	CD	SCALE	3/16"	SHEET NO.
SYM	DATE	REVISIONS	BY	CHECKED	BB	DATE
						3/26/98
						02
						DWG NO.
						7249A



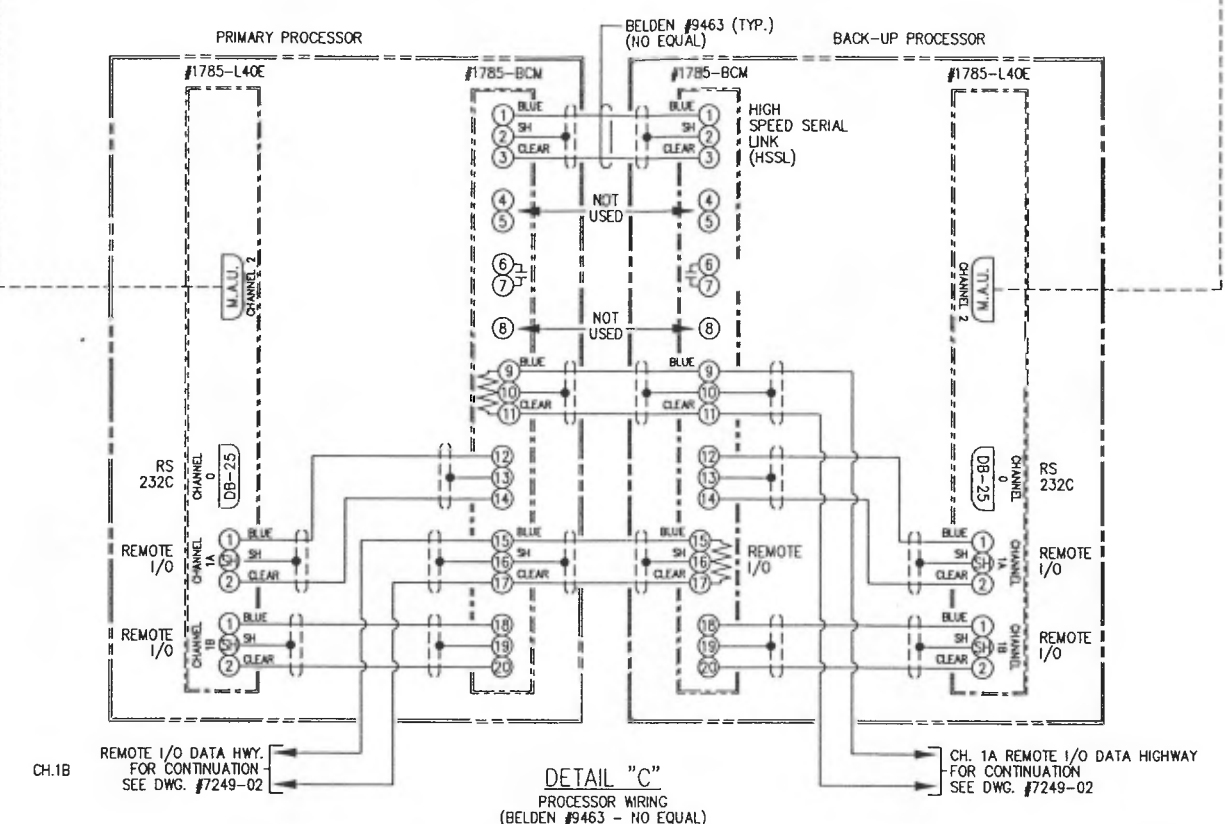
BILL OF MATERIAL				
SYMBOL	QTY.	MANUFACTURER	PART NUMBER	DESCRIPTION
1	1	CUSTOM	CUSTOM	NEMA-12 ENCLOSURE 90"H X 84"W X 20"D
2	2	CUSTOM	CUSTOM	TWO SECTION CONSTRUCTION
3	1	GOULD	20326R	SUBPLATE, 80"H X 38"W
4	1	GOULD	TR30R	FUSEBLOCK, 1P - 250V - 30A
5	12	ALLEN BRADLEY	1492-CB1G050	FUSE, 30A - 120VAC
6	1	ALLEN BRADLEY	1492-CB1G100	CIRCUIT BREAKER, 5A - 120VAC
7	4	ALLEN BRADLEY	1492-CB1G010	CIRCUIT BREAKER, 10A - 120VAC
8	3	ALLEN BRADLEY	1492-CB1G200	CIRCUIT BREAKER, 20A - 120VAC
9	2	ALLEN BRADLEY	1771-A1B	MODULE CHASSIS, 4-SLOT
10	1	ALLEN BRADLEY	1771-A4B	MODULE CHASSIS, 16-SLOT
11	1	ALLEN BRADLEY	1771-A2B	MODULE CHASSIS, 8-SLOT
12	2	ALLEN BRADLEY	1771-P4S	CHASSIS POWER SUPPLY, 8-AMP
13	3	ALLEN BRADLEY	1771-P7	CHASSIS POWER SUPPLY, 16-AMP
14	3	ALLEN BRADLEY	1771-CP1	POWER SUPPLY CABLE
15	2	ALLEN BRADLEY	1785-L40E	ETHERNET PROCESSOR, PLC 5/40
16	2	ALLEN BRADLEY	1785-BCM	BACKUP COMMUNICATIONS MODULE
17	3	ALLEN BRADLEY	1771-ASB	REMOTE I/O ADAPTER MODULE
18	8	ALLEN BRADLEY	1771-IAD	DIGITAL INPUT MODULE, 16-POINT
19	2	ALLEN BRADLEY	1771-ID16	DIGITAL INPUT MODULE, 16-POINT ISOLATED
20	4	ALLEN BRADLEY	1771-OW16	RELAY OUTPUT MODULE, 16-POINT
21	6	ALLEN BRADLEY	1771-IFE	ANALOG INPUT MODULE, 8-POINT
22	3	ALLEN BRADLEY	1771-OF2	ANALOG OUTPUT MODULE, 4-POINT
23	1	ALLEN BRADLEY	9323-RL5300D	RS-LOGIX 5 PROGRAMMING SOFTWARE
24	2	TECH DATA	847529	BAY NETWORKS SERIES 5000 3-SLOT CHASSIS
25	1	TECH DATA	847532	BAY NETWORKS SERIES 5000 POWER SUPPLY
26	1	TECH DATA	847501	BAY NETWORKS NETWORK MANAGE MODULE
27	2	TECH DATA	841721	BAY NETWORKS 12-PORT UTP MODULE
28	2	TECH DATA	844304	BAY NETWORKS 3-PORT ST FIBER OPTIC MODULE
29	1	TECH DATA	846523	EZ-LAN NETWORK MANAGEMENT SOFTWARE
30	1	MCMMASTER	9456T11	DIGITAL CLOCK, 120VAC, BATTERY BACKUP
31	5	CUTLER-HAMM	E34TPB120	PRESS-TO-TEST PILOT LIGHT, 120VAC
32	5	CUTLER-HAMM	E34V9	AMBER LENS
33	1	CUTLER-HAMM	GBK12	GROUND BAR, 12-CIRCUIT
34	1	CONDOR	HB24-1.2	POWER SUPPLY, 24VDC, 1.2A
35	1	HOFFMAN	A-TEMNO	COOLING THERMOSTAT, SPST
36	1	SQUARE D	8501KU13MP14-V20	CONTROL RELAY, 120VAC, 3PDT
37	1	CUSTOM CONN.	ST11-PC	RELAY SOCKET, 11-BLADE
38	1	GRAINGER	2VB11	SLIMLINE FLUORESCENT FIXTURE, 20W
39	1	GRAINGER	2VB96	FLUORESCENT BULB, 20W
40	1	HOFF	A-PA6AXFN	COOLING FAN, 120VAC
41	2	HOFF	A-EXGR6	VENT ASSY.
42	1	EDWARDS	502A	LIGHT SWITCH ASS'Y, 1-NC
43	1	P & S	5250S	DUPLEX RECPTACLE, 15A, 120VAC
44	1	RACO	660	BACKBOX, 2 X 4
45	1	MULBURY	10002	COVERPLATE, DUPLEX RECPTACLE
46	62	GOULD	GSB-1	FUSE, 1A, 120VAC
47	6	GOULD	GSB-1/10	FUSE, 1/10 A, 120VAC
48	135	SQUARE D	9080-M48SF	FUSIBLE TERMINAL, W/ FUSE PULLER
49	15	SQUARE D	9080-MFEM8S	END BARRIER, LARGE
50	5	SQUARE D	9080-GR6	WIRING TERMINAL, WHITE
51	150	SQUARE D	9080-GRR6	WIRING TERMINAL, RED
52	110	SQUARE D	9080-GRY6	WIRING TERMINAL, YELLOW
53	140	SQUARE D	9080-GRL6	WIRING TERMINAL, BLUE
54	35	SQUARE D	9080-GRE6	WIRING TERMINAL, GREY
55				
56	40	SQUARE D	9080-GRS6	WIRING TERMINAL, ORANGE
56	64	GOULD	65B-2	FUSE 2A,120V

AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335
 CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
 TERTIARY FILTER RENOVATIONS
 CP-70 CONTROL PANEL TERM. ROTATION & B.O.M.

9/98	AS-SHIPPED	CS	CUSTOMER	WEBB ELECTRIC	P.O. NO.	38851030006
A	5/26/98	REVISED PER APPROVAL	CS	DRAWN	SCALE	NONE
SYM	DATE	REVISIONS	BY	CHECKED	DATE	3/26/98
						SHEET NO. 03
						DWG NO. 7249A

TO ETHERNET HUB.
FOR CONTINUATION
SEE DWG # 7249-01

TO ETHERNET HUB.
FOR CONTINUATION
SEE DWG # 7249-01

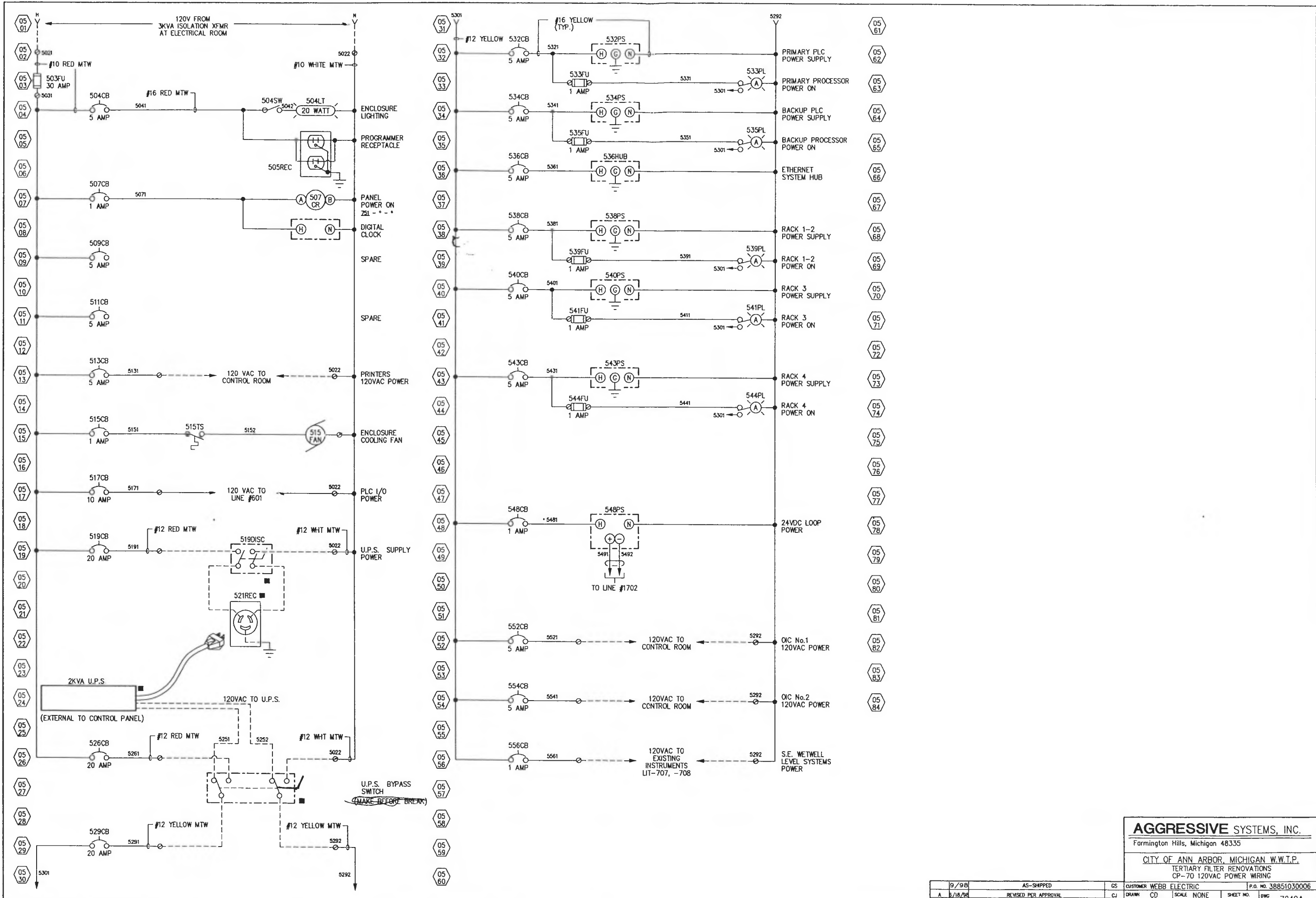


AGGRESSIVE SYSTEMS, INC.
Farmington Hills, Michigan 48335

CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
TERTIARY FILTER RENOVATIONS
CP-70 PLC DETAILS

9/98		AS-SHIPED	CS	DRAWN	BW	SCALE NONE	SHEET NO.	DWG
SYM	DATE	REVISIONS	BY	CHECKED	BB	DATE 3/25/98	04	7249A

CUSTOMER WEBB ELECTRIC P.O. NO. 38851030006

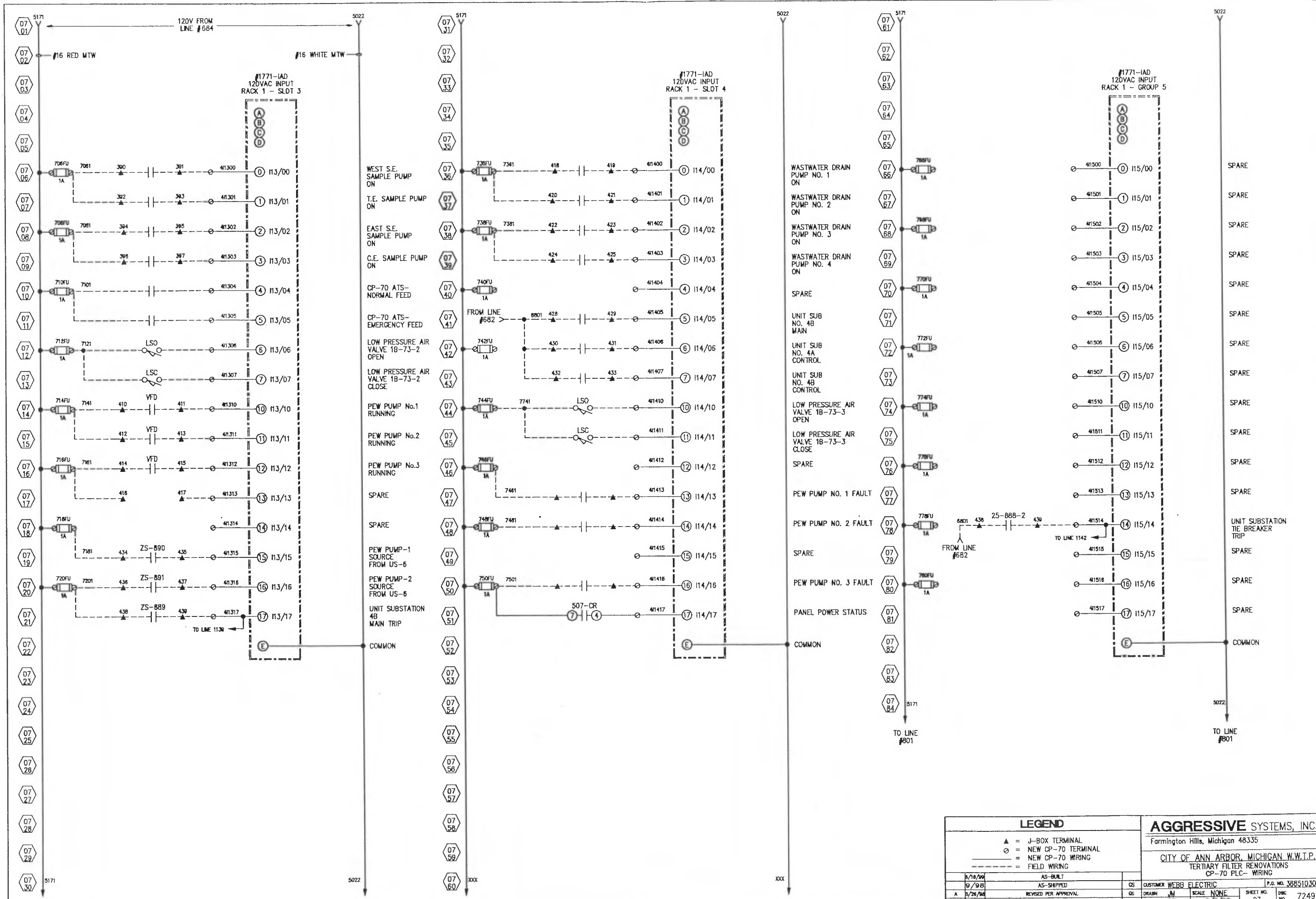


AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335

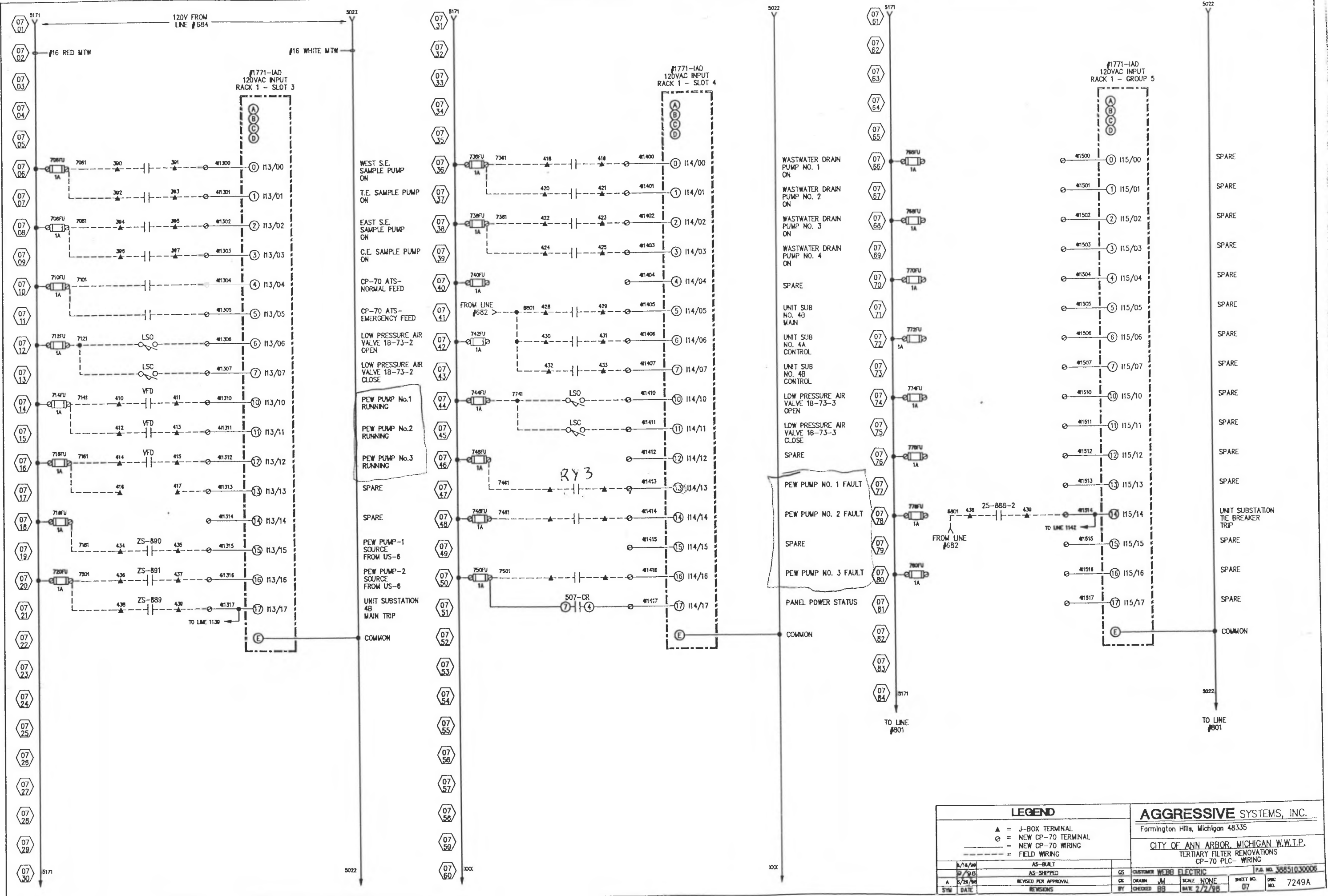
CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
 TERTIARY FILTER RENOVATIONS
 CP-70 120VAC POWER WIRING

9/98	AS-SHIPED	CS	CUSTOMER WEBB ELECTRIC	P.O. NO. 38851030006
5/18/98	REVISED PER APPROVAL	CJ	DRAMM CD	SHEET NO. 05
SYM	DATE	BY	CHECKED BB	DWG NO. 7249A

9/98	AS-SHIPED	CS	CUSTOMER WEBB ELECTRIC	P.O. NO. 38851030006
5/18/98	REVISED PER APPROVAL	CJ	DRAMM CD	SHEET NO. 05
SYM	DATE	BY	CHECKED BB	DWG NO. 7249A



LEGEND		AGGRESSIVE SYSTEMS, INC.			
▲	J-BOX TERMINAL	Farmington Hills, Michigan 48335			
○	NEW CP-70 TERMINAL	CITY OF ANN ARBOR, MICHIGAN W.W.I.P.			
—	NEW CP-70 WIRING	TERTIARY FILTER RENOVATIONS			
---	FIELD WIRING	CP-70 PLC- WIRING			
AS-BUILT	AS-SHIPPED	CS	CUSTOMER	WEBB ELECTRIC	P.O. NO. 38851030006
5/18/98	5/9/98	OS	DRAWN	JM	SCALE NONE
A	5/28/98	REVISOR	BY	BB	DATE 2/2/98
SYM	DATE	REVISIONS			SHEET NO. 07
					DWG. NO. 7249A



WEST S.E. SAMPLE PUMP ON

T.E. SAMPLE PUMP ON

EAST S.E. SAMPLE PUMP ON

C.E. SAMPLE PUMP ON

CP-70 ATS-NORMAL FEED

CP-70 ATS-EMERGENCY FEED

LOW PRESSURE AIR VALVE 1B-73-2 OPEN

LOW PRESSURE AIR VALVE 1B-73-2 CLOSE

PEW PUMP No.1 RUNNING

PEW PUMP No.2 RUNNING

PEW PUMP No.3 RUNNING

SPARE

SPARE

PEW PUMP-1 SOURCE FROM US-6

PEW PUMP-2 SOURCE FROM US-6

UNIT SUBSTATION 4B MAIN TRIP

COMMON

WASTEWATER DRAIN PUMP NO. 1 ON

WASTEWATER DRAIN PUMP NO. 2 ON

WASTEWATER DRAIN PUMP NO. 3 ON

WASTEWATER DRAIN PUMP NO. 4 ON

SPARE

UNIT SUB NO. 4B MAIN

UNIT SUB NO. 4A CONTROL

UNIT SUB NO. 4B CONTROL

LOW PRESSURE AIR VALVE 1B-73-3 OPEN

LOW PRESSURE AIR VALVE 1B-73-3 CLOSE

SPARE

PEW PUMP NO. 1 FAULT

PEW PUMP NO. 2 FAULT

SPARE

PEW PUMP NO. 3 FAULT

PANEL POWER STATUS

COMMON

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

SPARE

UNIT SUBSTATION TIE BREAKER TRIP

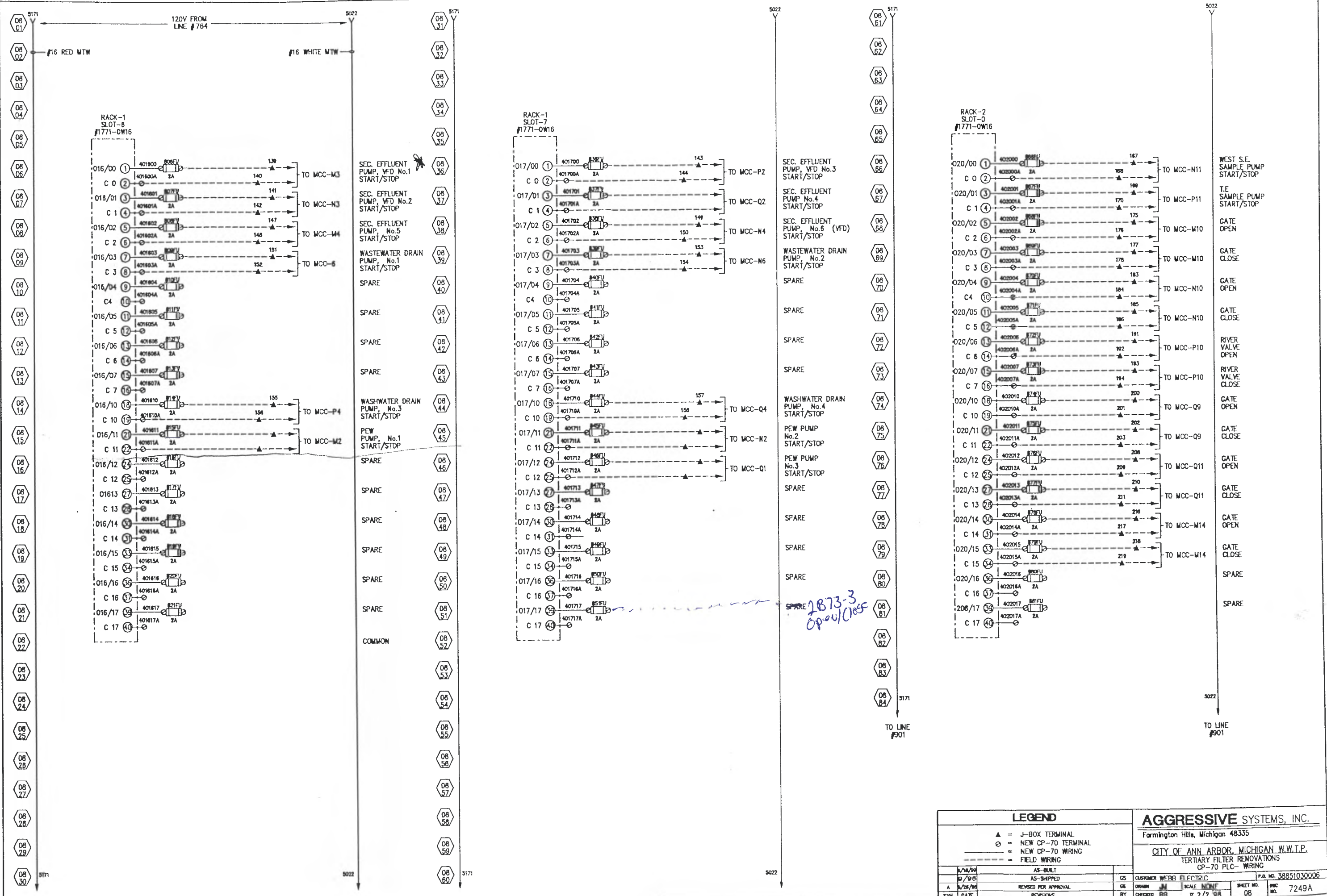
SPARE

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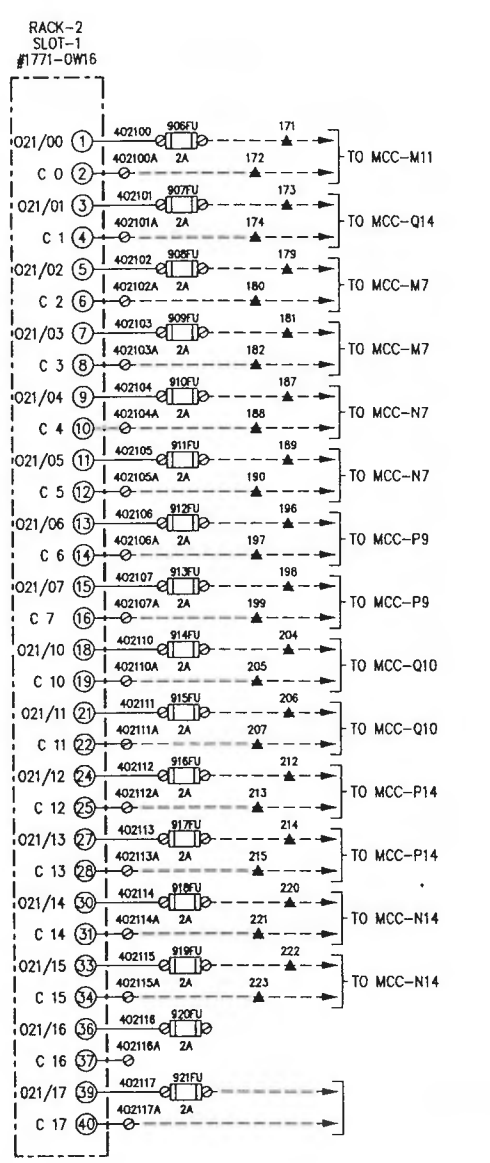
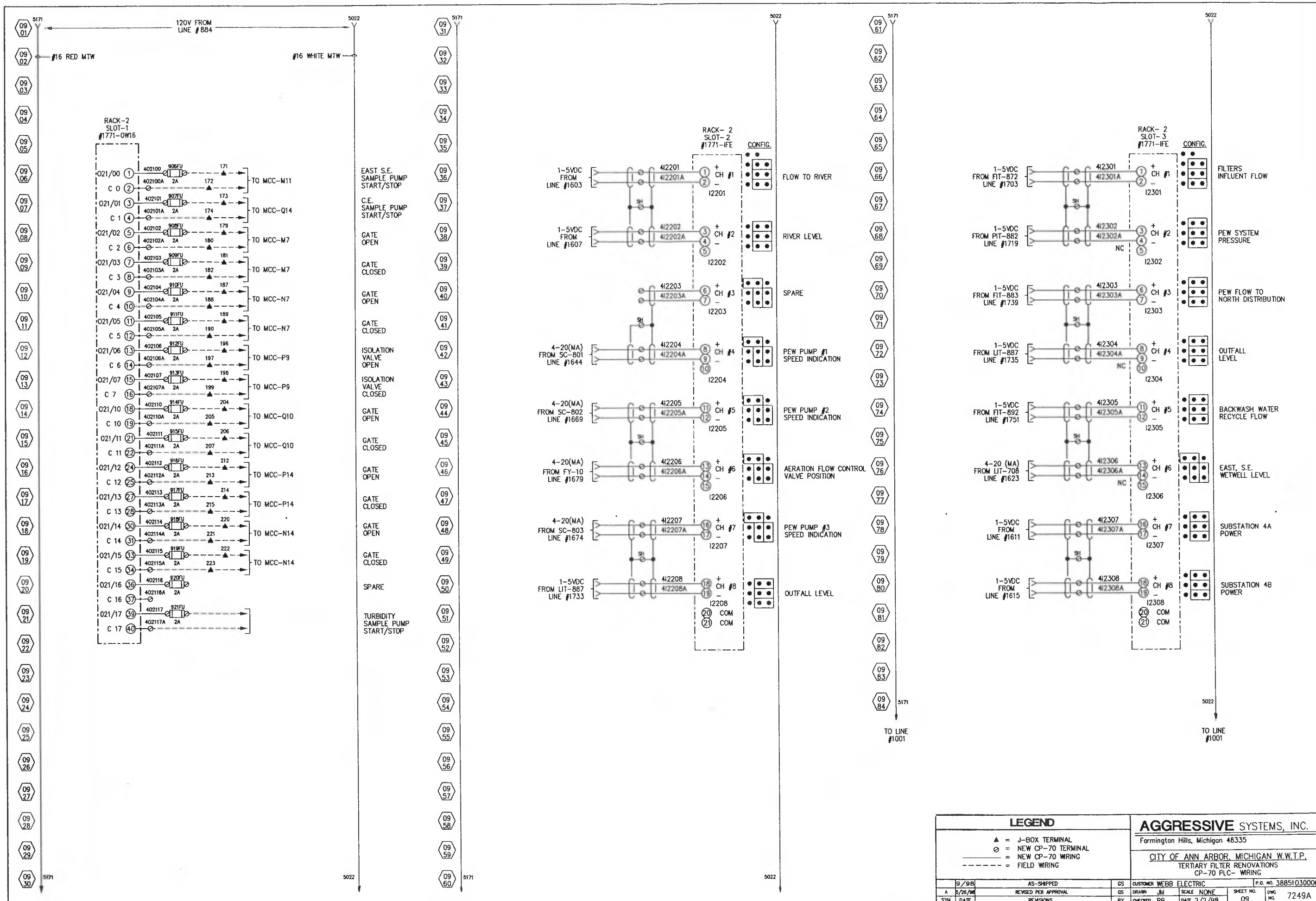
SPARE

COMMON

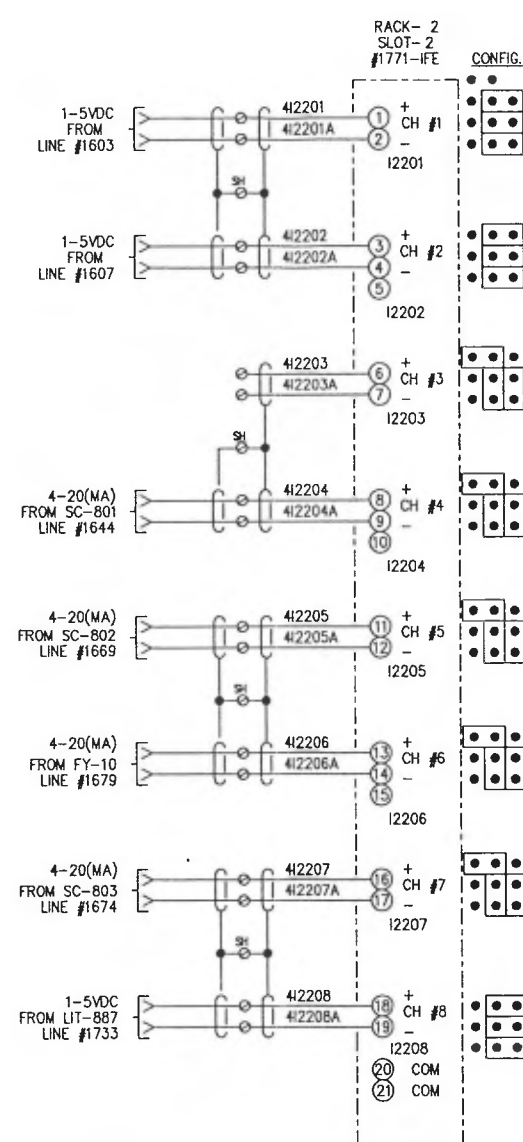
LEGEND		AGGRESSIVE SYSTEMS, INC.			
▲	J-BOX TERMINAL	Farmington Hills, Michigan 48335			
⊙	NEW CP-70 TERMINAL	CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
---	NEW CP-70 WIRING	TERTIARY FILTER RENOVATIONS			
----	FIELD WIRING	CP-70 PLC-WIRING			
1/14/98	AS-BUILT	CS	CUSTOMER	WEBB ELECTRIC	P.O. NO. 38851030006
2/28/98	AS-SHIPPED	DR	DRAWN	JM	SHEET NO. 07
3/28/98	REVISED PER APPROVAL	BY	CHECKED	BB	DATE 2/2/98
SYN	DATE	REVISIONS	BY	CHECKED	NO. 7249A



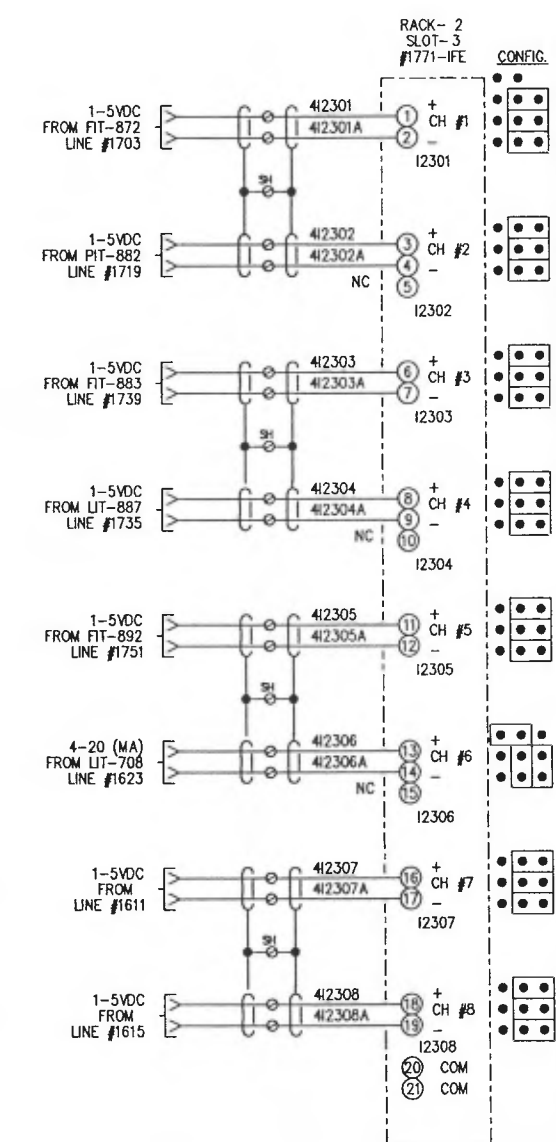
LEGEND		AGGRESSIVE SYSTEMS, INC.	
▲	= J-BOX TERMINAL	Formington Hills, Michigan 48335	
○	= NEW CP-70 TERMINAL	CITY OF ANN ARBOR, MICHIGAN W.W.T.P.	
—	= NEW CP-70 WIRING	TERTIARY FILTER RENOVATIONS	
---	= FIELD WIRING	CP-70 PLC WIRING	
DATE	AS-BUILT	CS	CUSTOMER WFB
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DATE	REVISED PER APPROVAL	CS	SCALE
DATE	REVISIONS	BY	CHECKED
		P.O. NO. 38851030006	
		SHEET NO. 08	
		PWC NO. 7249A	



EAST S.E. SAMPLE PUMP START/STOP
 C.E. SAMPLE PUMP START/STOP
 GATE OPEN
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 ISOLATION VALVE OPEN
 ISOLATION VALVE CLOSED
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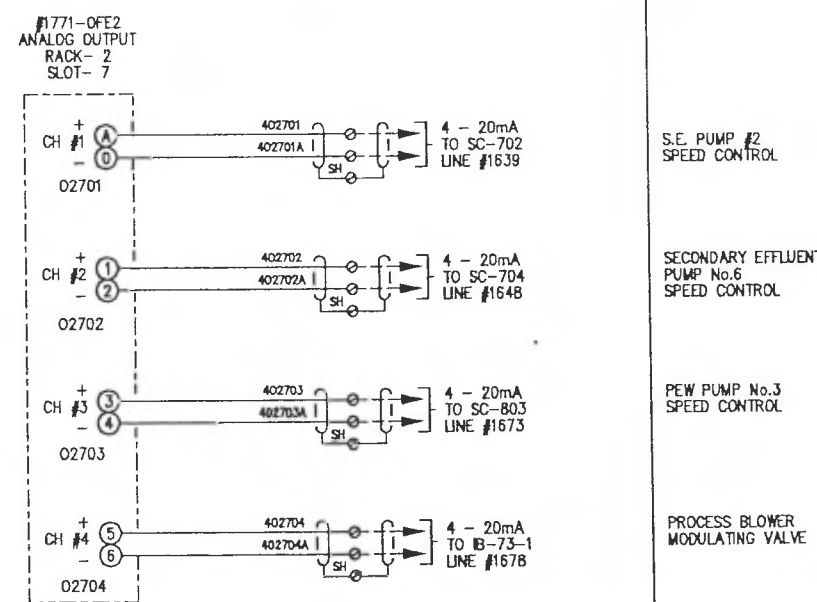
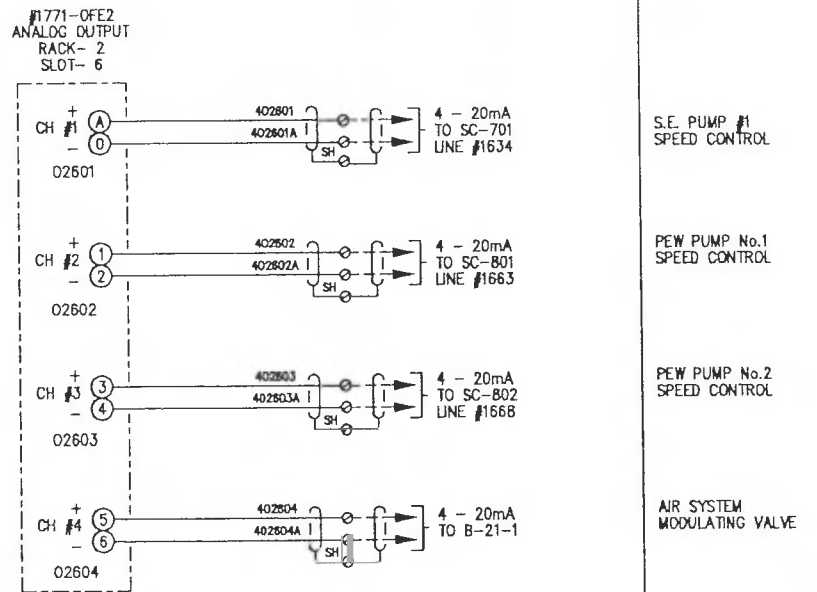
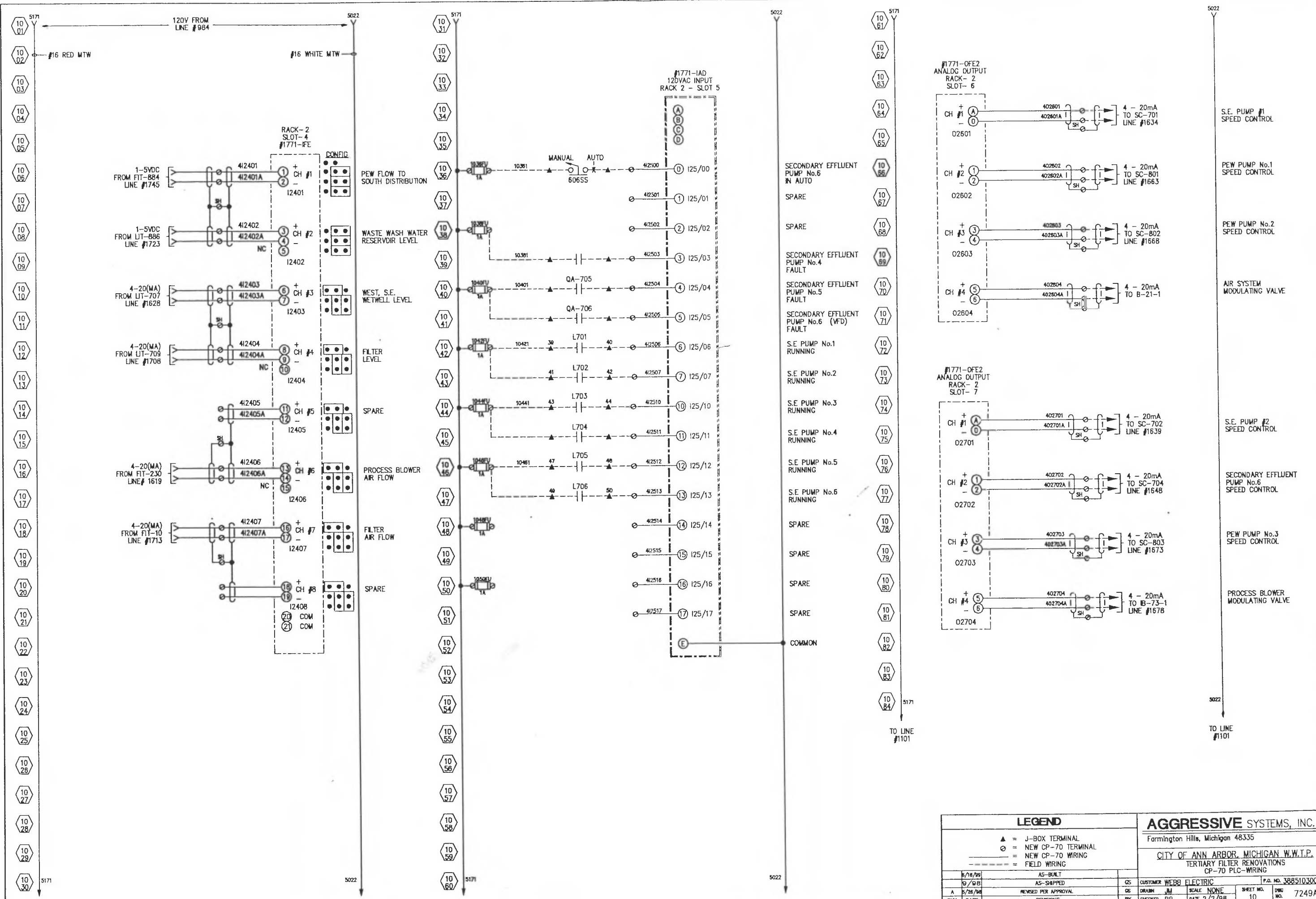


FLOW TO RIVER
 RIVER LEVEL
 SPARE
 PEW PUMP #1 SPEED INDICATION
 PEW PUMP #2 SPEED INDICATION
 AERATION FLOW CONTROL VALVE POSITION
 PEW PUMP #3 SPEED INDICATION
 OUTFALL LEVEL

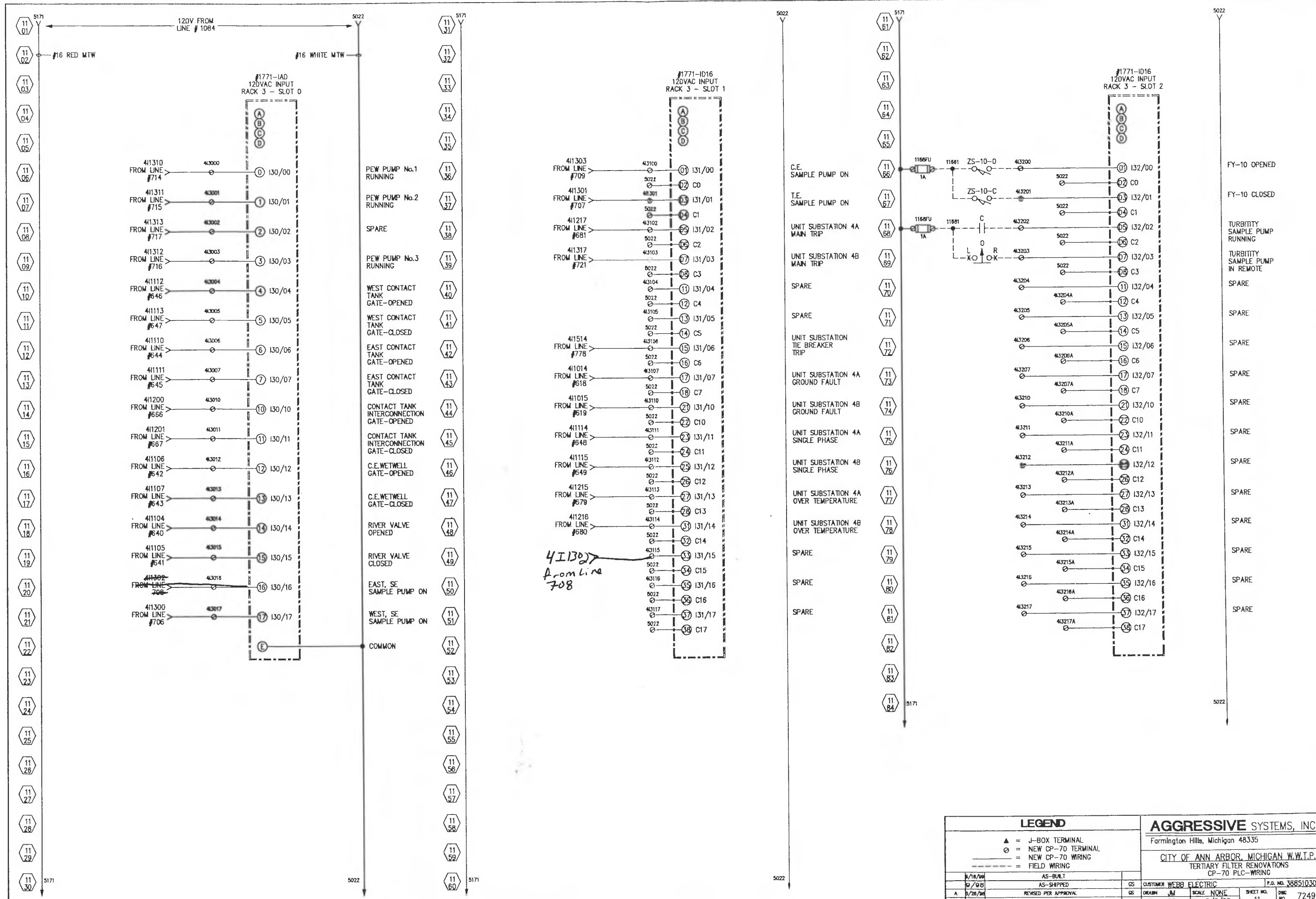


FILTERS INFLUENT FLOW
 PEW SYSTEM PRESSURE
 PEW FLOW TO NORTH DISTRIBUTION
 OUTFALL LEVEL
 BACKWASH WATER RECYCLE FLOW
 EAST, S.E. WETWELL LEVEL
 SUBSTATION 4A POWER
 SUBSTATION 4B POWER

LEGEND		AGGRESSIVE SYSTEMS, INC.			
▲	J-BOX TERMINAL	Farmington Hills, Michigan 48335			
○	NEW CP-70 TERMINAL	CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
---	NEW CP-70 WIRING	TERTIARY FILTER RENOVATIONS			
---	FIELD WIRING	CP-70 PLC- WIRING			
9/98	AS-SHIPPED	CS	CUSTOMER WEBB ELECTRIC	P.O. NO. 38851030006	
A	5/26/98	CS	DRANN	SCALE NONE	SHEET NO.
SYM	DATE	BY	CHEGRED	DATE 2/2/98	DWG NO. 7249A



LEGEND				AGGRESSIVE SYSTEMS, INC.			
▲	=	J-BOX TERMINAL		Farmington Hills, Michigan 48335			
○	=	NEW CP-70 TERMINAL		CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
---	=	NEW CP-70 WIRING		TERTIARY FILTER RENOVATIONS			
----	=	FIELD WIRING		CP-70 PLC-WIRING			
5/18/98		AS-BUILT	CS	CUSTOMER	WEBB	ELECTRIC	P.O. NO. 38851030006
9/98		AS-SHIPPED	CS	DRAWN	JM	SCALE NONE	SHEET NO. 10
5/28/98		REVISED PER APPROVAL	BY	CHECKED	BB	DATE 2/2/98	DWG. NO. 7249A
SYM	DATE	REVISIONS					



LEGEND		AGGRESSIVE SYSTEMS, INC.			
▲	J-BOX TERMINAL	Farmington Hills, Michigan 48335			
○	NEW CP-70 TERMINAL	CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
---	NEW CP-70 WIRING	TERTIARY FILTER RENOVATIONS			
----	FIELD WIRING	CP-70 PLC-WIRING			
AS-BUILT		CS	CUSTOMER	WEBB ELECTRIC	P.O. NO. 38851030006
AS-SHIPPED		CS	CUSTOMER	WEBB ELECTRIC	SHEET NO. 11
REVISED PER APPROVAL		CS	CUSTOMER	WEBB ELECTRIC	DWG NO. 7249A
REVISIONS		BY	CHECKED	BB	DATE 2/2/98

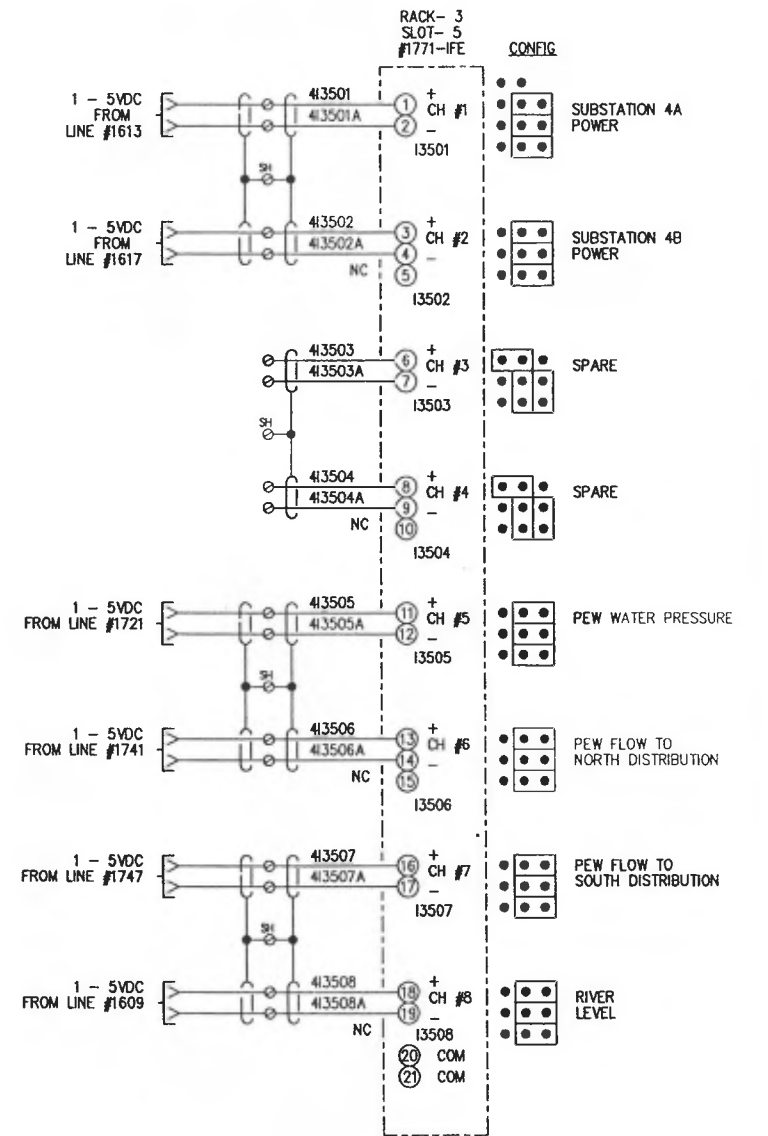
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SPARE SPACE
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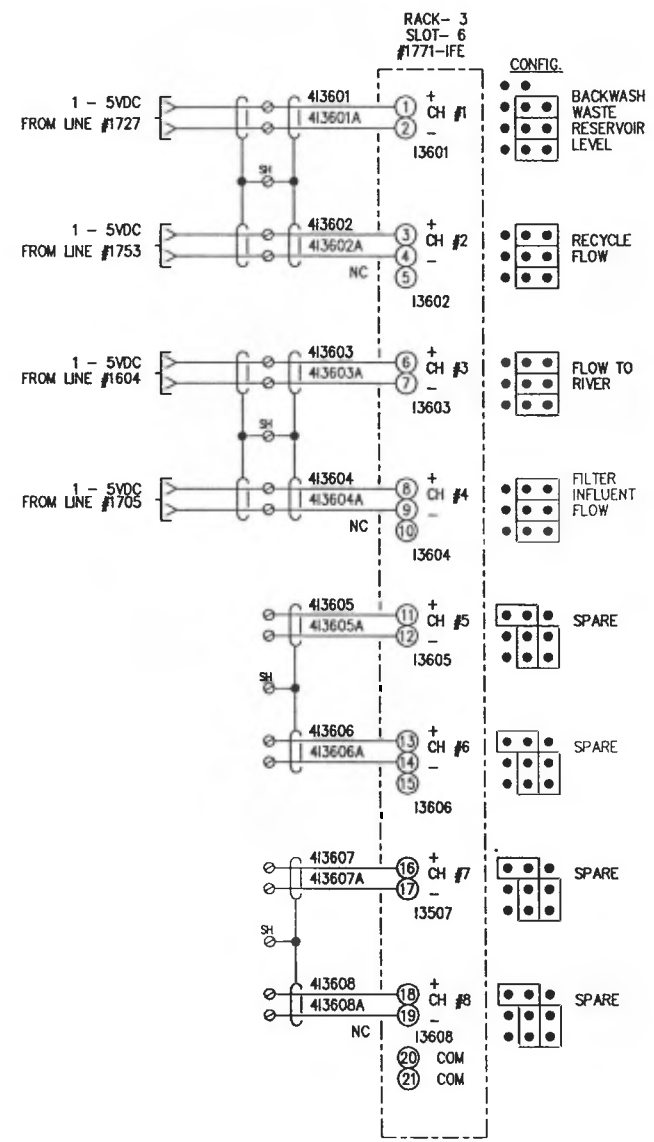
SPARE SPACE
RACK 3 SLOT 4

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LEGEND				AGGRESSIVE SYSTEMS, INC.			
<ul style="list-style-type: none"> ▲ = J-BOX TERMINAL ○ = NEW CP-70 TERMINAL — = NEW CP-70 WIRING - - - = FIELD WIRING 				Farmington Hills, Michigan 48335 CITY OF ANN ARBOR, MICHIGAN W.W.T.P. TERTIARY FILTER RENOVATIONS CP-70 PLC- WIRING			
9/98	AS-SHIPPED	GS	CUSTOMER	WEBB ELECTRIC	P.O. NO.	38851030006	
A	5/26/98	REVISED PER APPROVAL	GS	DRAWN	JM	SCALE	NONE
SYM	DATE	REVISIONS	BY	CHECKED	BB	DATE	2/2/98
						SHEET NO.	12
						DWG NO.	7249A

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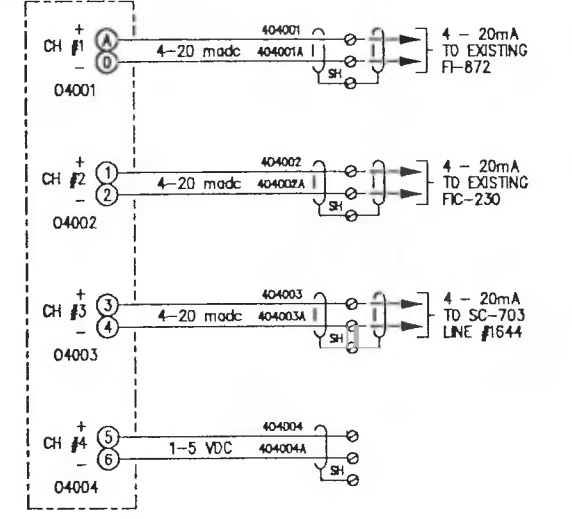
RACK- 3
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LEGEND				AGGRESSIVE SYSTEMS, INC.			
▲	=	J-BOX TERMINAL		Farmington Hills, Michigan 48335			
⊙	=	CP-70 TERMINAL		CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
—	=	EXISTING WIRING		TERTIARY FILTER RENOVATIONS			
---	=	NEW WIRING		CP-70 PLC-WIRING			
---	=	FIELD WIRING					
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A	5/26/98	REVISED PER APPROVAL	GS	DRAWN	JM	SCALE	NONE
SYN	DATE	REVISIONS	BY	CHECKED	BB	DATE	2/2/98
						SHEET NO.	13
						DWG	NO. 7249A

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ANALOG OUTPUT
RACK - 4
SLOT - 0



FIT-872
REMOTE
READOUT

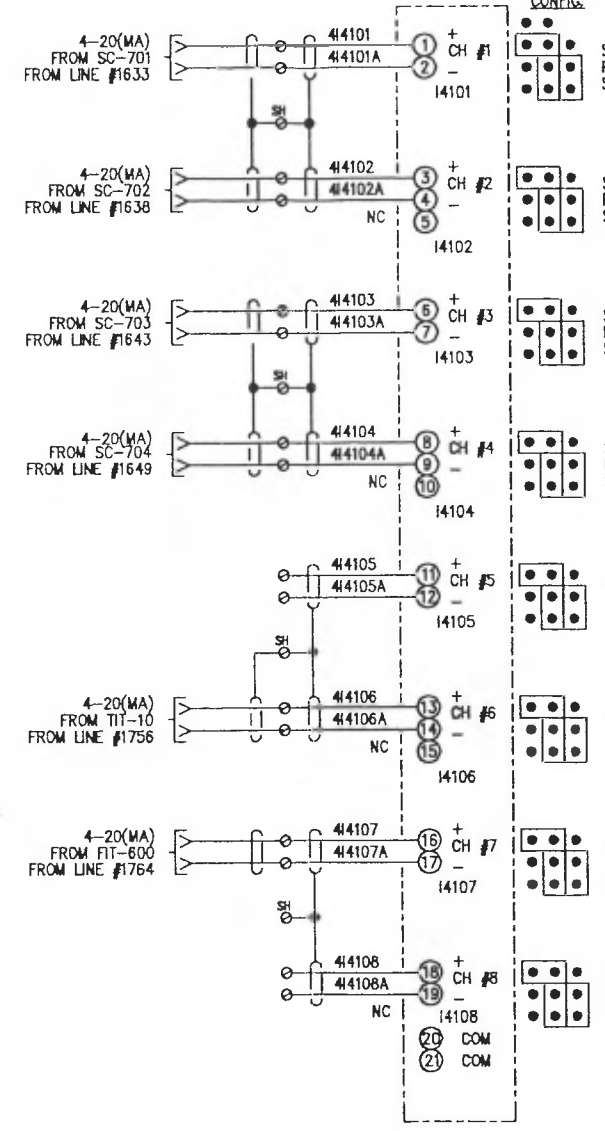
FIC-230
CP-20 SETPOINT

S.E. PUMP #3
SPEED CONTROL

SPARE

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RACK : 4
SLOT: 1
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RACK - 4
SLOT - 2
SPACE

LEGEND				AGGRESSIVE SYSTEMS, INC.			
▲	=	J-BOX TERMINAL		Farmington Hills, Michigan 48335			
○	=	NEW CP-70 TERMINAL		CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
---	=	NEW CP-70 WIRING		TERTIARY FILTER RENOVATIONS			
----	=	FIELD WIRING		CP-70 PLC-WIRING			
1/18/98	AS-BUILT		OS	CUSTOMER	ELECTRIC	P.O. NO.	88351030006
9/98	AS-SHIPPED		GS	DRAWN	JM	DATE	2/2/98
A	5/28/98	REVISED PER APPROVAL	BY	CHECKED	BB	SHEET NO.	14
SYM	DATE	REVISIONS				DWG NO.	7249A

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RACK -4
SLOT -3
SPARE SPACE

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RACK -4
SLOT -4
SPARE SPACE

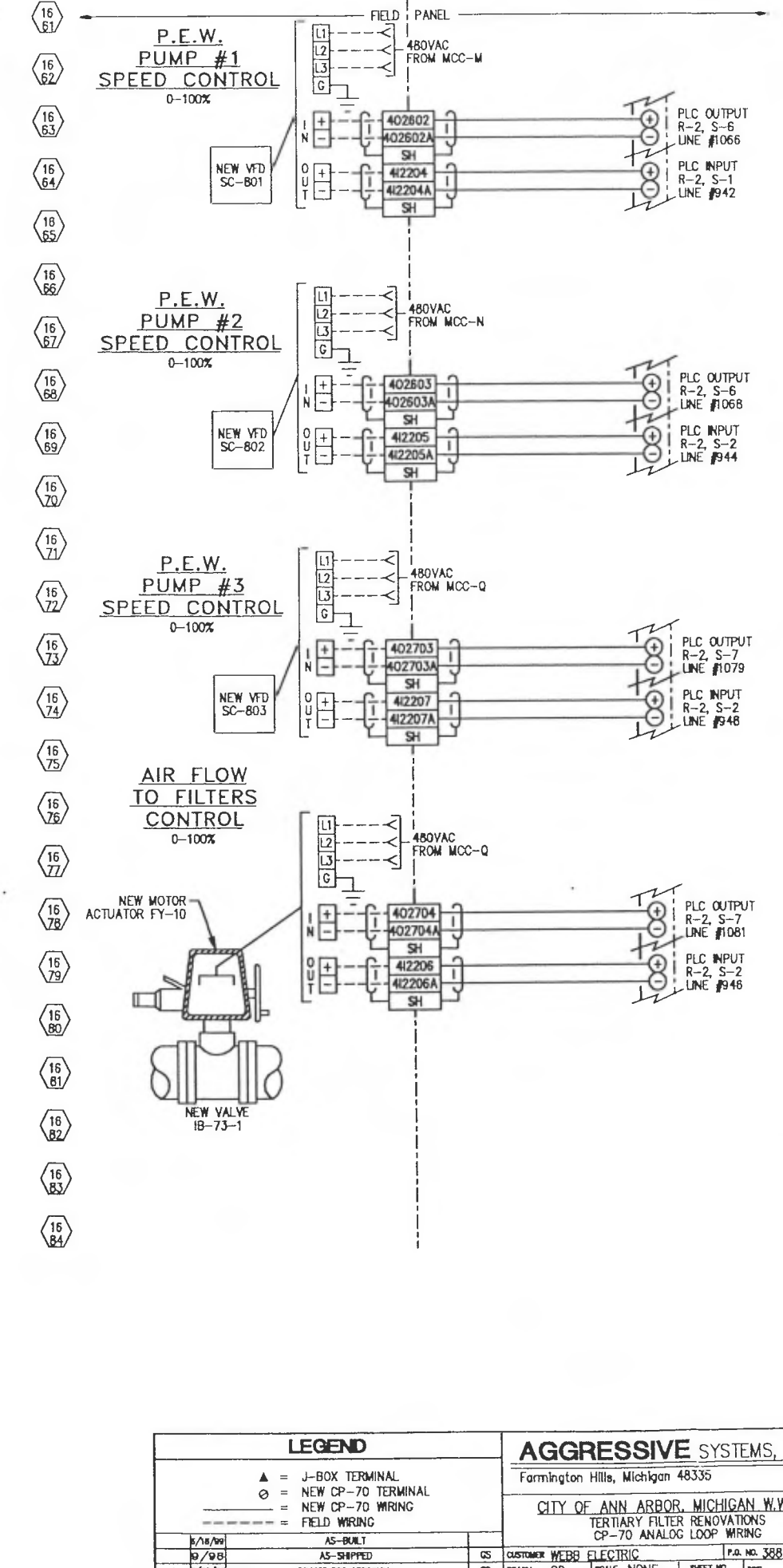
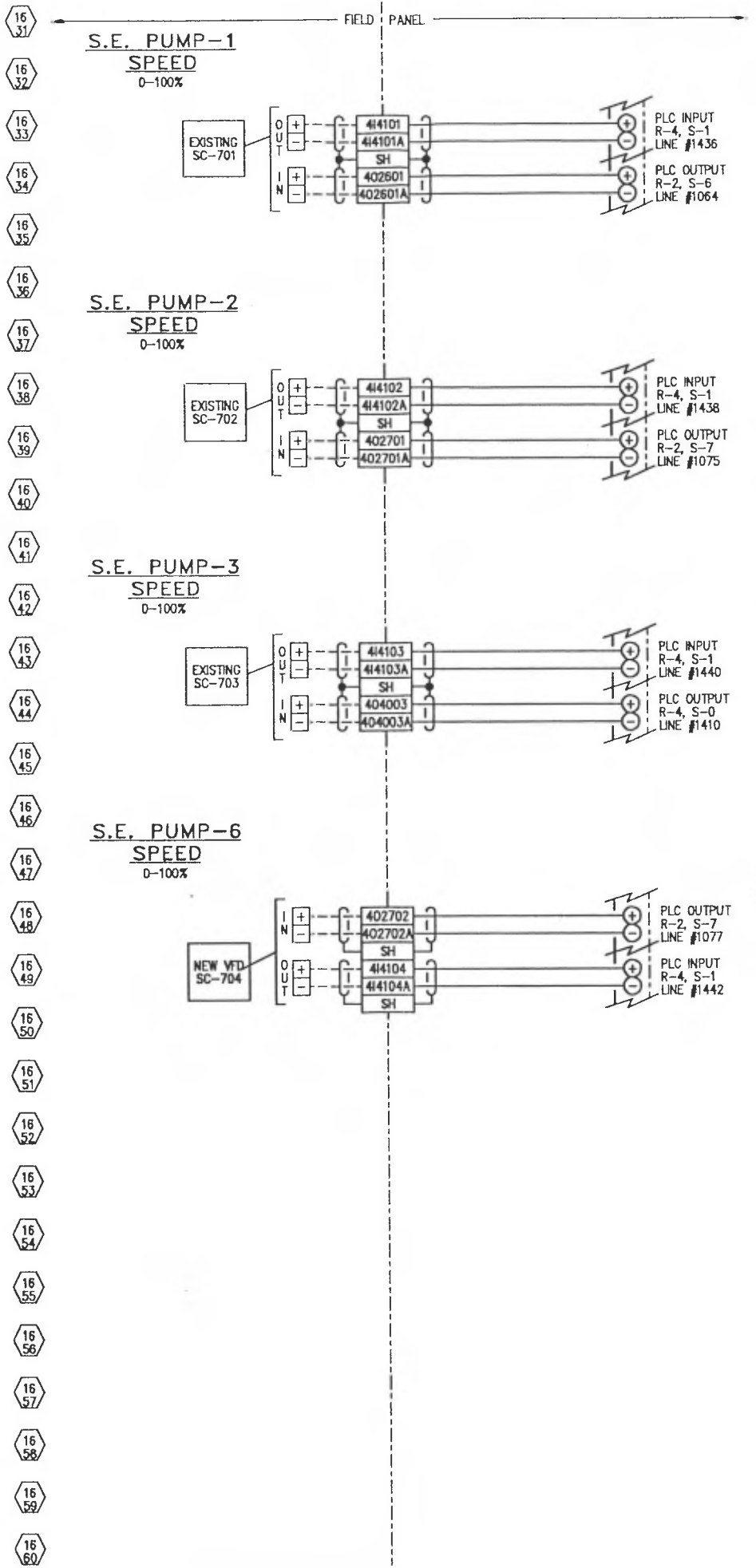
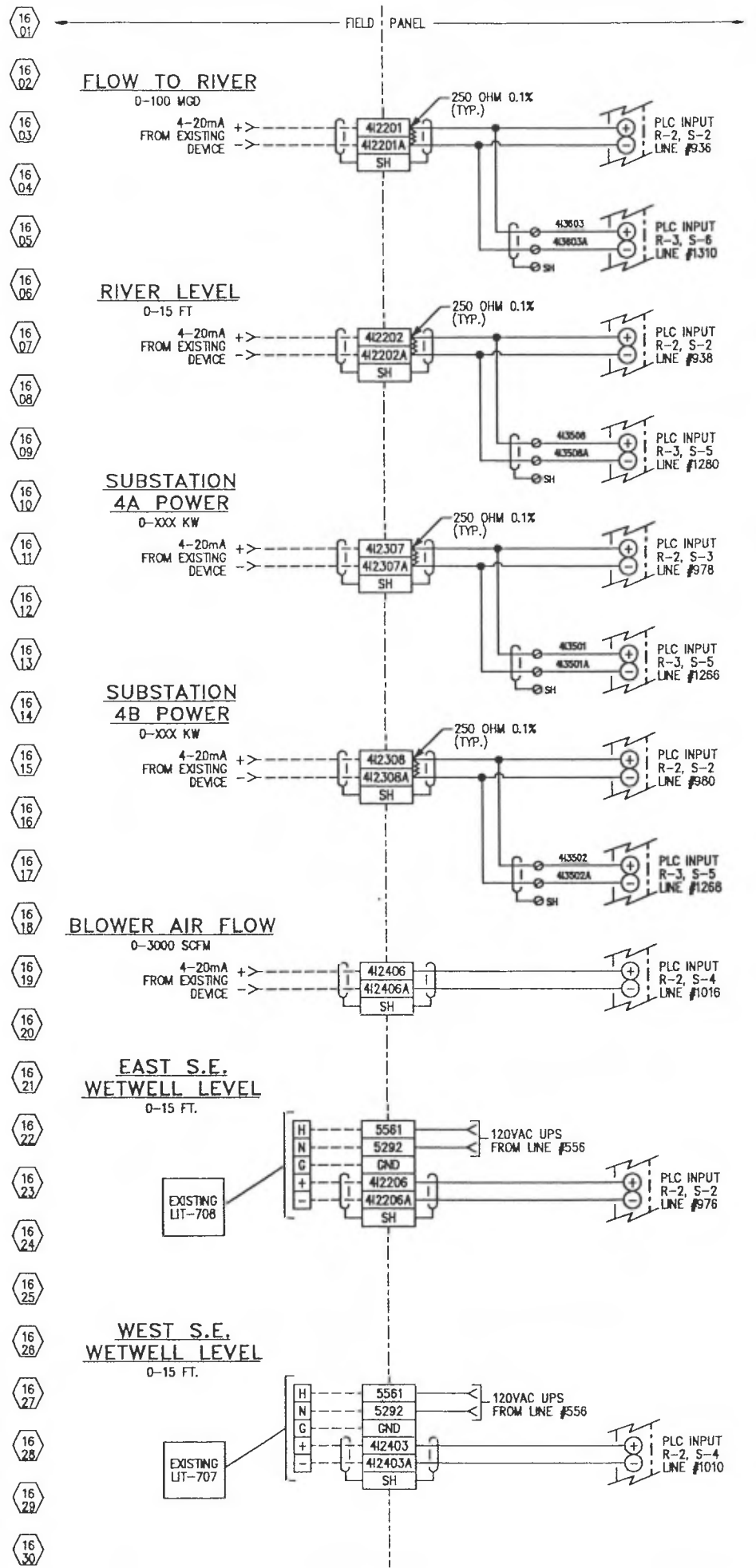
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SLOT -5
SPARE SPACE

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RACK -4
SLOT -6
SPARE SPACE

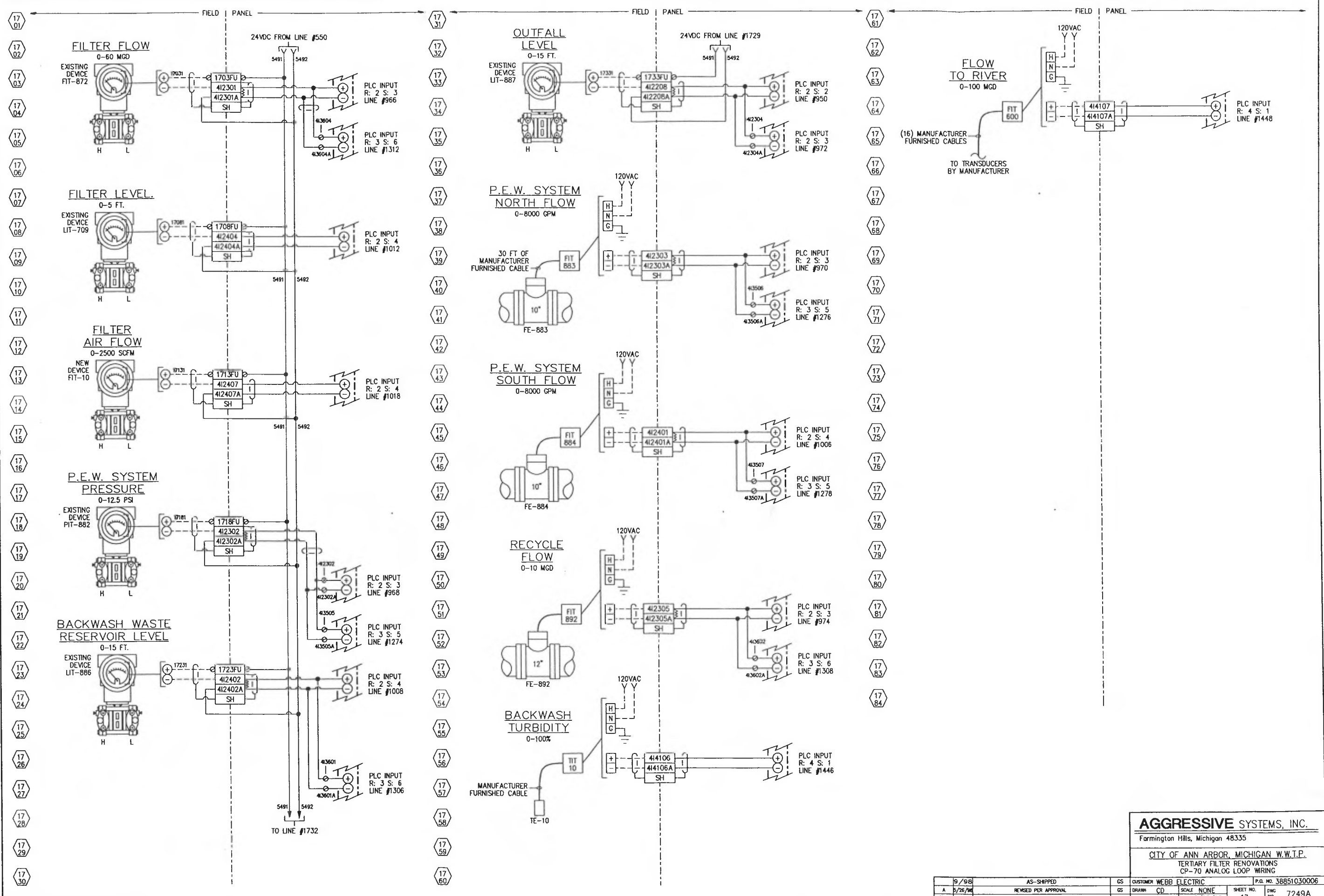
RACK -4
SLOT -7
SPARE SPACE

AGGRESSIVE SYSTEMS, INC.			
Farmington Hills, Michigan 48335			
CITY OF ANN ARBOR, MICHIGAN W.W.T.P. TERTIARY FILTER RENOVATIONS CP-70 PLC-SPARE SLOTS			
19/98	AS-SHIPED	CS	CUSTOMER WEBB ELECTRIC
A 5/26/98	REVISED PER APPROVAL	GS	SCALE NONE
SYM DATE	REVISIONS	BY	CHECKED BB DATE 2/2/98
		SHEET NO 15	
		P.O. NO. 38851030006	
		DWG NO. 7249A	



LEGEND			
▲	=	J-BOX TERMINAL	
○	=	NEW CP-70 TERMINAL	
—	=	NEW CP-70 WIRING	
---	=	FIELD WIRING	

AGGRESSIVE SYSTEMS, INC.			
Farmington Hills, Michigan 48336			
CITY OF ANN ARBOR, MICHIGAN W.W.T.P.			
TERTIARY FILTER RENOVATIONS			
CP-70 ANALOG LOOP WIRING			
DATE	AS-BUILT	GS	CUSTOMER
10/18/99	AS-BUILT	GS	WEBB ELECTRIC
10/19/99	AS-SHIPPED	GS	
A 6/28/04	REVISED PER APPROVAL	GS	SCALE NONE
SYM	DATE	BY	CHECKED
		BB	DATE 3/25/98
P.O. NO. 38851030006		SHEET NO. 16	
DWC NO. 7249A			



AGGRESSIVE SYSTEMS, INC.
 Farmington Hills, Michigan 48335

CITY OF ANN ARBOR, MICHIGAN W.W.T.P.
 TERTIARY FILTER RENOVATIONS
 CP-70 ANALOG LOOP WIRING

9/98	AS-SHIPPED	GS	CUSTOMER WEBB ELECTRIC	P.O. NO. 38851030006
A 5/26/98	REVISED PER APPROVAL	GS	DRAWN CD	SCALE NONE SHEET NO. 17
SYM	DATE	BY	CHECKED BB	DATE 3/25/98 DWG NO. 7249A

**ATTACHMENT B
LEGAL STATUS OF OFFEROR**

(The Respondent shall fill out the provision and strike out the remaining ones.)

The Respondent is:

- A corporation organized and doing business under the laws of the state of _____, for whom _____ bearing the office title of _____, whose signature is affixed to this proposal, is authorized to execute contracts on behalf of respondent.*

*If not incorporated in Michigan, please attach the corporation's Certificate of Authority

- A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.
- A partnership organized under the laws of the State of _____ and filed with the County of _____, whose members are (attach list including street and mailing address for each.)
- An individual, whose signature with address, is affixed to this RFP.

Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.

_____, Date: _____,
Signature

(Print) Name _____ Title _____

Firm: _____

Address: _____

Contact Phone _____ Fax _____

Email _____

**ATTACHMENT D
CITY OF ANN ARBOR
LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE**

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here No. of employees

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits

Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Company Name

Street Address

Signature of Authorized Representative

Date

City, State, Zip

Print Name and Title

Phone/Email address



ATTACHMENT E

VENDOR CONFLICT OF INTEREST DISCLOSURE FORM
--

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <hr/> <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:		
Vendor Name	Vendor Phone Number	
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized Representative

**ATTACHMENT F
CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE**

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below.
You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

Discriminatory Employment Practices: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by e-mail (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

Private Actions For Damages or Injunctive Relief: To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

**THIS IS AN OFFICIAL GOVERNMENT NOTICE AND
MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.**

ATTACHMENT G

CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2021 - ENDING APRIL 29, 2022

\$14.05 per hour

If the employer provides health care benefits*

\$15.66 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

**For Additional Information or to File a Complaint contact
Colin Spencer at 734/794-6500 or cspencer@a2gov.org**

APPENDIX A: SAMPLE PROFESSIONAL SERVICES AGREEMENT

If a contract is awarded, the selected Firm(s) will be required to adhere to a set of general contract provisions which will become a part of any formal agreement. These provisions are general principles which apply to all contractors/service providers to the City of Ann Arbor. The required provisions are:

(2020 PSA over \$25,000 NO Auto AI Rev. 1)

This agreement ("Agreement") is between the City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and _____ ("Contractor"), a(n) _____, with its address at _____ (State where organized) _____ (Partnership, Sole Proprietorship, or Corporation). City and Contractor are referred to collectively herein as the "Parties." The Parties agree as follows:

I. DEFINITIONS

Administering Service Area/Unit means _____.

Contract Administrator means _____, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for and delivered to City by Contractor under this Agreement.

Project means _____.
Project name

II. DURATION

Contractor shall commence performance on _____, 20__ ("Commencement Date"). This Agreement shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XI. The terms and conditions of this Agreement shall apply to the earlier of the Effective Date or Commencement Date.

III. SERVICES

A. The Contractor agrees to provide _____

Type of service

("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the compensation shall be adjusted

accordingly. All such changes shall be executed under the conditions of the original Agreement.

- B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory, and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement. The Contractor shall also comply with and be subject to the City of Ann Arbor policies applicable to independent contractors.
- D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

IV. INDEPENDENT CONTRACTOR

The Parties agree that at all times and for all purposes under the terms of this Agreement each Party's relationship to any other Party shall be that of an independent contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

Contractor does not have any authority to execute any contract or agreement on behalf of the City, and is not granted any authority to assume or create any obligation or liability on the City's behalf, or to bind the City in any way.

V. COMPENSATION OF CONTRACTOR

- A. The Contractor shall be paid in the manner set forth in Exhibit B. Payment shall be made monthly, unless another payment term is specified in Exhibit B, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.
- B. The Contractor will be compensated for Services performed in addition to the Services described in Article III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.
- C. The Contractor shall keep complete records of work performed (e.g. tasks performed, hours allocated, etc.) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

VI. INSURANCE/INDEMNIFICATION

- A. The Contractor shall procure and maintain from the Effective Date or Commencement Date of this Agreement (whichever is earlier) through the conclusion of this Agreement, such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage that may arise under this Agreement; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of work under this Agreement, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the policies and endorsements required by Exhibit C. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

- B. Any insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-authorized insurance companies are not acceptable unless approved in writing by the City.

- C. To the fullest extent permitted by law, Contractor shall indemnify, defend, and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

VII. COMPLIANCE REQUIREMENTS

- A. Nondiscrimination. The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of the Ann Arbor City Code and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

- B. Living Wage. If the Contractor is a “covered employer” as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a “living wage,” as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

VIII. WARRANTIES BY THE CONTRACTOR

- A. The Contractor warrants that the quality of its Services under this Agreement shall conform to the level of quality performed by persons regularly rendering this type of service.
- B. The Contractor warrants that it has all the skills, experience, and professional licenses (if applicable) necessary to perform the Services pursuant to this Agreement.
- C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services pursuant to this Agreement.
- D. The Contractor warrants that it has no personal or financial interest in the Project other than the fee it is to receive under this Agreement. The Contractor further certifies that it shall not acquire any such interest, direct or indirect, which would conflict in any manner with the performance of the Services it is to provide pursuant to this Agreement. Further Contractor agrees and certifies that it does not and will not employ or engage any person with a personal or financial interest in this Agreement.
- E. The Contractor warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes. Further Contractor agrees that the City shall have the right to set off any such debt against compensation awarded for Services under this Agreement.
- F. The Contractor warrants that its proposal for services was made in good faith, it arrived at the costs of its proposal independently, without consultation, communication or agreement, for the purpose of restricting completion as to any matter relating to such fees with any competitor for these Services; and no attempt has been made or shall be made by the Contractor to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition.

- G. The person signing this Agreement on behalf of Contractor represents and warrants that she/he has express authority to sign this Agreement for Contractor and agrees to hold the City harmless for any costs or consequences of the absence of actual authority to sign.

IX. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Contractor access to the Project area and other City-owned properties as required to perform the necessary Services under this Agreement.
- B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.

X. ASSIGNMENT

- A. The Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

XI. TERMINATION OF AGREEMENT

- A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice. The waiver of any breach by any party to this Agreement shall not waive any subsequent breach by any party.
- B. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to Contractor, except the obligation to pay for Services actually performed under the Agreement before the termination date.
- C. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The Contract Administrator shall give Contractor written notice of such non-appropriation within thirty (30) days after it receives

notice of such non-appropriation.

- D. The provisions of Articles VI and VIII shall survive the expiration or earlier termination of this Agreement for any reason. The expiration or termination of this Agreement, for any reason, shall not release either party from any obligation or liability to the other party, including any payment obligation that has already accrued and Contractor's obligation to deliver all Deliverables due as of the date of termination of the Agreement.

XII. REMEDIES

- A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
- B. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any agreement between the parties or otherwise.
- C. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.

XIII. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated below or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor

(insert name of Administering Service Area Administrator)

301 E. Huron St.
Ann Arbor, Michigan 48104

With a copy to: The City of Ann Arbor
ATTN: Office of the City Attorney
301 East Huron Street, 3rd Floor
Ann Arbor, Michigan 48104

XIV. CHOICE OF LAW AND FORUM

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

XV. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., Deliverables) prepared by or obtained by the Contractor as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Contractor as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Contractor.

XVI. CONFLICTS OF INTEREST OR REPRESENTATION

Contractor certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Contractor further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this Agreement.

Contractor agrees to advise the City if Contractor has been or is retained to handle any matter in which its representation is adverse to the City. The City's prospective consent to the Contractor's representation of a client in matters adverse to the City, as identified above, will not apply in any instance where, as the result of Contractor's representation, the Contractor has obtained

sensitive, proprietary or otherwise confidential information of a non-public nature that, if known to another client of the Contractor, could be used in any such other matter by the other client to the material disadvantage of the City. Each matter will be reviewed on a case by case basis.

XVII. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

XVIII. EXTENT OF AGREEMENT

This Agreement, together Exhibits A, B, and C, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party's failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.

XIX. ELECTRONIC TRANSACTION

The parties agree that signatures on this Agreement may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Agreement. This Agreement may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

XX. EFFECTIVE DATE

This Agreement will become effective when all parties have signed it. The Effective Date of this Agreement will be the date this Agreement is signed by the last party to sign it.

[REMAINDER OF PAGE LEFT BLANK; SIGNATURE PAGE FOLLOWS]

FOR CONTRACTOR

By _____
Type Name

Its

Date: _____

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Date: _____

Approved as to substance

Type Name
Service Area Administrator

Milton Dohoney Jr., Interim City Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

**EXHIBIT A
SCOPE OF SERVICES**

(Insert/Attach Scope of Work & Deliverables Schedule)

EXHIBIT B COMPENSATION

General

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:

(insert/Attach Negotiated Fee Arrangement)

**EXHIBIT C
INSURANCE REQUIREMENTS**

From the earlier of the Effective Date or the Commencement Date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall have, at a minimum, the following insurance, including all endorsements necessary for Contractor to have or provide the required coverage.

A. The Contractor shall have insurance that meets the following minimum requirements:

1. Professional Liability Insurance or Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.
2. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident
Bodily Injury by Disease - \$500,000 each employee
Bodily Injury by Disease - \$500,000 each policy limit
3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined
\$2,000,000 Per Project General Aggregate
\$1,000,000 Personal and Advertising Injury
4. Motor Vehicle Liability Insurance equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
5. Umbrella/Excess Liability Insurance shall be provided to apply in excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- B. Insurance required under A.3 and A.4 above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City for any insurance listed herein.

- C. Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and unqualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company; name(s), email address(es), and address(es) of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions, which may be approved by the City in its sole discretion; (c) that the policy conforms to the requirements specified. Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. If any of the above coverages expire by their terms during the term of this Agreement, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.