CITY OF GALENA, ILLINOIS

101 Green Street, Galena, Illinois 61036

SPECIFICATIONS FOR

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL
POOL PAINTING

CITY OF GALENA
101 GREEN STREET
GALENA, IL 61036

DUE:
10:00 A.M.
WEDNESDAY, FEBRUARY 20, 2019

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ADVERTISEMENT FOR BIDS

PROJECT:	**ALICE T. VIRTUE MEMORIAL POOL & CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING**
BID DATE:	**Wednesday, February 20, 2019**
BID TIME:	**10:00 A.M**.
BIDS RECEIVED BY OWNER:	City of Galena 101 Green Street Galena, IL 61036
BID OPENING:	Sealed bids will be publicly opened and read at City Hall, 101 Green Street, Galena, Illinois.
PROJECT DESCRIPTION:	Work to include wet sandblasting pool surface, painting with two-part epoxy paint with sand mix, and associated work at Alice T. Virtue Memorial Pool and Clint D. Sitzmann Memorial Kiddie Pool.
DOCUMENTS:	Plans, specifications, and bid forms may be obtained and inspected at the City of Galena, 101 Green Street, Galena, IL 61036. They are also available at www.cityofgalena.org under Departments/Engineering/Bid Documents. All contractors who intend to bid the project, must inform the city engineer if they download bid documents so any addenda can be issued.
CONDITIONS:	Bids will be on a total sum basis; segregated bids are not acceptable. Contractors for work under this Bid will obligate Contractor and subcontractors not to discriminate in employment practices.
BID SECURITY:	All bids must be accompanied by a bank draft, cashier's check, certified check, or bid bond payable to the City of Galena for 10 percent of the total amount of the bid.
PREVAILING WAGE:	All work done under this contract is subject to all requirements of the Department of Labor, State of Illinois, and must pay the prevailing wage rate as determined by the Department of Labor and the Owner.
DRUG FREE WORK PLACE	Contractors must comply with the Drug Free Workplace Act (Source: P.A. 86-1459.).

This invitation is given and published pursuant to authorization and direction of the City of Galena. The City of Galena reserves the right to reject any or all Bids or to waive any informalities in the bidding.

By Order of City of Galena, Illinois
Terry Renner, Honorable Mayor

INSTRUCTIONS TO BIDDERS

1. Defined Terms

Terms used in these Instructions to Bidders, which are defined in the standard General Conditions of the Construction Contract, have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to the OWNER, as distinct from a sub-bidder, who submits a bid to a Bidder. The term "Successful Bidder" means the lowest, qualified, responsible, and responsive Bidder to whom OWNER (on the basis of OWNERS evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

2. Copies of Bidding Documents

2.1 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement or Invitation to Bid may be obtained from the ENGINEER. The deposit will be refunded to document holders of record who return the Bidding Documents in good condition within thirty days after opening of Bids as stipulated by the Invitation to Bid.

2.2 Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3 OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. Qualifications of Bidders

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days of OWNER'S request written evidence, such as financial data, previous experience, present commitments and other such data a may be called for below or in the supplementary Instructions. Each Bid must contain evidence of Bidder's qualifications to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

4. Examination of Contract Documents and Site

4.1 It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance, or federal, state, and local Laws and Regulations that may affect cost, progress, performance, or furnishing of the Work, (c) study and carefully correlate Bidder's observations with the Contract Documents, and (d) notify ENGINEER of all conflicts, errors, or discrepancies in the Contract Documents.

4.2 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods., techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

4.3 All inquiries and questions about the contract documents are to be made in writing, preferably by email, sent to **Janelle Keeffer – Facilities Manager at: jkeeffer@cityofgalena.org**.

5. Interpretations and Addenda

5.1 All questions about the meaning or intent of the Contract Documents are to be directed to ENGINEER. Interpretations or clarifications considered necessary by ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by ENGINEER as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5.2 Addenda may also be issued to modify the Bidding Documents as deemed advisable by OWNER or ENGINEER.

6. Bid Security

Each Bid must be accompanied by Bid security made payable to OWNER in an amount of **ten percent** of the Bidder's maximum Bid price and in the form of a certified check or bank check or a Bid Bond (on form attached, if a form is prescribed) issued by a surety meeting the requirements of paragraph 5.1 of the General Conditions.

6.2 The Bid security of the successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required contract security, whereupon the Bid security will be returned. If the successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of the seventh day after the Effective Date of the Agreement or the forty-sixth day after the Bid opening, whereupon Bid security furnished by such Bidders will be returned. Bid security with Bids, which are not competitive, will be returned within seven days after the Bid opening.

7. Contract Time

The times for substantial Completion and final completion are set forth in the Agreement. It will be necessary for the successful Bidder to satisfy OWNER of Bidder's ability to achieve substantial completion and final completion within the times designated in the Agreement.

8. Liquidated Damages

Provisions for liquidated damages, if any, are set forth in the Agreement.

9. Substitute or "Or-Equal" Items

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to ENGINEER, until after the Effective Date of the Agreement.

10. Subcontractors, Suppliers and Others

10.1 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within seven days after the Bid opening submit to OWNER a list of all such Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work for which such identification is required.

Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each Subcontractor, Supplier, person or organization if requested by OWNER. If OWNER after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, either may before the Notice of Award is given request the apparent Successful Bidder to submit an acceptable substitute without any change in Bid price.

If apparent Successful Bidder declines to make any such substitution, OWNER may award contract to the next lower Bidder that proposes to use acceptable Subcontractors, Suppliers, and other persons and organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any Bidder. Any Subcontractor, Supplier, other person or organization listed and to whom OWNER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6 of the General Conditions.

10.2 In contracts where the Contract Price is on the basis of Cost-of-the-work Plus a Fee, the apparent Successful Bidder, prior to the Notice of Award, shall identify in writing to OWNER those portions of the Work that such Bidder proposes to subcontract and after the Notice of Award may only subcontract other portions of the Work with OWNER'S written consent.

10.3 No CONTRACTOR shall be required to employ any Subcontractor, Supplier, other person or organization against whom CONTRACTOR has reasonable objection.

11. Bid Form

11.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from City of Galena.

11.2 All blanks on the Bid Form must be completed in ink or by a typewriter.

11.3 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

11.4 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

11.5 All names must be typed or printed below the signature.

11.6 The bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

11.7 The address and telephone number for communications regarding the Bid must be shown.

12. Submission of Bids

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the project for which the Bid is submitted) and name and address of the Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

13. Modifications and Withdrawal of Bids

13.1 Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

13.2 If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with OWNER and promptly thereafter demonstrates to the reasonable satisfaction of OWNER that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

14. Opening of Bids

Bids will be opened and (unless obviously non-responsive) read aloud publicly. An abstract of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

15. Bids to Remain Subject to Acceptance

All bids will remain subject to acceptance for forty-five days after the day of the Bid opening, but OWNER may, in its sole discretion, release any Bid and return the Bid security prior to that date.

16. Award of Contact

16.1 OWNER reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all non-conforming, non-responsive, unbalanced, or conditional Bids. Also, OWNER reserves the right to reject the Bid of any Bidder if OWNER believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive, or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by OWNER. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

16.2 In evaluating Bids, OWNER will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

16.3 OWNER may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. OWNER also may consider the operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

16.4 OWNER may conduct such investigations as OWNER deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to OWNER'S satisfaction within the prescribed time.

16.5 If the contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by OWNER indicates to OWNER that the award will be in the best interests of the Project.

16.6 If the lowest Bid received exceeds the available funding, the OWNER reserves the right to negotiate the deduction of items necessary to meet funding limits with the lowest Bidder prior to award of contract.

16.7 If the contract is to be awarded, OWNER will give the Successful Bidder a Notice of Award within forty-five days after the day of the Bid opening.

17. Contract Security

Payment and performance bonds not required for described work.

18. Signing of Agreement

When OWNER gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement. Within fifteen days thereafter CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement to OWNER with the required Bonds. Within ten days thereafter OWNER shall deliver one fully signed counterpart to CONTRACTOR.

19. Sales and Use Taxes

OWNER is exempt from Illinois State Sales and Use Taxes on materials and equipment to be incorporated in the Work (exemption No. E9996-1725-02). Said taxes shall not be included in the Contract Price. Refer to Supplementary Conditions for additional information.

20. Retainage

Provisions concerning retainage and CONTRACTOR'S rights to deposit securities in lieu of retainage are set forth in the Agreement.

21. Waivers of Lien

CONTRACTORS shall hold OWNER safe and free from all claims and liens and shall deliver to the OWNER waivers of lien and CONTRACTOR'S affidavit, short form, embracing the labor and materials included in payments as requested by the Contractor.

22. Prevailing Wage

All work done under this Contract shall be subject to Illinois laws Relating to Prevailing Wages and Illinois Preference to Citizens on Public Works and Arbitration. Burden for compliance with these laws rests with the contractor.

Contractors and subcontractors on public works projects must submit certified payroll records on a monthly basis to the public body in charge of the construction project, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing records he or she knows to be false is a Class B misdemeanor. Refer also to Section 17 of General Requirements.

All contractors shall provide written notice to its subcontractors of their duty to comply with the prevailing wage rate. The contractor shall provide the City with verification of such notice.

23. Drug Free Workplace

All work done under this Contract must comply with the Drug Free Workplace Act
(Source: P.A. 86-1459.).

BID

Project Identification: **ALICE T. VIRTUE MEMORIAL POOL &**
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

Contract Identification and Number: **NA**

This Bid is submitted to:

City of Galena
101 Green Street
Galena, IL 61036

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with owner in the form included in the Contract Documents to perform and furnish all work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to BIDDERS, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for forty-five days after the day of Bid opening. BIDDER WILL SIGN AND SUBMIT THE AGREEMENT with the Bonds and other documents required by the Bidding Requirements within fifteen days after the date of OWNER's Notice of Award.

3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement that;

a. BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Date	Number
_____	_____

b. BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

c. BIDDER has studied carefully all reports and drawings of subsurface conditions and drawings of physical conditions which are identified in the Supplementary Conditions as provided in paragraph 4.0.2 of the General Conditions, ands accept the determination set forth in the Supplementary Conditions of the extent of the technical data contained in such reports and drawings upon which BIDDER is entitled to rely.

d. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, and studies (in addition to or to supplement those referred to in (c) above) which pertain to the subsurface or physical conditions at the site or otherwise may affect the Work as BIDDER considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.0.2 of the General Conditions; and no additional

examinations, investigations, explorations, tests, reports or similar information or data are or will be required by BIDDER for such purposes.

e. BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.0.3 of the General Conditions.

f. BIDDER has given OWNER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.

g. The Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.

h. Bidder is familiar with and is satisfied as to all federal, state and local laws and Regulations that may affect cost, progress, performance and finishing the work.

4. Bidder will complete work for the costs indicated in the table as follows (please see page 12):

ALICE T. VIRTUE MEMORIAL POOL & CLINT D. SITZMANN KIDDIE POOL PAINTING

Item No.	Description	Unit	Qty.	Unit Price	Total Amount
1	**COMBINED--ALL DEFINED POOL AREAS** **13,220 Square Feet (SF)—walls, floors, slope** A. Main Pool (includes Zero Depth Area + Deep End) B. Slide Tank **C.** Kiddie Pool Labor, materials and equipment necessary to sand blast surface of defined areas and then apply two coats of pool epoxy with sand to create a safe, non-slip surface. Provide warranty for work and recommended maintenance plan. Base bid is to do work for all defined areas prior to pool opening and in time for necessary curing and pool fill. Completion by May 15, 2019. 13,220 SF for floors, walls, and slope defined in Main Pool, Slide Tank See specifications on page 32.	SUM			
	Total Base Bid				
Alternates					
	NOTE: If contractor identifies any other necessary repairs or improvements, these can be priced on a time and material basis with a not to exceed total cost or by unit price and total cost.				
A	**KIDDIE POOL ONLY** **2,120 SF** Labor, materials and equipment necessary to sand blast surface of defined areas and then apply two coats of pool epoxy with sand to create a safe, non-slip surface.	Sum	1		
B	**KIDDIE POOL + ZERO DEPTH (to Expansion Joint) ONLY** **(6,750 ZD + 2,120 Kiddie Pool) = 8,870 SF** Labor, materials and equipment necessary to sand blast surface of defined areas and then apply two coats of pool epoxy with sand to create a safe, non-slip surface.	Sum	1		
	Total Alternates				

NOTE: All work must be completed by May 15, 2019 to allow for proper curing and fill of the pool to be open in time for Memorial Day Weekend (Sunday, May 26, 2019).

The projects outlined above present three different options for painting areas of the pool. Alternates are options *rather than* the main bid and *are not in addition to* the main bid.

The City has the right to reject all bids.

All specific cash allowances are included in the price (s) set forth above and have been computed in accordance with paragraph 11.0.3 of the General Conditions.

5. BIDDER agrees that the Work will be substantially completed and completed and ready for final payment in accordance with paragraphs 14.13 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

6. The following document is attached to and made a condition of this Bid:

Required Bid security in the form of _____.

7. Communications concerning this Bid shall be addressed to the address of the BIDDER indicated below. The following address:

_____

_____

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

Submitted on _____, 20 ____

Respectfully submitted:

_____ _____
Signature

_____ _____
Title

_____ _____
License Number Address
(If Applicable)

_____
Date

(SEAL if BID is by a corporation)

Attest: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal and

_____as Surety, are

hereby held and firmly bound unto _____ as OWNER

in the penal sum of _____ for the

payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed this _____ day of _____, 20 _____.

The Condition of the above obligation is such that whereas

the Principal has submitted to _____

a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

_____

_____

_____

NOW, THEREFORE,

a. If said Bid shall be rejected, or

b. If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims there under shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their property officers, the day and year first set forth above.

_____ (Legal Seal)
Principal

_____
Surety

By: _____

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR
ON THE BASIS OF A STIPULATED PRICE

THIS AGREEMENT is dated as of the **……..** in the year **2019** by and between the CITY OF GALENA, Illinois (hereinafter called OWNER) and **……** (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

1. Work

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL POOL PAINTING

The project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL POOL PAINTING

2. ENGINEER

The project has been designed by the FACILITIES MANAGER and CITY STAFF, City of Galena who is hereinafter called ENGINEER and who is to act as OWNER'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in condition with completion of the Work in accordance with the Contract Documents.

3. Contract Time

3.1 The Work will be substantially completed **four weeks after the commencement date** and completed and ready for final payment in accordance with article 14 of the General Conditions **one week after substantial completion**. **Commencement date will be the ……. and if there are issues in working with the weather or unforeseen issues, the time may be extended.**

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and the OWNER will suffer financial loss if the work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER **two hundred dollars ($200.00)** for each day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.

4. Contract Price

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents in current funds for the bid price of **…….**

5. Payment Procedures

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payment. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the 25th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work measured by the schedule of values established in paragraph 2.9 of the General Conditions (and in completed) or, in the event there is no schedule of values, as provided in the General Requirements.

5.1.1 Prior to Substantial Completion, progress payment will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold:

> 90% of Work completed. If Work has been 80% completed as determined by ENGINEER, and if the character and progress of the Work have been satisfactory to OWNER and ENGINEER, OWNER on recommendation of ENGINEER, may determine that as long as the character and progress of the Work remain satisfactory to them, there will be a reduction in the retainage on the remaining progress payments prior to Substantial Completion in an amount equal to 95% of the Work completed.
>
> 90% of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.0.2 of the General Conditions).

5.1.2 Upon Substantial Completion in an amount sufficient to increase total payment to CONTRACTOR to 95% of the Contract Price, less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.0.7 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the work in accordance with paragraph 14.0.7 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.0.7.

6. Interest

All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.

7. Contractor's Representations

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations.

7.1 CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

~~7.2 CONTRACTOR has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical condition which are identified in the Supplementary Conditions and accepts the determination of the extent of the technical data contained in such reports and drawings upon which CONTRACTOR is entitled to reply.~~

~~7.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in paragraph 7.2 above which pertain to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.0.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.~~

~~7.4 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.~~

7.5 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

7.6 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

8. Contract Documents

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

8.1 This Agreement.

8.2 Exhibits to this Agreement.

8.3 Performance and Payment Bonds.

8.4 Notice of Award.

8.5 Notice to Proceed.

8.6 General Requirements.

8.7 Supplementary Requirements

8.8 Specifications bearing the title:

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

8.9 Drawings, consisting of a cover sheet and sheets numbered 1, inclusive with each sheet bearing the following general title:

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

8.10 Addenda number 1 through 2 inclusive with each sheet bearing the following general title:

ALICE T. VIRTUE MEMORIAL POOL &
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

8.11 CONTRACTOR'S Bid and Bid Security.

8.12 Documentation submitted by CONTRACTOR prior to Notice of Award.

8.13 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents.

8.14 There are no Contract Documents other than those listed above in this article 8. The Contract Documents may only be amended, modified or supplemented as provided in article 3 of the General Conditions.

9. Miscellaneous

9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may not be

assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This Agreement will be effective **on …….**

OWNER	CONTRACTOR
City of Galena	
By _____	By _____
Mayor	
(Corporate Seal)	(Corporate Seal)
Attest _____	Attest _____
Address for giving notices:	Address for giving notices:
City of Galena 101 Green Street Galena, IL 61036	
(If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Agreement.)	License No. _____ Agent for service of process _____ (If CONTRACTOR is a Corporation, attach evidence of authority to sign.)

NOTICE OF AWARD

Dated:

To:

Address:

OWNER'S Project No.: **N/A**

Project: **ALICE T. VIRTUE MEMORIAL POOL &**
CLINT D. SITZMANN MEMORIAL KIDDIE POOL POOL PAINTING

Contract No: **N/A**

Contract for: **ALICE T. VIRTUE MEMORIAL POOL &**
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

* * * *

NOTICE TO PROCEED

Dated:

To:

Address:

OWNER'S Project No.: **NA**

Project: **ALICE T. VIRTUE MEMORIAL POOL &**
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

OWNER'S Contract No.: **N/A**

Contract for: **ALICE T. VIRTUE MEMORIAL POOL &**
CLINT D. SITZMANN MEMORIAL KIDDIE POOL PAINTING

* * * *

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1990 Edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemental remain in full force and effect.

SC-1
The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract (No. 1910-8, 1990 Edition) have the meanings assigned to them in the General Conditions.

SC 5.4
The limits of liability for the insurance required by Paragraph 5.4 of the General Conditions shall provide the following coverage's for not less than the following amounts or greater where required by Laws and Regulations:

5.4.1. and 5.4.2: Workers' Compensation, etc., under Paragraphs 5.4.1 and 5.4.2 of the General Conditions:

(1)	State:	Statutory
(2)	Applicable Federal (e.g., Longshoreman's):	Statutory
(3)	Employer's Liability	Bodily Injury by Accident - $1,000,000 Each Accident Bodily Injury by Disease - $1,000,000 Each Employee Bodily Injury by Disease - $1,000,000 Policy Limit

5.4.3, 5.4.4, and 5.4.5: Contractor's Liability Insurance under Paragraphs 5.4.3 through 5.4.5 of the General Conditions which shall also include completed operations and product liability coverage's:

(1)	General Aggregate (except products-completed operations)	$3,000,000
(2)	Products-Completed Operations Aggregate	$1,000,000
(3)	Personal and Advertising Injury (per person/organization)	$1,000,000
(4)	Each Occurrence (bodily injury and property damage	$1,000,000
(5)	Property Damage Liability insurance will provide explosion, collapse, and underground coverage's which applicable	Provide X, C, U Standard

(6) Excess Liability:

General Aggregate	$3,000,000
Each Occurrence	$1,000,000

5.4.6: Automobile Liability:

Combined Single Limit (bodily injury and property damage)	$1,000,000 each accident

SC 5.6

Delete Paragraph 5.6 of the General Conditions in its entirety and insert the following in its place.

5.6 CONTRACTOR shall purchase and maintain property insurance upon the Work at the site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall:

5.6.1 Include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and any other person or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

5.6.2 Be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, false work and Work in transit and shall insure against at least the following perils: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils as may be specifically required by the Supplementary Conditions.

5.6.3 Include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

5.6.4 Cover materials and equipment in transit for incorporation in the Work or stored at the site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER; and

5.6.5 Be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR and ENGINEER with thirty day's written notice to each other additional insured to whom a certificate of insurance has been issued.

The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph 5.6 shall comply with the requirements of GC-5.8. Revised 7/12/2016

GENERAL REQUIREMENTS

1. Drawings and Specifications

1.1 The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials, tools, equipment, and transportation necessary for the lawful and proper execution of the Work in accordance with the latest edition of the **"International Building Code", "Standard General Conditions of the Construction Contract" and "City of Galena Specifications"** unless otherwise specified, and all incidental work necessary to complete the Project in an acceptable manner, ready for lawful use, occupancy or operation by the City of Galena.

1.2 Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings. Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the City Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

2. Materials, Services and Facilities

2.1 It is understood that, except as otherwise specifically stated in the specifications, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

2.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.

2.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

2.4 Materials, supplies and equipment shall be in accordance with samples submitted by the Contractor and approved by the Engineer.

2.5 Materials, supplies or equipment to be incorporated into the Work shall not be purchased by the Contractor or the Subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

3. Inspection and Testing

3.1 All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with generally accepted standards, and as may be further required and defined in the Contract Documents.

3.2 The Contractor shall provide at his expense the testing and inspection services required by this specification.

3.3 If the specifications, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than

the Contractor, the Contractor will give the Engineer timely notice of readiness. The Contractor will then furnish the Engineer the required certificates of inspection, testing or approval.

3.4 Inspections, tests or approvals by the Engineer or others shall not relieve the Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

3.5 The City Engineer and his representatives will at all times have access to the Work. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.

3.6 If any Work is covered contrary to the written instructions of the City Engineer it must, if requested by the City Engineer, be uncovered for his observation and replaced at the Contractor's expense.

3.7 If the City Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the City Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the City Engineer may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate Change Order shall be issued.

4. Surveys, Permits, Regulations

4.1 The Contractor shall hire, at his expense, a licensed surveyor to furnish all boundary surveys and establish all base lines for locating the principal component parts of the Work together with a suitable number of bench marks adjacent to the Work.

4.2 From the information provided, unless otherwise specified, the Contractor shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

4.3 The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction’s, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

4.4 Permits and licenses of a temporary nature necessary for the prosecution of the Work shall be secured and paid for by the Contractor. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the City Engineer in writing, and any necessary changes shall be adjusted as provided in "Changes in the Work".

5. Protection of Work, Property and Persons

5.1 The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

5.2 The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the Work may affect them. The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

5.3 In emergencies affecting the safety of persons or the work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the City Engineer or owner, shall act to prevent threatened damage, injury or loss. He will give the City Engineer prompt written notice of any significant changes in the Work or deviations from the specifications caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved, provided that such emergency did not arise in whole or in part as a result of any act or omission of Contractor, any of its Subcontractors or any of the persons directly or indirectly employed by any of them.

6. Supervision

6.1 The Contractor will supervise and direct the work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.

7. Changes in the Work

7.1 The City of Galena may at any time, as the need arises, order changes within the scope of the Work without invalidating the Agreement.

7.2 The City Engineer, also may at any time, by issuing a Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the work so ordered by the Engineer.

8. Correction of Work

8.1 The Contractor shall promptly remove from the premises all work rejected by the City Engineer for failure to comply with the Specifications, whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the Work in accordance with the Specifications and without expense to the City of Galena and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

8.2 All removal and replacement Work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected work within ten (10) days after receipt of Written Notice, the City of Galena may remove such Work and store the materials at the expense of the Contractor.

9. Insurance

9.1 The Contractor shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's execution of the Work, whether such execution be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable:

9.1.2 Claims under Worker's Compensation, disability benefit and other similar employee benefit acts;

9.1.3 Claims for damages because of bodily injury occupational sickness or disease, or death of his employees;

9.1.4 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

9.1.5 Claims for damages insured by usual personal injury liability coverage which are sustained: (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and

9.1.6 Claims for damages because of injury to or destruction of tangible property, including loss or use resulting there from.

9.2 Certificates of Insurance acceptable to the City of Galena shall be filed with the City of Galena prior to commencement of the Work. These Certificates shall contain a provision that coverage’s afforded under the policies will not be canceled unless at least fifteen (15) days prior Written Notice has been given to the City of Galena.

9.3 The Contractor shall procure and maintain, at his own expense, during the Contract Time, liability insurance as hereinafter specified:

9.3.1 Contractor's General Public Liability and Property Damage Insurance including vehicle coverage issued to the Contractor and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contract Documents, whether such operations be by himself or by any Subcontractor under him, or anyone directly or indirectly employed by the Contractor or by a Subcontractor under him. Refer to Supplementary Conditions for written limits of liability.

9.4 The contractor shall procure and maintain, at his own expense during the Contract Time, in accordance with the provisions of the laws of the state in which the Work is performed, Workmen's compensation Insurance, including occupational disease provisions for all of his employees at the site of

the Project and in case any Work is sublet, the Contractor shall require such Subcontractor similarly to provide Workmen's compensation Insurance, including occupational disease provisions for all of the latter employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under Workmen's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

9.5 The contractor shall secure, if applicable, "All Risk" type Builder's Risk Insurance for Work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Price totaled in the Bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract Time, and until the Work is accepted by the City of Galena. The policy shall name as the insured the Contractor and the City of Galena

10. Indemnification

10.1 The Contractor will indemnify and hold harmless the City of Galena and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting there from; and is caused in whole or in part by any negligent or willful act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

10.2 In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workmen's Compensation Acts, Disability Benefit Acts or other employee benefits acts.

10.3 The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or approval of maps, Drawings, opinions, reports, surveys, Change Orders, designs or Specifications.

11. Engineer's Authority

11.1 The City Engineer shall act as the City of Galena's representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and Work performed. He shall interpret the intent of the Contract Documents in a fair and unbiased manner. The City Engineer will make visits to the site and determine if the Work is proceeding in accordance with the specifications.

12. Guarantee and Security

12.1 The Contractor shall guarantee all materials and equipment furnished and Work performed for a period of one (1) year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the City of Galena may do so and charge the Contractor the cost thereby incurred.

12.2 A Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the contract price, with a corporate surety approved by the City of Galena, will be required for the faithful performance of the Contract. Attorneys-in-fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each Bond a certified and effective dated copy of their power of attorney. Contractor shall guarantee the work for a period of one (1) year from date of final acceptance of the Work and the Performance Bond furnished by Contractor shall run for a like period.

12.3 The Performance Bond and Payment Bond shall be executed prior to construction in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the specifications and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the Work provided by the Contract Documents. Such Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact business in the state in which the Work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570, in the amount of the bonds supplied by such surety to not exceed the maximum amount shown for such surety in such publications. The expense of these Bonds shall be borne by the Contractor.

14. Periodic and Final Cleanup

14.1 From time to time or as may be ordered by the ENGINEER and immediately after completion of the Work, the Contractor shall at his own expense clean up and remove all refuse and unused materials of any kind resulting from the Work. Upon failure to do so within five (5) working days after receipt of written request from the Owner, the Work may be done by the Owner and the cost thereof be charged to the Contractor. Upon completion of the Work, the Contractor shall remove all his equipment and put the area of the Work in a neat and clean condition and do all other cleaning required to complete the Work in a workmanlike manner, ready for use and satisfactory to the City Engineer and City of Galena.

15. Final Inspection

15.1 A meeting at the job site shall be arranged by the ENGINEER and City Engineer for the purpose of Final Inspection. The Contractor's representative(s) in charge of overall field supervision will be required to attend. The purpose of the meeting shall be to determine whether the project is completed to the satisfaction of all parties. Any unsatisfactory items shall be documented in a letter to the Contractor for action. At this time the City of Galena will determine if the said alley will be open, as well as whether the issuance of the Building Occupancy permit will be approved.

16. Additional Work

16.1 All additional work to be in accordance with latest edition of the International Fire Code and local building codes. No additional work can be completed without authorization from the City Engineer. Contractor will inform City immediately or within 24 hours of any proposed change to the contract. Payment method will be agreed before additional work is completed and be based on unit prices, agreed lump sum or force account with hours agreed immediately or within 24 hours of proposed work. Force Account Form (see example) detailing the hours for labor and equipment is to be completed and submitted to City for approval within 24 hours of the proposed work being identified. When force account work is completed a breakdown of the labor, equipment and materials costs is to be submitted to the City. No payment for the force account work will be authorized until the breakdown sheet is received and approved.

Revised 1/2/2019

SPECIAL PROVISIONS / GENERAL NOTES

1. **Contractor must provide an insurance certificate when bid is awarded which complies with all requirements specified in Supplementary Conditions, including Builders Risk coverage if deemed appropriate**.

2. Refer also to all construction specifications listed in drawings and specification section of General Requirements.

3. **All inquiries and questions about the contract documents are to be in writing, preferably by email, sent to Janelle Keeffer – Facilities Manager at:** jkeeffer@cityofgalena.org.

4. Contractor to tidy up upon final completion of project.

5. Work must be completed to allow for proper curing, fill and opening by Memorial Day weekend 2019. Pool opening is targeted for Sunday, May 26, 2019. Requested completion for painting is May 15, 2019.

6. Pool plans have been included for reference.

7. Paint and application must be in compliance with current local, state, and federal codes for public swimming pools—in terms of paint type and also color.

8. Six pool drain covers will be replaced by April 15, 2019. Successful bidder will be kept apprised of pool drain replacement progress for optimal project scheduling.

9. Contractor must identify paint and products to be used in writing to the City of Galena and ensure that new paint is compatible with existing paint surface. Paint to be used should be equal to or as specked below. The City of Galena Public Works team used the following paint in 2018:
   a. SLIDE TANK STEPS
      —NO-71517-VB Olympic Zeron Epoxy / Viking Blue

   b. POOL PATCHES / FLOORS
      —Olympic KEL65 6208 White Poxolon2 + Catalyst
      —Olympic KEL65-6003 Poxoprime2 / Catalyst

   Contractor is responsible for researching and guaranteeing compatibility of products.

10. Areas of the pool:

    A. CLINT D. SITZMANN MEMORIAL KIDDIE POOL
    - Approximately 2,300 SF. Subtracting 189 SF for slide and gratings, leaving 2,120 SF.

    B. **ZERO DEPTH TO EXPANSION JOINT**
    - Approximately 6,750 SF.

    B. SLIDE TANK at base of water slide
    - Approximately 610 SF.
    - Elephant Armor coating applied in 2016; painted by Public Works in 2018.

CITY OF GALENA
WORK CHANGE DIRECTIVE

THIS FORM MUST BE COMPLETED ON SAME DAY AS WORK IS AGREED AND/OR COMPLETED

WORKS ORDER # ……. **DATE:** …….

PROJECT NAME: …….

CONTRACTOR: …….

CONTRACTOR'S REPRESENTATIVE: …….

DESCRIPTION OF EXTRA WORK:

METHOD OF PAYMENT:

PAYMENT METHOD	**CHECK ONE**	**PAYMENT DETAILS (UNIT COSTS, AMOUNT)**
UNIT PRICES		
LUMP SUM		
FORCE ACCOUNT		USE EXTRA WORK ORDER / TIME AND MATERIAL RECORD FORM PER IDOT STANDARD SPECIFICATIONS

ESTIMATED/AGREED CHANGE IN CONTRACT PRICE AND CONTRACT TIME:

CONTRACT PRICE: $ ……..

CONTRACT TIME (DAYS): .....

COMMENTS – ADDITIONAL INFORMATION:

CITY OF GALENA REPRESENTATIVE: CONTRACTORS REPRESENTATIVE

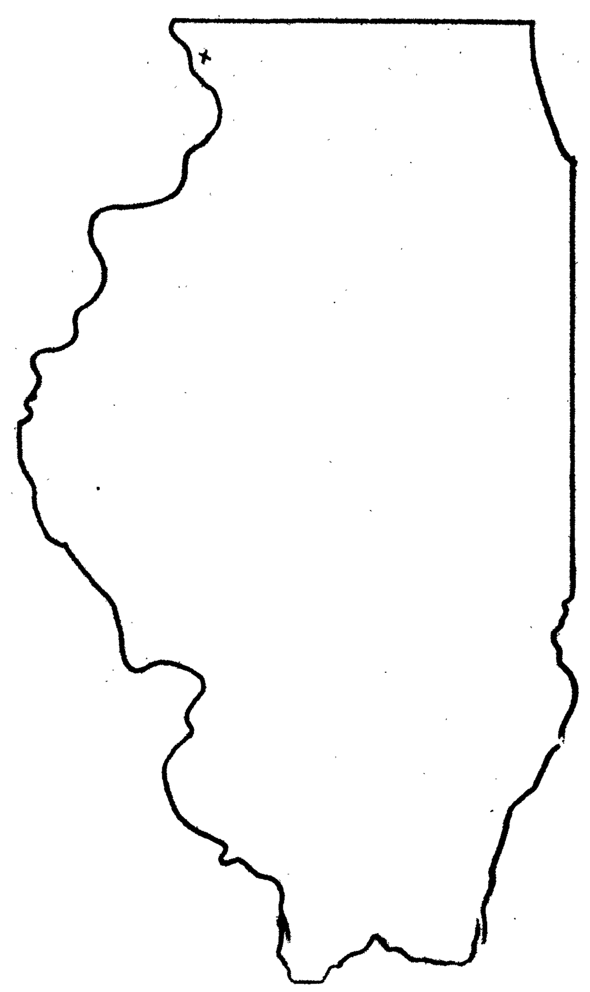
……..……City Engineer

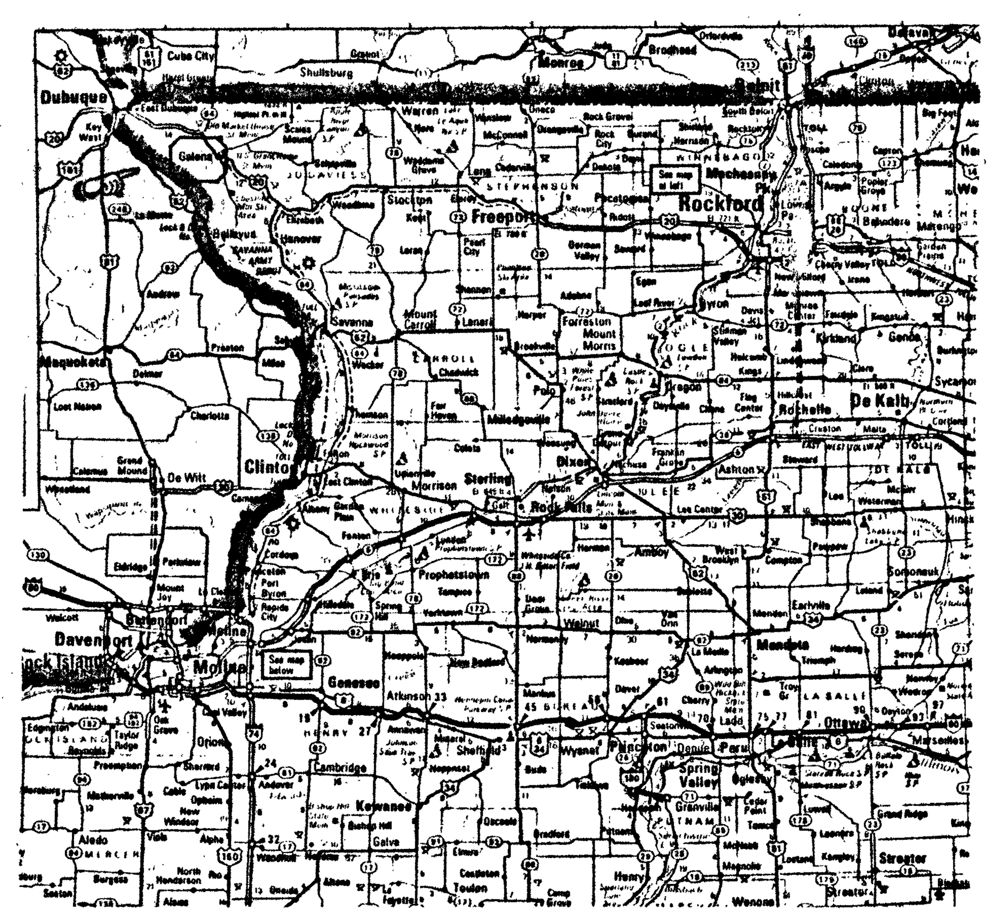
……

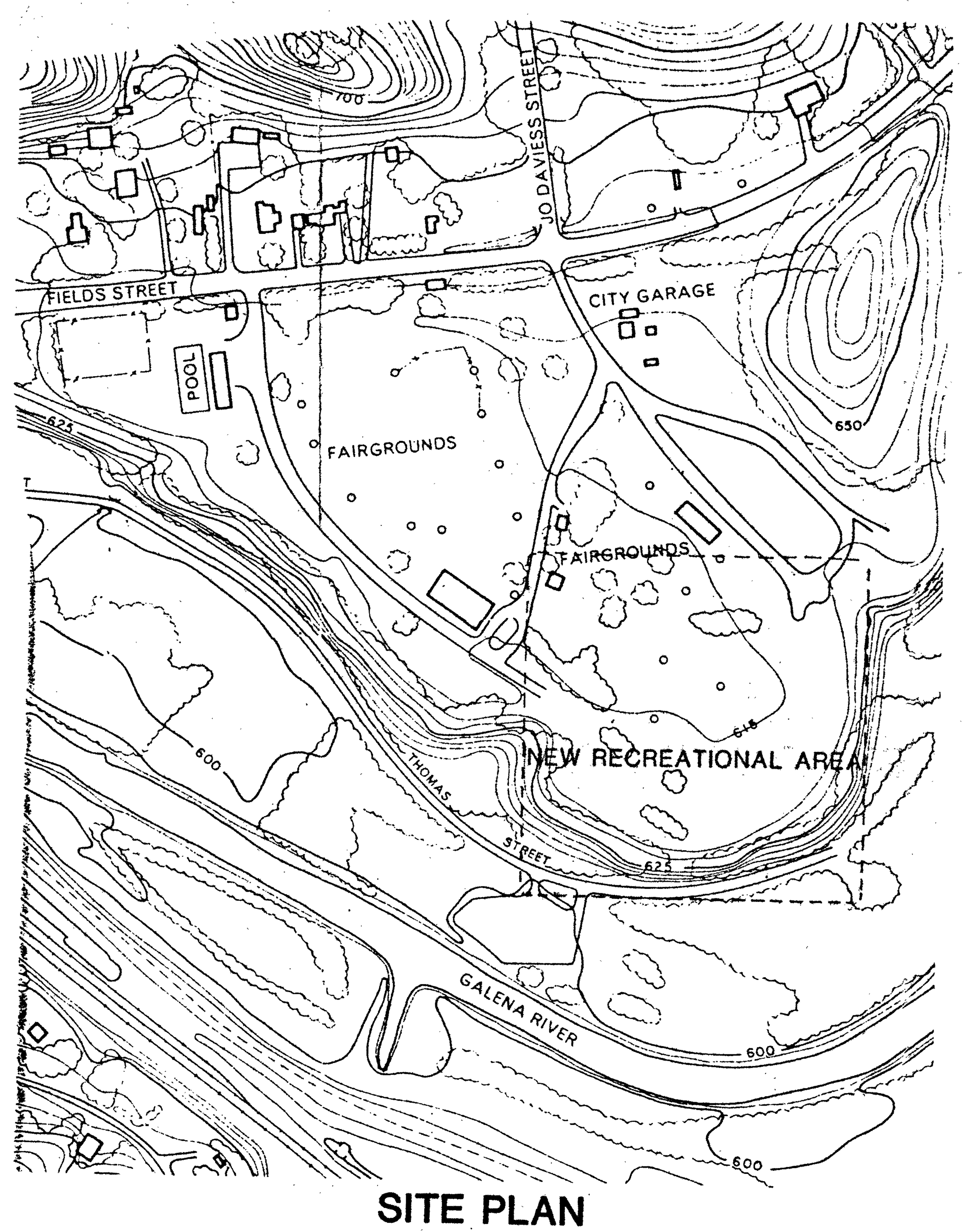
Signature and Title Signature and Title

WCR 2/26/10

CITY OF GALENA RECREATION PARK







SITE PLAN
SCALE: 1" - 60'0"

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M 6	MECHANICAL BUILDING PLUMBING SCHEMATIC
M-7	FILTRATION ISOMETRIC
M-8	ACTIVITY PUMP ISOMETRIC
M-9	

ELECTRICAL

E-1	MECHANICAL ROOM ELECTRICAL & NOTES

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATIONS WERE PREPARED BY ME AND I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.

R. G. WHITEAKER 62-23977 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

R. G. WHITEAKER
REGISTRATION # 062-023977
DATE 10-4-86

Received 10/13/86

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DESIGNERS • ENGINEERS
Water Amusements • Institutional Pools • Water Filtration • Mechanical Systems

CITY OF GALENA
RECREATION PARK
GALENA, ILLINOIS

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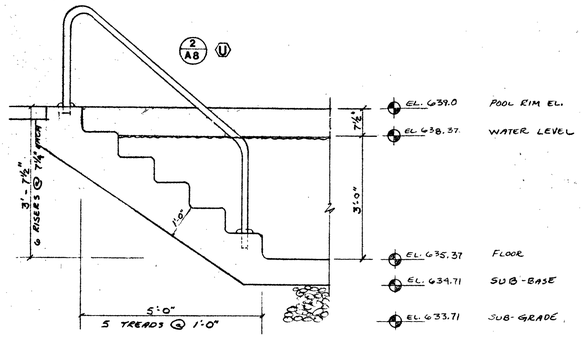
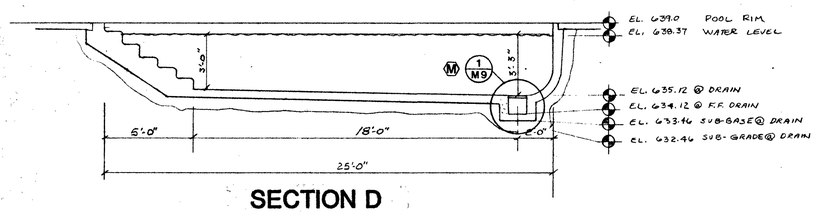
DATE	REVISON

DRAWN	LM
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	
JOB NO.	13886
SHEET TITLE	
SHEET NO.	



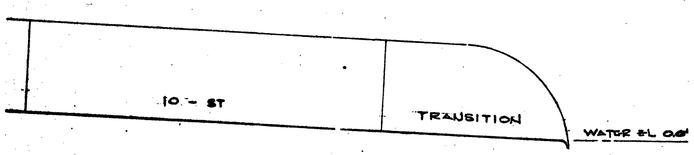
STAIR DETAIL

SCALE: 1/2" - 1'0"



SECTION D

SCALE: 1/4" = 1'0"



FLUME ENTRY DETAIL

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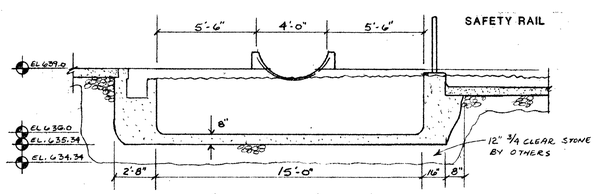


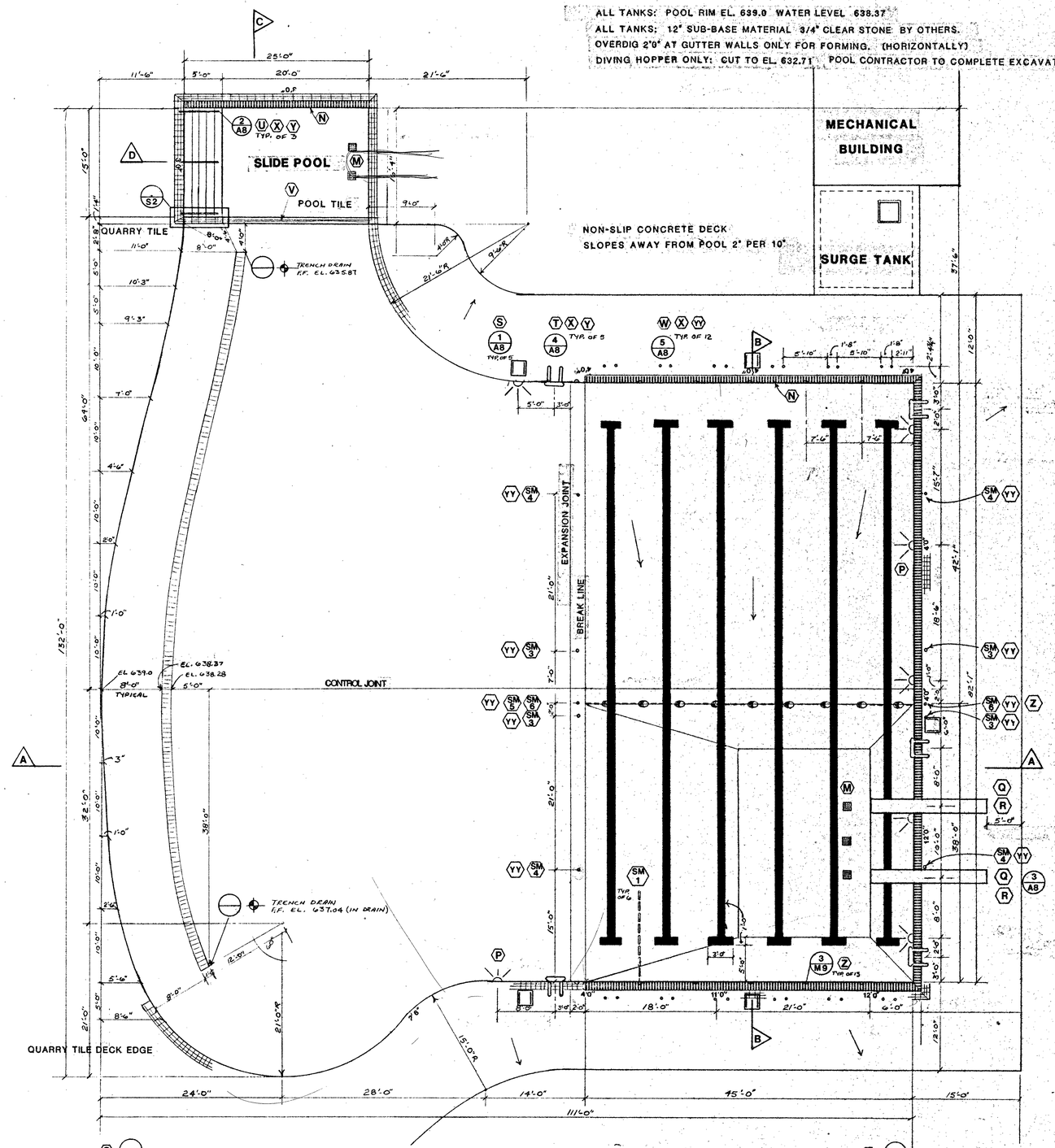
SECTION C

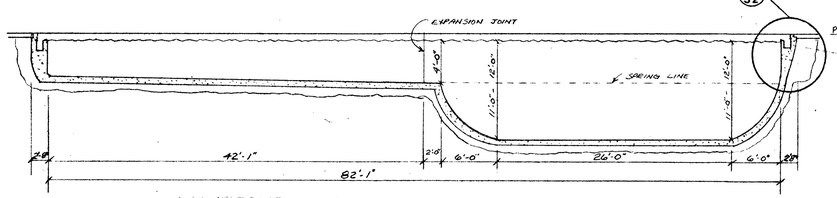
SCALE: 1/4" = 1'0"

WATER CIRCULATES FREELY BETWEEN POOLS WHEN PLUNGE POOL IS OPERATING.

EXCAVATION NOTES:

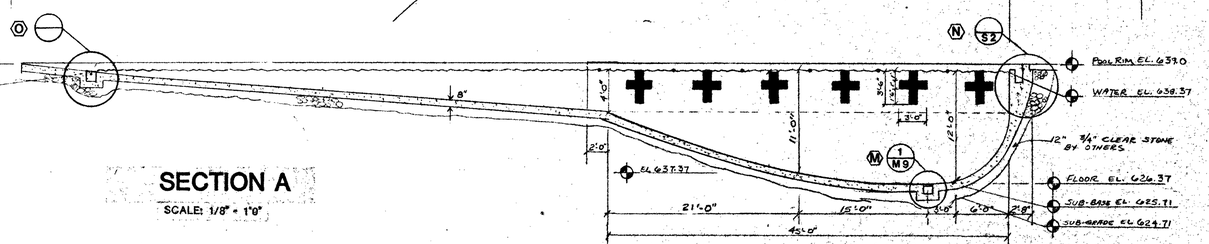
ALL TANKS: POOL RIM EL. 639.0 WATER LEVEL 638.37
ALL TANKS: 12" SUB-BASE MATERIAL 3/4" CLEAR STONE BY OTHERS.
OVERDIG 2'0" AT GUTTER WALLS ONLY FOR FORMING. (HORIZONTALLY)
DIVING HOPPER ONLY: CUT TO EL. 632.71 POOL CONTRACTOR TO COMPLETE EXCAVATION





SECTION B

SCALE: 1/8" = 1'0"



SECTION A

SCALE: 1/8" = 1'0"

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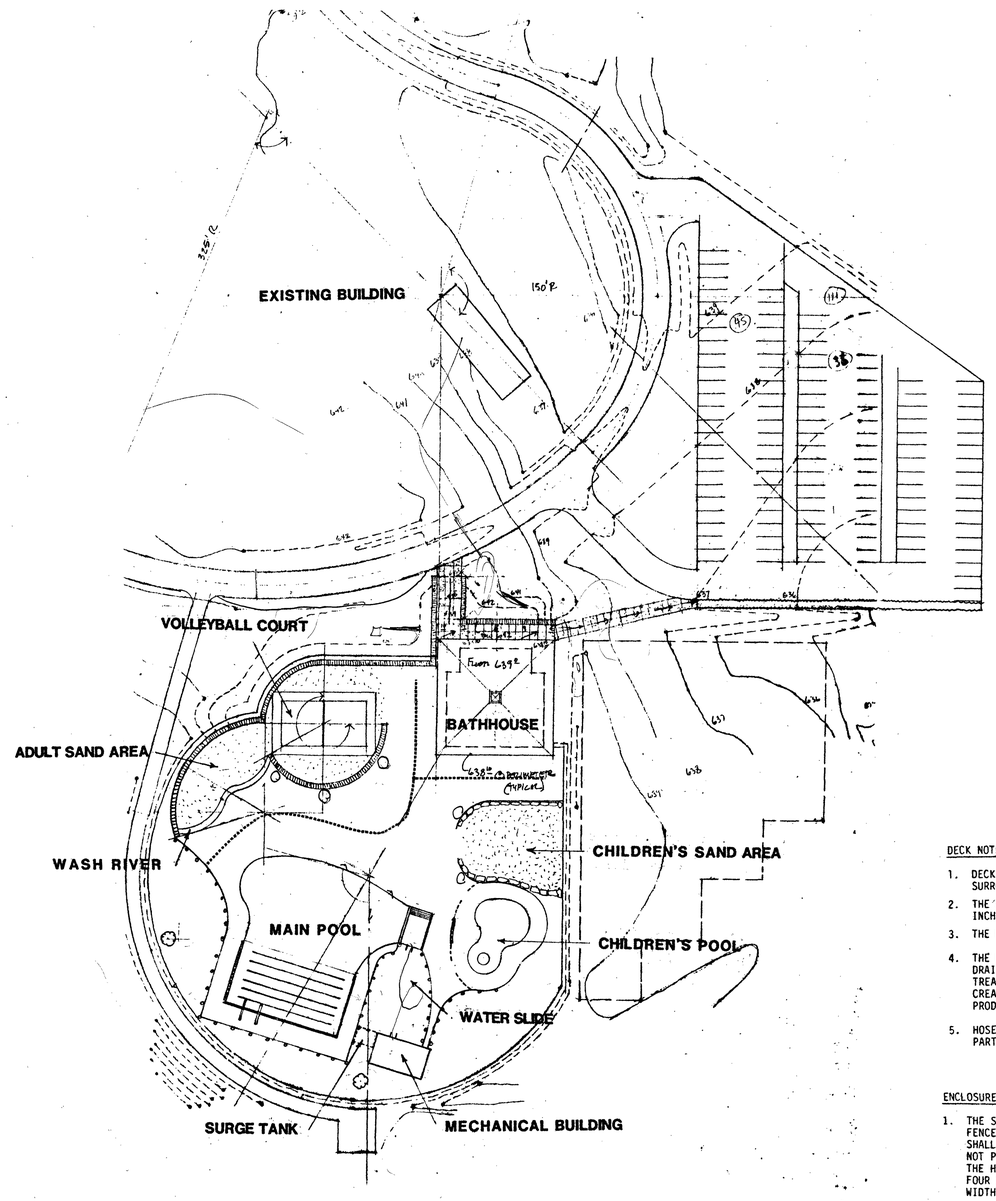
DATE	REVISION
7-16-86 LM	TRENCH DRAIN PLACEMENT
9-30-86 LM	SLIDE POOL SIZE DIMENSION
10-10-86 LM	HOPPER DIMEN.

DRAWN	LM
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	1/8" - 1'0"
JOB NO.	13886
SHEET TITLE	ACTIVITY & SLIDE POOL PLAN VIEW
SHEET NO.	A-3



DECK NOTES

1. DECK SHALL SLOPE AT LEAST TWO INCHES PER TEN FEET TO DECK DRAINS OR TO THE SURROUNDING GROUND SURFACE.
2. THE OUTER PERIMETER OF THE DECK FOR OUTDOOR POOLS SHALL BE AT LEAST FOUR INCHES HIGHER THAN THE SURROUNDING GROUND SURFACE.
3. THE DECKS AND WALKWAYS SHALL HAVE A PAVED, NON-SLIP SURFACE.
4. THE DECK DRAINAGE WATER MAY BE DISCHARGED DIRECTLY TO STORM SEWERS, NATURAL DRAINAGE AREAS, SEEPAGE PITS OR THE THE FOUND SURFACE WITHOUT ADDITIONAL TREATMENT. SUCH DRAINAGE SHALL NOT RESULT IN NUISANCE CONDITIONS WHICH CREATE AN OFFENSIVE ODOR, OR WHICH PRODUCE A STAGNANT WET AREA, OR WHICH PRODUCE AN ENVIRONMENT FOR THE BREEDING OF INSECTS.
5. HOSE BIBBS WITH VACUUM BREAKERS SHALL BE PROVIDED FOR CLEANING OF ALL PARTS OF THE POOL AND DECK (MAXIMUM SEPARATION 150 FEET).

ENCLOSURES

1. THE SWIMMING POOL AREA SHALL BE COMPLETELY ENCLOSED BY A PROTECTIVE WALL, FENCE OR OTHER BARRIER. THE ENTIRE BARRIER, INCLUDING DOORS AND GATES SHALL BE AT LEAST FOUR FEET HIGH MEASURED ON THE INSIDE AND OUTSIDE, SHALL NOT PROVIDE READY FOOTING FOR CLIMBING, AND SHALL PREVENT PASSAGE THROUGH IT. THE HEIGHT OF AN OPENING UNDER THE BOTTOM OF THE BARRIER SHALL NOT EXCEED FOUR INCHES. THE OPENINGS IN ANY BARRIER SHALL NOT EXCEED FOUR INCHES IN WIDTH.
2. EACH ENTRANCE SHALL BE EQUIPPED WITH A DOOR OR GATE THAT IS SELF-CLOSING AND SELF-LATCHING.

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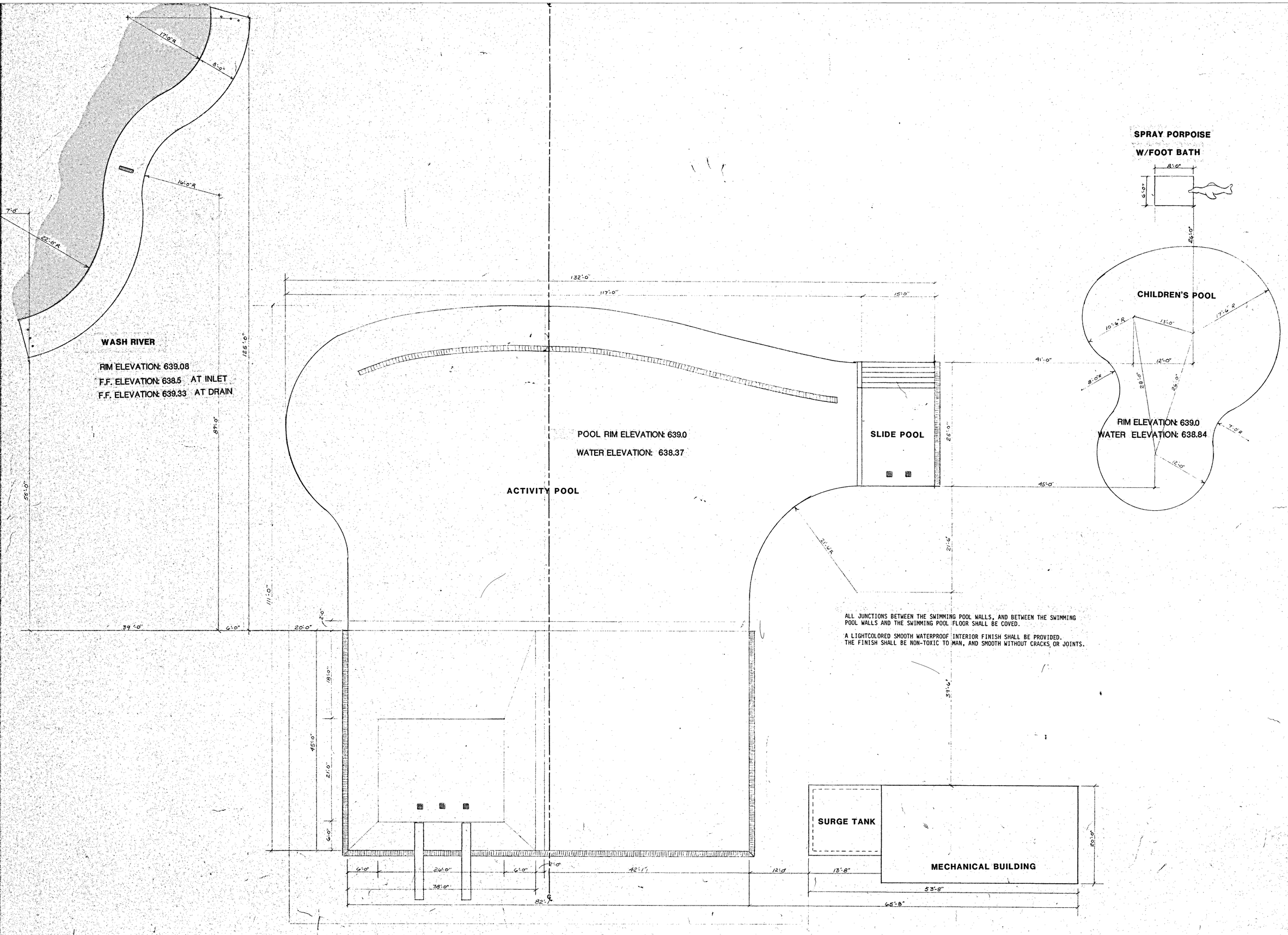
DATE	REVISION

DRAWN LM
CHECKED
APPROVED
DATE 10-4-86
SCALE 1" - 50'0"
JOB NO. 13886
SHEET TITLE
SITE PLAN
SHEET NO.
A-1



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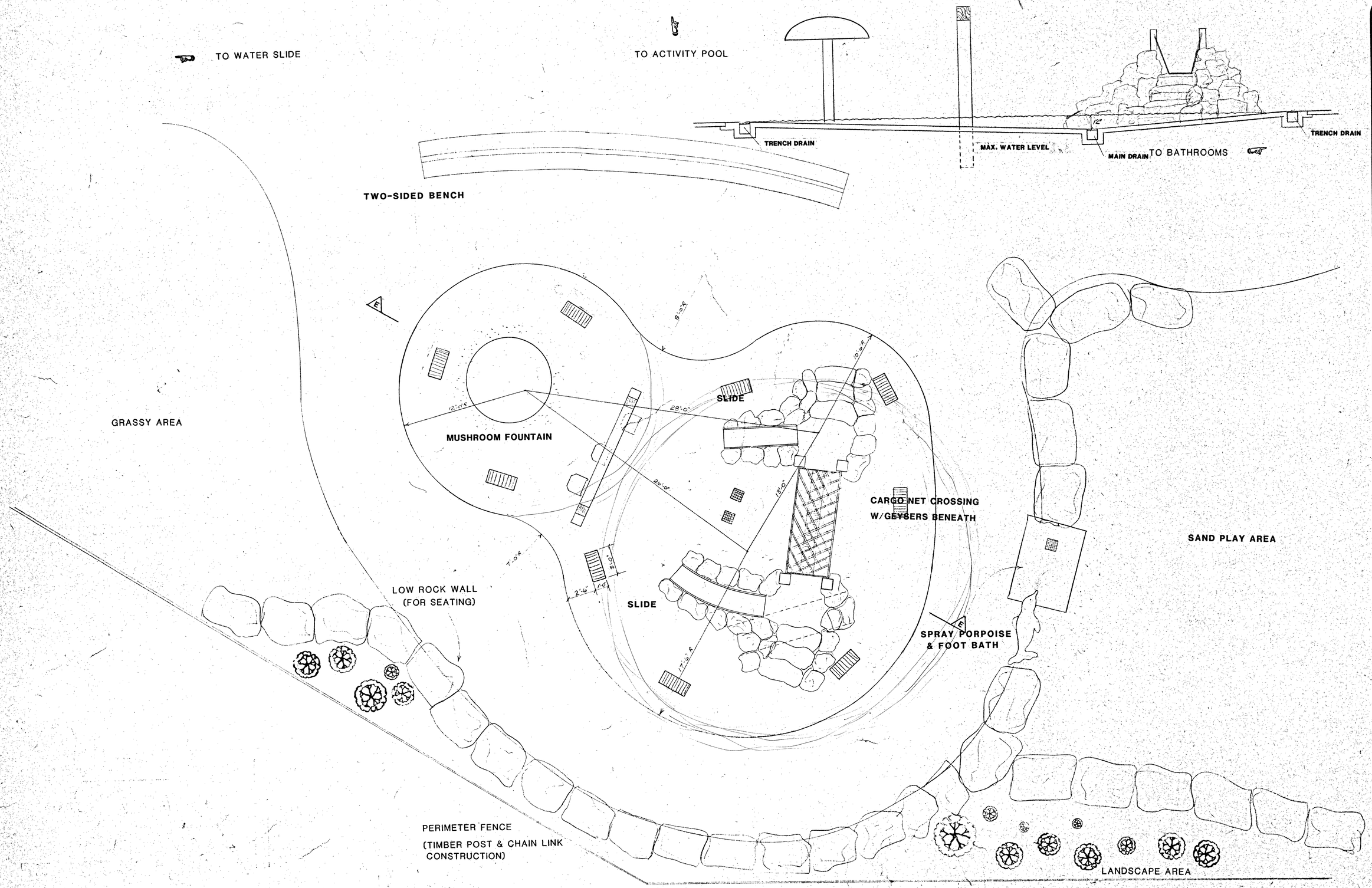
DRAWN LM
CHECKED
APPROVED
DATE 10-4-86
SCALE 1/8" - 1'0"
JOB NO. 13886
SHEET TITLE
POOL SITE PLAN

SHEET NO.
A-2



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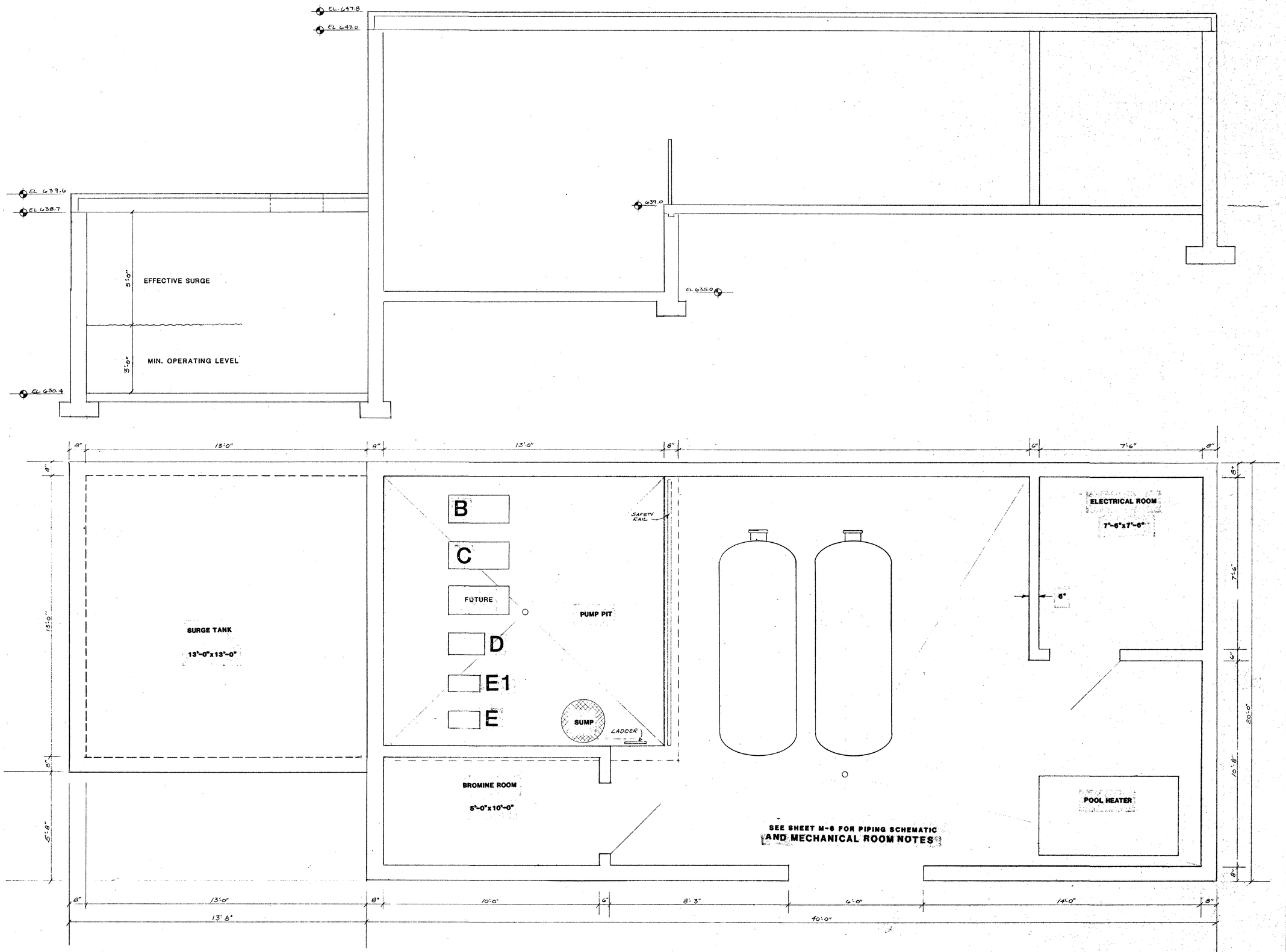
DATE	REVISON

DRAWN LM
CHECKED
APPROVED
DATE 10-4-86
SCALE 1/4" - 1'0"
JOB NO. 13886
SHEET TITLE
CHILDREN'S POOL PLAN VIEW
SHEET NO.
A-4



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DATE	REVISION
10-10-86 LM	SURGE NOTES

DRAWN T. P.
CHECKED
APPROVED
DATE 10-4-86
SCALE 1/4" = 1'-0"
JOB NO. 13886
SHEET TITLE
MECH. BLDG. PLAN & ELEVATION
SHEET NO.
A-7

1 CANTILEVER GUARD CHAIR

Guard Chair shall be cantilever (15") design bolted to a pre-set base.

The Guard Chair shall be fabricated of:

SUPPORT COLUMN – 5-9/16" O.D. x .258" wall pipe with ⅜" plate top and bottom flanges. Flanges shall be gusseted to pipe with ⅜" plate. Four uni-weld steps 3/16" x 8" x 20" shall be welded to the column on 12" centers. Each step shall have a self adhesive non-slip pad attached.

FIBERGLASS PLATFORM – 1¾" x 30" x 42" with non-slip top surface shall be bolted between top flange and ¼" plate seat assembly flange.

SEAT ASSEMBLY – 3" Sch 40 pipe welded to ⅜" flange to accept base of formed fiberglass seat. A 1½" Sch 40 bent pipe serving as both a handgrip and umbrella holders shall be welded to the 3" pipe.

HANDRAILS – 1¼" O.D. x .049" wall S/S tube with mirror finish extending the length of the column and bolting to pipe adapters welded to the column.

PRE-SET BASE – 5-9/16" O.D. X .258" wall pipe welded to ⅜" plate flange. Plate shall have welded threaded inserts to accept 5 ⅜" diameter cadmium plated securing bolts.

All bolted connections have red rubber gaskets between mating surfaces.

All steel parts shall be sand blasted before receiving one coat of red oxide primer.

Complete installation instructions supplied with each unit.

MODEL NO.	DESCRIPTION
CAT-LG-100	Carbon Steel Guard Chair with S/S Handrails
CAT-LG-101	All S/S superstructure. (Made of S/S 304, polished to satin finish)
CAT-LG-102	Carbon Steel Parts Hot Dipped Galvanize Recommended for Indoor Use

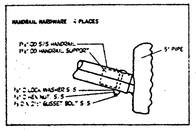
SHIPPING WEIGHT: 330 lbs.

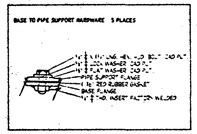
CANTILEVER GUARD CHAIR

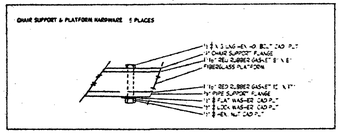
Installation Instructions

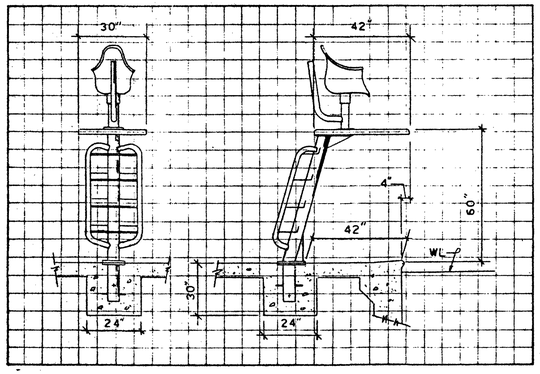
1. Excavate to dimensions shown.
2. Set-back dimension (42") may vary to suit owner's requirements & or deck conditions.
3. Place base assembly in excavation. Be sure flange is set so longest overhang is toward pool.
   A. Leave bolts in base as shipped to keep threads clear.
   B. Level & stabilize assembly.
4. Pour concrete – Level & adjust base if necessary before concrete sets.

   ALLOW 24 HOURS BEFORE PROCEEDING.
5. Paint pipe stand & seat with two finish coats.
6. Bolt on non-slip treads using flat washers & acorn nuts provided.
7. Bolt on handrails using 2½" long S/S gusset bolts.
8. Bolt post to base flange using gasket between flanges.
9. Bolt platform & seat post to top flange using gaskets between flanges.

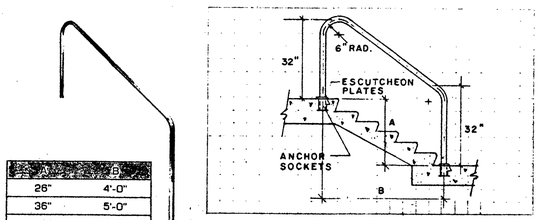








2 2-BEND STANDARD HANDRAIL



A	B
26"	4'-0"
36"	5'-0"
46"	6'-0"

CUSTOM HANDRAILS:
Handrails shall be fabricated of 1.90" O.D. x .065" wall, 304 S/S tube with mirror finish. All bends shall be 6" radius.

Custom dimension handrails are available on a Special Order basis. Customer to specify "A" and "B" dimensions. Horizontal and vertical cross braces are also available upon request.

MODEL NO.	DESCRIPTION	SHIPPING WEIGHT
2HR-4-065	4' 2-Bend (.065 Wall)	20 lbs.
2HR-4-049	4' 2-Bend (.049 Wall)	15 lbs.
2HR-5-065	5' 2-Bend (.065 Wall)	25 lbs.
2HR-5-049	5' 2-Bend (.049 Wall)	20 lbs.
2HR-6-065	6' 2-Bend (.065 Wall)	30 lbs.
2HR-6-049	6' 2-Bend (.049 Wall)	25 lbs.

3 SWAN DELUXE ONE METER TOWER

One Meter Tower shall be cantilever (15" angle) for all aluminum fiberglass and wood 14' and 16' springboards, and shall bolt to a pre-set base assembly.

The Tower shall be fabricated of:

FRONT SUPPORT COLUMN – 10¾" O.D. x .250" wall pipe, welded to top and bottom ⅜" plate flanges.

REAR SUPPORT COLUMNS – Two 1.90" O.D. x .145 wall, mirror finish S.S pipes shall support rear of tray and connect to hand rail to make continuous rail. There shall be two 6" wide S.S. non-slip treads bolted to the support pipes.

PLATFORM TRAY – 3 16" plate formed tray reinforced with ⅜" plates front and rear.

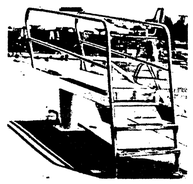
BASE ASSEMBLY – Integral all welded unit, the front pipe 10¾" O.D. with a ⅜" plate flange. The two sections joined by 1.90" O.D. pipe and two 1½" x 1½" x ⅛" angles.

ADJUSTABLE FULCRUM – Model GAF 100 hand operated adjustable fulcrum shall be provided.

BOARD TIE DOWN ASSEMBLY – Mounted in neoprene blocks and arranged so that the board is able to tilt up approximately 45°. A 1½" pipe brace shall be provided which shall fit into a socket on the tray. This brace shall support the springboard while in the raised position.

HANDRAILS – Shall run the full length of the tray and be of 1.90" O.D. mirror finish S.S pipe. Front end of rail shall bolt to the tray, rear end shall bolt to support pipes.
The Tower shall bolt to the base assembly with four ⅜" dia. bolts at the front flange and four ½" dia. S.S bolts in each of the rear pipe flanges. Red rubber gaskets shall be placed between all mating surfaces.

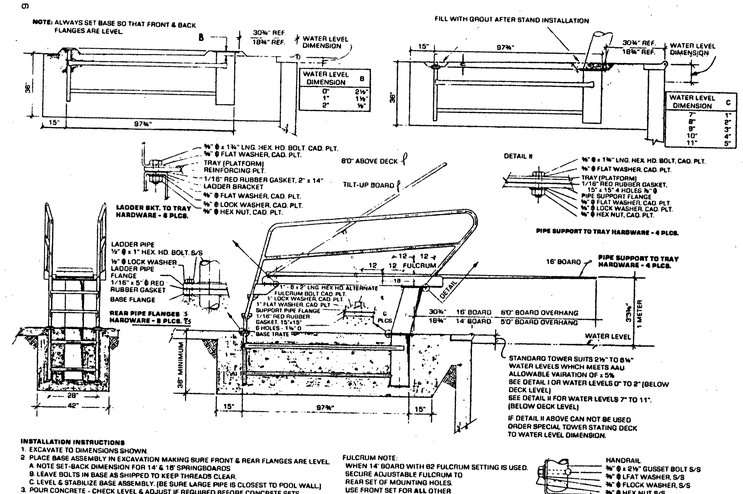
The standard tower is suited for pools with water levels 2⅜" to 6½" below the deck line (suits AAU height variation). Installation drawing sent on request, shows method of installing base so that standard tower can be used when water levels is from 0" to 11" below the deck level.



MODEL NO.	DESCRIPTION
CAT-1M-200	Carbon Steel Tower with S.S handrails and ladder
CAT-1M-201	All S.S superstructure (Made of S.S 304 polished to satin finish)
CAT-1M-202	Carbon Steel Parts Hot Dipped Galvanize Recommended for Indoor Use

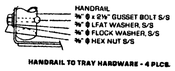
BD	DVG	A
14	5	18¼"
16	5	42½"
16	6	30¼"

SHIPPING WEIGHT: 1045 lbs.



INSTALLATION INSTRUCTIONS
1. EXCAVATE TO DIMENSIONS SHOWN.
2. PLACE BASE ASSEMBLY IN EXCAVATION MAKING SURE FRONT & REAR FLANGES ARE LEVEL.
   A. NOTE SET-BACK DIMENSION FOR 14' & 18' SPRINGBOARDS
   B. LEAVE BOLTS IN BASE AS SHIPPED TO KEEP THREADS CLEAR.
   C. LEVEL & STABILIZE BASE ASSEMBLY. (BE SURE LARGE PIPE IS CLOSEST TO POOL WALL)
   ALLOW MINIMUM OF 24 HOURS BEFORE PROCEEDING
1. ASSEMBLE LADDER MAKING UP BOLTS HAND TIGHT.
2. REMOVE BOLTS FROM BASE FLANGES - ERECT FRONT PIPE & LADDER MAKING BOLTS HAND TIGHT
3. PLACE PLATFORM ON SUPPORTS & MAKE UP BOLTS WITH WRENCH.
   ALLOW MINIMUM OF 48 HOURS BEFORE DIVING USE.

FULCRUM NOTE:
WHEN 14' BOARD WITH 82 FULCRUM SETTING IS USED SECURE ADJUSTABLE FULCRUM TO REAR SET OF MOUNTING HOLES.
USE FRONT SET FOR ALL OTHER 14' & 16' SPRINGBOARDS.



HANDRAIL TO TRAY HARDWARE - 4 PLCS.

4 COMMERCIAL LADDERS – 24", 30", 36"

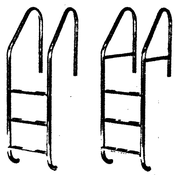
STANDARD (LF)
Ladder frames shall be fabricated of 1.90" O.D. x .065" wall, 304 S/S tube with mirror finish. All bends shall be 6" radius. Ladder frames shall extend from pool wall 6½". Upper ends of ladder frames shall be fastened to the pool deck with 2 anchor sockets on 20" centers. Lower ends of ladder frames shall be bent to meet pool wall, fitted with 2 white rubber bumpers.

CROSS BRACE (LFB)
Cross brace shall be continuously welded to front and rear legs by tungsten inert gas process.

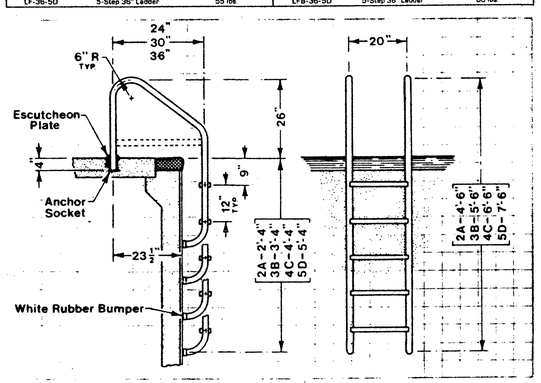
All welds, sharp corners and edges shall be ground smooth and polished to a mirror finish after fabrication.

Treads shall be 3" wide x 1¼" deep x 20" long, .049" 304 S/S mirror finish with permanently bonded non-slip, non-skid surface. Each end of tread shall have a 95° radius with a 25/64" dia. hole. Treads shall be bolted to ladder frame 12" apart with (2) ⅜" dia. gusset bolts.

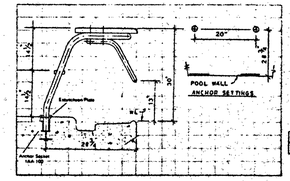
Order anchor sockets and escutcheons separately.

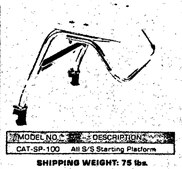


STANDARD			CROSS BRACE		
MODEL NO.	DESCRIPTION	SHIPPING WEIGHT	MODEL NO.	DESCRIPTION	SHIPPING WEIGHT
LF-24-2A	2-Step 24" Ladder	28 lbs.	LFB-24-2A	2-Step 24" Ladder	35 lbs.
LF-24-3B	3-Step 24" Ladder	32 lbs.	LFB-24-3B	3-Step 24" Ladder	38 lbs.
LF-24-4C	4-Step 24" Ladder	36 lbs.	LFB-24-4C	4-Step 24" Ladder	43 lbs.
LF-24-5D	5-Step 24" Ladder	40 lbs.	LFB-24-5D	5-Step 24" Ladder	48 lbs.
LF-30-2A	2-Step 30" Ladder	33 lbs.	LFB-30-2A	2-Step 30" Ladder	40 lbs.
LF-30-3B	3-Step 30" Ladder	36 lbs.	LFB-30-3B	3-Step 30" Ladder	45 lbs.
LF-30-4C	4-Step 30" Ladder	42 lbs.	LFB-30-4C	4-Step 30" Ladder	50 lbs.
LF-30-5D	5-Step 30" Ladder	47 lbs.	LFB-30-5D	5-Step 30" Ladder	55 lbs.
LF-36-2A	2-Step 36" Ladder	40 lbs.	LFB-36-2A	2-Step 36" Ladder	45 lbs.
LF-36-3B	3-Step 36" Ladder	45 lbs.	LFB-36-3B	3-Step 36" Ladder	50 lbs.
LF-36-4C	4-Step 36" Ladder	50 lbs.	LFB-36-4C	4-Step 36" Ladder	55 lbs.
LF-36-5D	5-Step 36" Ladder	55 lbs.	LFB-36-5D	5-Step 36" Ladder	60 lbs.



5 INSTITUTIONAL CANTILEVER STARTING PLATFORM





MODEL NO.	DESCRIPTION
CAT-SP-100	All S/S Starting Platform

SHIPPING WEIGHT: 75 lbs.

Starting Platform shall be constructed of 304 S/S pipe and tube with mirror finish and all welded construction. Platform shall fasten to pool deck in two model IAA-100 Anchor Assemblies.

Starting Platform shall be fabricated of:

FRAME – 1.90" O.D. x .145" wall 304 S/S pipe with mirror finish. All bends shall be 6" radius. Legs shall be drilled for ⅜" diameter S/S securing pin of anchor assembly.

BACKSTROKE BAR – 1" O.D. x .065" wall S/S tube with mirror finish. All bends shall be 4" radius. Bar shall be drilled for (4) ½"-13 S/S carriage bolts for fastening to frame.

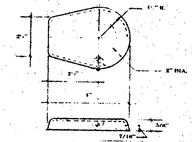
PLATFORM – 20" x 24" fiberglass wood core with permanent non-slip top surface. Platform bolts to frame with 4 ½"-13 S/S carriage bolts.

TREAD – 1¼" x 3" x 20" long .049" thick 304 S/S with permanently bonded non-slip surface pads. Each end of tread shall have a .95" radius with 25/64" hole. Treads shall be bolted to frames with two 3/8" S/S gusset bolts.

Note: Customer shall state type of gutter and deck to water level dimension when ordering.

25

6 INSTITUTIONAL ESCUTCHEON PLATE



Escutcheon plate shall be ⅜" deep x 4" long with a 2" dia. hole to fit 1.90" O.D. 304 S/S tubing.

Escutcheon plate shall be chrome plated cast bronze, wall thickness of 1/16" to 1/8" with a 1/4" dia. tapped hole.

Escutcheon plate shall be held firmly in place with one ¼" – 20 S/S set screw.

All sharp corners and edges shall be eliminated.

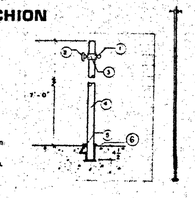
MODEL NO.	DESCRIPTION
IEP-100	Institutional Escutcheon Plate

SHIPPING WEIGHT: 1 lb.

7 FALSE START STANCHION

False start stanchion shall consist of:

PART NO.	DESCRIPTION
1	Stainless steel eye bolt with ⅜" eye
2	Aluminum hand wheel with ⅜" S/S set screw round nosed
3	2" adjustable S/S collar bend
4	1½" Sch. 40, 304 S/S with mirror finish. One end tapped
5	Bronze Anchor Socket
6	Escutcheon Plate

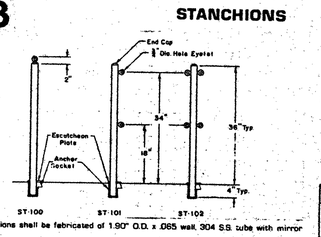


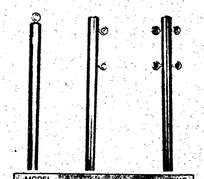
False start stanchion shall be fabricated as shown in plans. Welding shall be by Tungsten inert gas process, ground smooth and polished after fabrication.

MODEL NO.	DESCRIPTION
FSS-100	False Start Stanchion

SHIPPING WEIGHT: 25 lbs.

8 STANCHIONS





Stanchions shall be fabricated of 1.90" O.D. x .065 wall, 304 S.S. tube with mirror finish.

Custom dimension stanchions are available on a special order basis. Customer to specify dimensions or provide a drawing.

Order anchor sockets and escutcheons separately.

MODEL NO.	DESCRIPTION	SHIPPING WEIGHT
ST-100	Stanchion with (1) eye bolt	6 lbs.
ST-101	Stanchion with (2) eye bolts	6 lbs.
ST-102	Stanchion with (4) eye bolts	7 lbs.

29

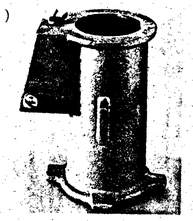
9 STAINLESS STEEL COVER PLATE

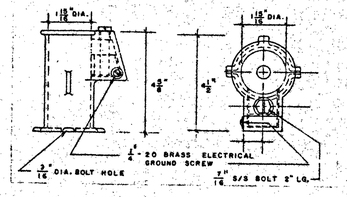
Plate shall be machined from ¼", 304 S/S plate. Plate shall have a ⅛" dia. hole counterbored 3/16" deep x ¾" dia. to accept a 7/16" x 2" long S/S bolt.

One side of plate shall be polished to a mirror finish with all corners and edges ground smooth after fabrication.

MODEL NO.	DESCRIPTION	SHIPPING WEIGHT
CP-100	Stainless Steel Cover Plate	8 oz.

10 INSTITUTIONAL ANCHOR SOCKET





MODEL NO.	DESCRIPTION
IAS-100	Cast Bronze

SHIPPING WEIGHT: 3 lbs.

Anchor socket shall be cast bronze consisting of one ¼"-20 brass ground screw and washer, one brass wedge drilled and tapped for 7/16" dia. thin head S/S bolt, 304 S/S designed to accept 1.90" O.D. tube.

Anchor socket shall be to exact size and shape as shown in plans.

All corners and edges shall be smooth and rounded after fabrication.

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P.O. Box 514, Beaver Dam, Wisconsin 53916
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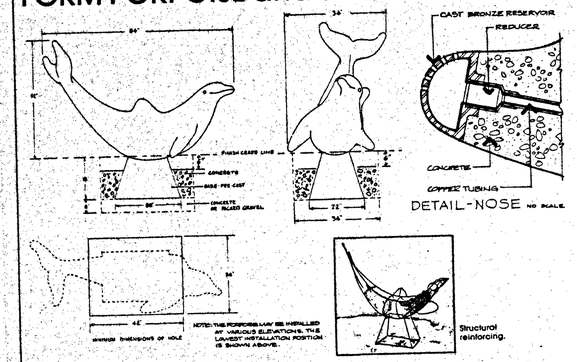
DATE 10-4-86
SCALE
JOB NO. 13886
SHEET TITLE
DECK EQUIPMENT DETAILS
SHEET NO.
A-8

FORM PORPOISE and SPRAY PORPOISE



DETAIL-NOSE NO SCALE

SPECIFICATIONS

I. GENERAL

A. MANUFACTURER'S QUALIFICATIONS AND EXPERIENCE: Manufacturers of this product to be prequalified by the specifying architect, and be defined as those businesses manufacturing and installing reinforced precast concrete Porpoises or approved equal. Product from said manufacturer to have five (5) years of proven field application - working and in good appearance.

B. ILLUSTRATIVE AND TECHNICAL DATA: Bidder to submit complete illustrative and technical data on product dimension, materials, concrete strength reports, installation and delivery methods. Failure to furnish such data prior to accepted proposal will void the bid.

II. SPECIFICATIONS FOR PORPOISE AND SPRAY PORPOISE

A. SCOPE: Furnish labor, equipment, material and perform all operations in connection with the manufacture and/or installation of Porpoise and Spray Porpoise.

B. MATERIALS AND FABRICATION

1. Quality of Concrete: Air entrainment of concrete to be 4 - 6%. Cured concrete shall attain minimum compressive strength of 4,000 p.s.i. at 28 days, when tested on a 6" x 12" cylinder according to ASTM - Designation 39-49.
2. Reinforcing and Anchoring: Reinforcing to be designed and engineered for maximum structural support and connected to all anchoring devices.

C. PRODUCT APPEARANCE AND WEIGHT

1. Sculptured configuration to meet tolerances within 1/4" of specified dimensions per sec. I-B.
2. Finish of formed surface to be smooth and free of all abrasions and sealed as per manufacturer's field proven recommendations and installation.
3. Weight of the Porpoise and Spray Porpoise shall be approx. 1400 lbs.

D. INSTALLATION

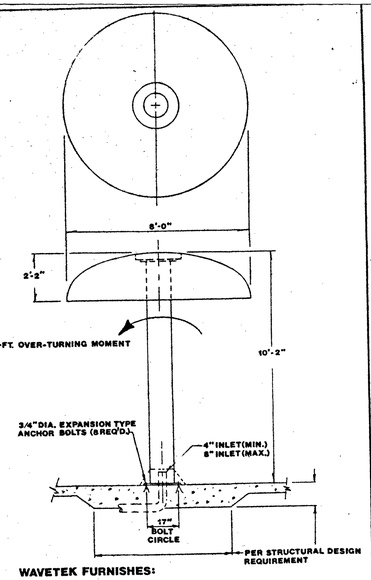
1. Footings: To be installed at location of anchoring recesses as per requirements of sec. I-B.
2. Delivery: Manufacturer shall provide equipment for delivery and unloading at the jobsite location.

FORM PRODUCTS DIVISION OF WAUSAU TILE, INC.

Mfrs: WAUSAU TILE
P.O. Box 1520 • Wausau, WI 54401
715/359-3121

© Wausau Tile 1982

Form FP-186 3M RG



WAVETEK FURNISHES:

A. UMBRELLA WITH STAINLESS FASTENERS
B. STEM & SKIRT (STAINLESS)
C. ANCHOR DEVICES
D. GASKETS
E. PUMP & ELECTRICAL COMPONENTS (OPTIONAL)

OTHERS FURNISH:

A. INSTALLATION OF STEM & UMBRELLA
B. FOUNDATION
C. PIPING TO STEM
D. PUMP & ELECTRICAL SERVICES (OPTIONAL)
1. 290 GPM

SHIPPING WEIGHT: 650 LB.

NO.	REVISION	DATE	CK. BY
1			
2			
3			
4			

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WAVETEK AUTOMATION SYSTEMS, INC.

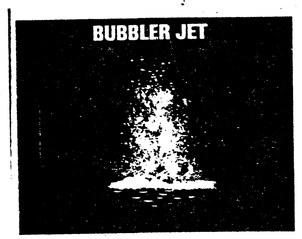
PROJECT: RAINDROP

DESCRIPTION:

B1046

DRAWN	DG	BY
CHECK	K.P.	DATE
APPROVE		
PROJ. ENGR.		

BUBBLER JET



The Imperial Bronzelite BUBBLER JET produces a pulsating mound of highly aerated water that lends itself well to applications where splash is a critical factor or wind conditions are unfavorable.

This jet is often used in multiples to accent a primary effect.

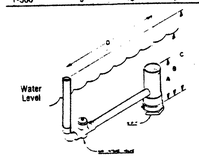
Material: Brass.

performance data

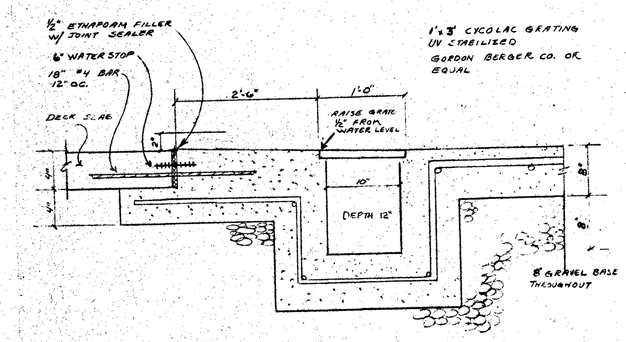
Model	Mound Height	Mound Diam.	G.P.M.	Head
T-150	18"	15"	45	10'
T-300	42"	30"	130	25'

dimensions

Model	A	B	C	D	N.P.T.
T-150	4½"	8½"	10"	12"	1½"
T-300	9"	13"	15"	18"	3"



BUBBLER JET



TRENCH DRAIN DETAIL

SCALE: 1 1/2" - 1' 0"

CHILDRENS PLAY AREA

TRENCH DRAIN NOTES

1. TRENCHES 10" WIDE WITH 1" LIP AROUND PERIMETER TO ACCEPT GORDON BERGER CO. 1" PVC GRATING. THE GUTTER GRATING SHALL BE HIGH IMPACT PVC EXTRUSION, COLOR FAST, AND UV RESISTANT. STANDARD SECTION LENGTH TO BE 3'-0". GRATING SHALL BE LOCKED IN PLACE WITH VANDAL-PROOF FASTENERS. THE GRATING SHALL BE LOCKED IN PLACE BY USE OF A SEPARATE COMPRESSIBLE EXTRUSION, BUT BE EASILY ACCESSIBLE BY USE OF A SPECIAL HOOKED TOOL WHICH SHALL BE PROVIDED.
2. GRATING RAISED ½" ALONG DECK SIDE OF TRENCH.
3. THICKEN POOL FLOOR SLAB AND ROLLBACK DECK SLAB TO 8" AT TRENCH FOR 12".
4. CONTINUOUS WATERSTOP REQUIRED BETWEEN TRENCH FLOOR AND WALL (IF NOT MONLITHIC).
5. IF WALL SECTIONS POURED SEPARATELY, CONTINUOUS WATERSTOP REQUIRED BETWEEN TRENCH WALLS AND POOL FLOOR SLAB AND TRENCH WALLS AND ROLLBACK DECK SLAB.
6. PROVIDE PVC WATERSTOP WHERE PVC PIPE PENETRATES TRENCH END WALL.
7. ALL TRENCH DRAIN PIPE SCHEDULE 40 PVC. MINIMUM 6" CONCRETE COVER AND 2" GRANULAR FILL OVER PIPE REQUIRED.

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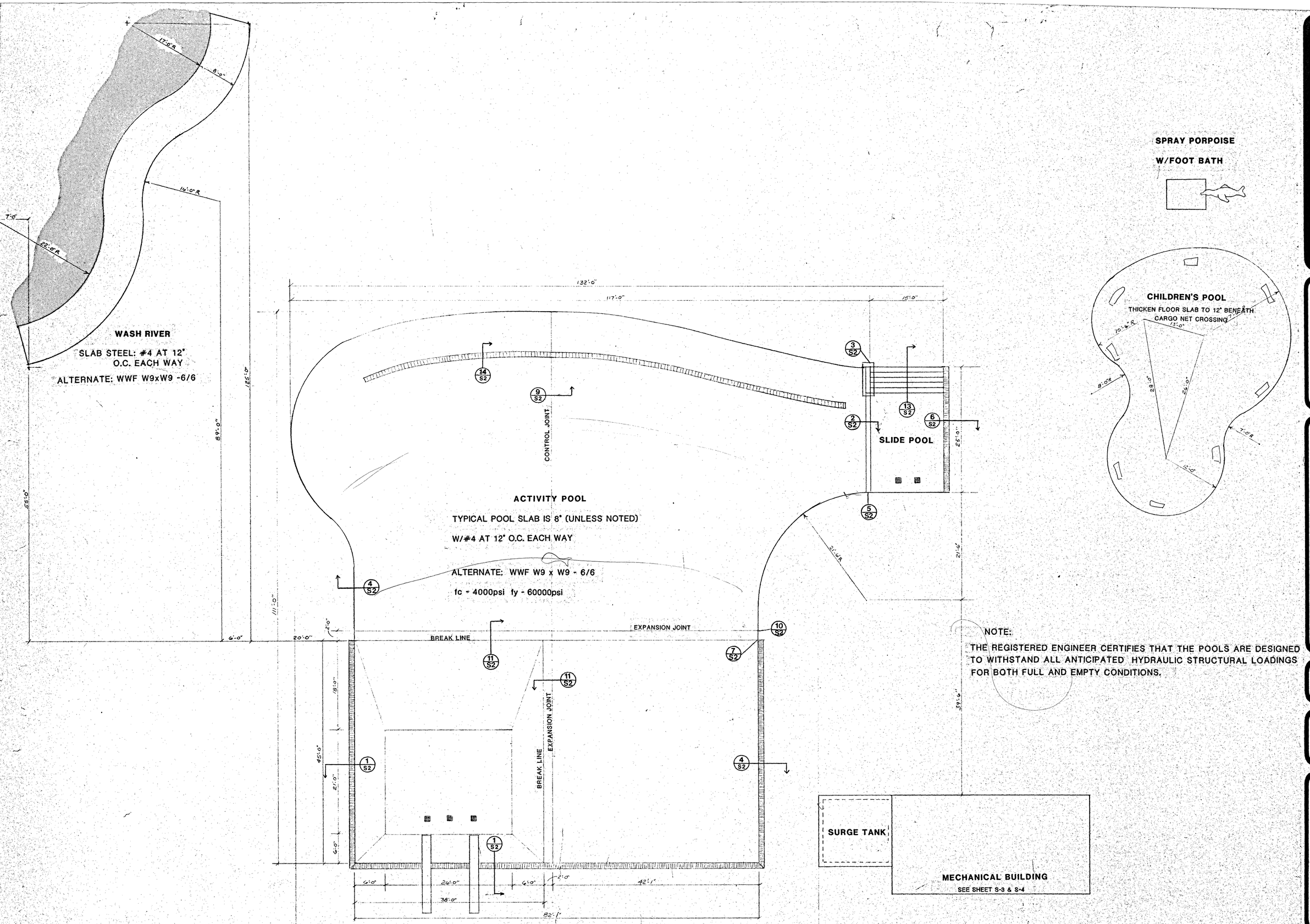
JOB NO. 13886
SHEET TITLE
CHILDREN'S AREA DETAILS
SHEET NO.
A-9



NOTE:

THE REGISTERED ENGINEER CERTIFIES THAT THE POOLS ARE DESIGNED TO WITHSTAND ALL ANTICIPATED HYDRAULIC STRUCTURAL LOADINGS FOR BOTH FULL AND EMPTY CONDITIONS.

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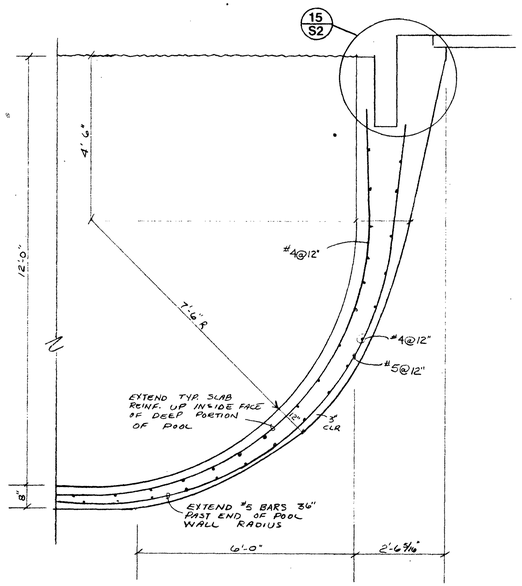
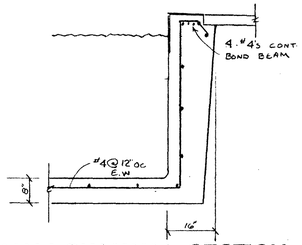
JOB NO. 13886
SHEET TITLE
POOL SITE PLAN

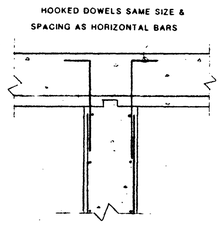
SHEET NO.
S-1



1 DEEP SECTION

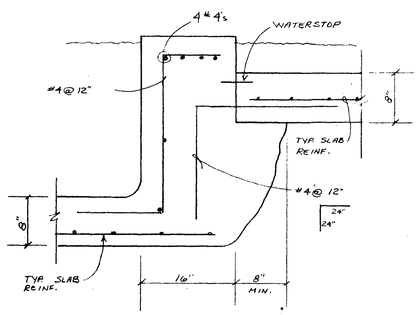


4 SHALLOW WALL SECTION

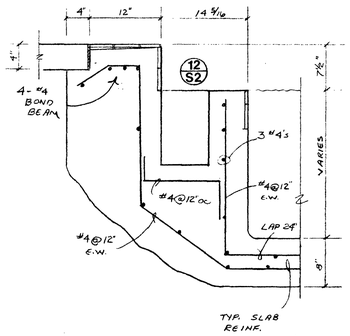


5 TYPICAL WALL INTERSECTION

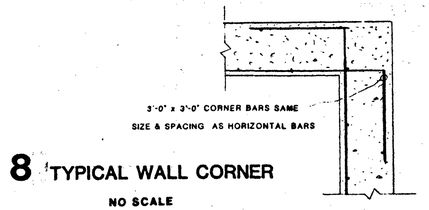
NO SCALE



2 WEIR WALL SECTION

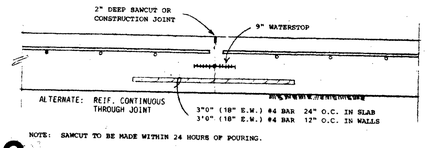


6 SHALLOW GUTTER WALL

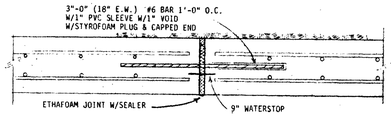


8 TYPICAL WALL CORNER

NO SCALE

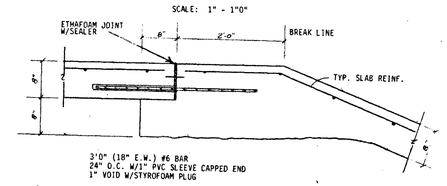


9 CONSTRUCTION OR CONTROL JOINT

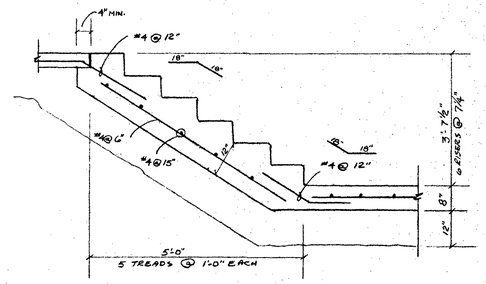


10 WALL EXPANSION JOINT

SCALE: 1" - 1'0"

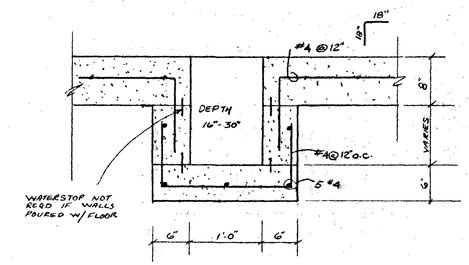


11 FLOOR EXPANSION JOINT



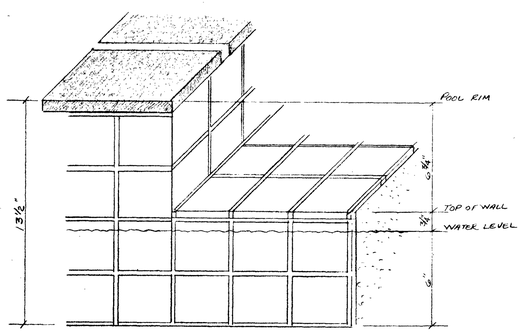
13 STAIR SECTION

SCALE: 1/2" = 1'-0"

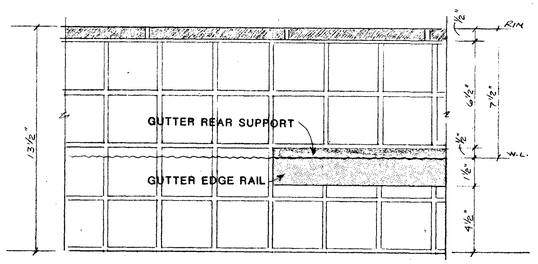


14 TRENCH DRAIN

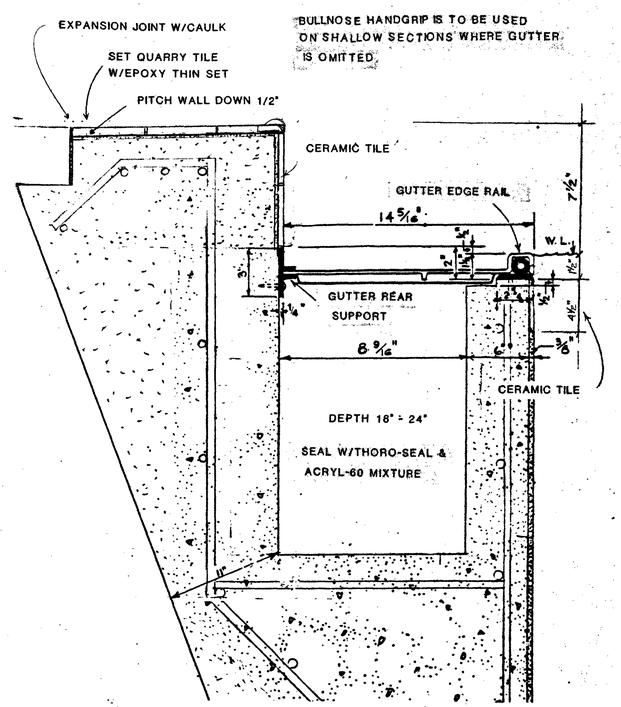
SCALE: 1/2" = 1'-0"



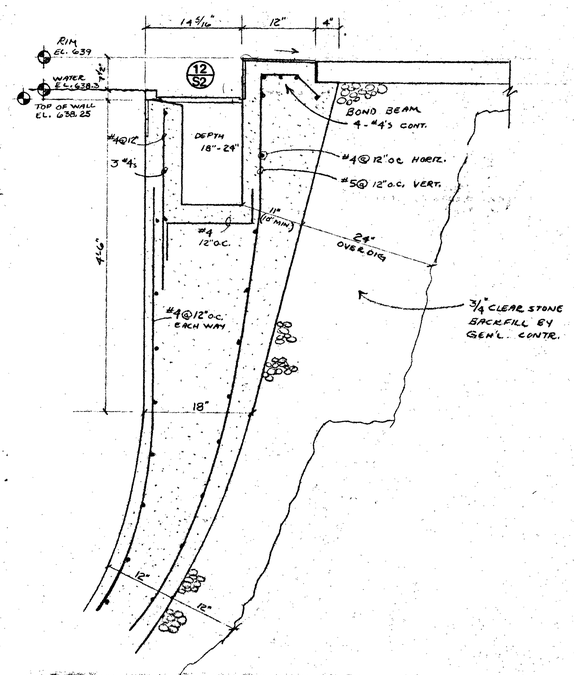
3 WEIR WALL DETAIL



7 TILE DETAIL AT GUTTER



12 SWIMOUT GUTTER DETAIL



15 DEEP GUTTER DETAIL

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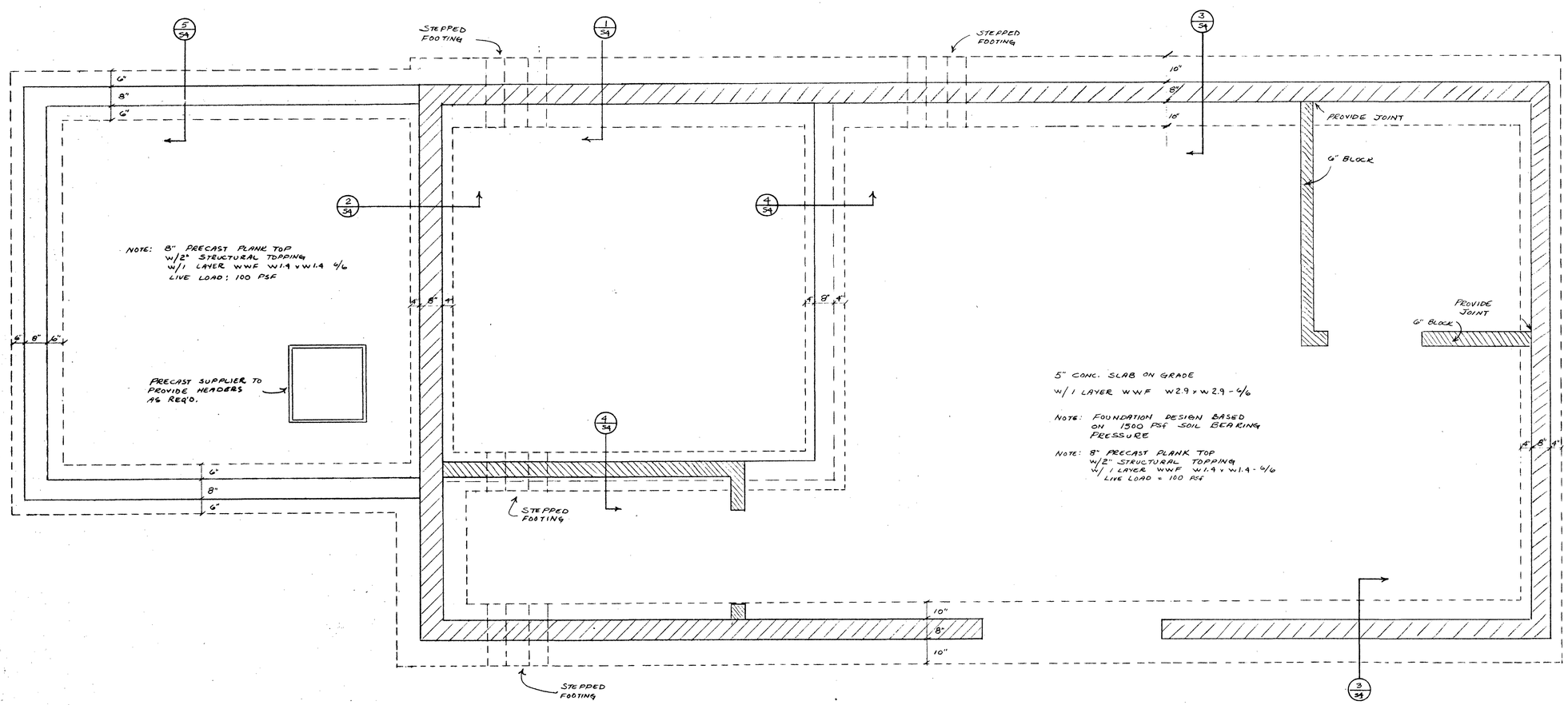
SCALE NOTED
JOB NO. 13886
SHEET TITLE
POOL STRUCTURAL DETAILS

SHEET NO.
S-2



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DATE	REVISON

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APPROVED	
DATE	10-4-86
SCALE	1/2" - 1'0"
JOB NO.	13886
SHEET TITLE	MECH. BLDG. FOUNDATION
SHEET NO.	S-3

NOTES

1. POOL CONFIGURATION SHALL MEET THE PUBLISHED STANDARDS OF THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH AND THE NATIONAL SWIMMING POOL INSTITUTE.

2. A MANUAL OF INSTRUCTION SHALL BE PROVIDED TO THE OWNER WITH EACH FILTER OR GROUP OF FILTERS WHICH SHALL INCLUDE ALL DRAWINGS, ILLUSTRATIONS, OPERATING PROCEDURES, CHARTS, AND PARTS LIST, DATA PLATES OF A PERMANENT NATURE, SO INSCRIBED AS TO BE EASILY READ AND UNDERSTOOD, SHALL BE SECURELY ATTACHED TO THE FILTER SHELL. THE PLATES SHALL PROVIDE THE FOLLOWING INFORMATION:
   - A.) MANUFACTURER'S MODEL NUMBER
   - B.) FILTER MODEL NUMBER
   - C.) FILTER SERIAL NUMBER
   - D.) EFFECTIVE FILTER AREA IN SQUARE FEET
   - E.) DESIGN FLOW RATE IN GALLONS PER MINUTE
   - F.) MAXIMUM WORKING PRESSURE
   - G.) DATE OF MANUFACTURE

3. ONE EXTRA BASKET FOR THE HAIR AND LIST STAINER SHALL BE PROVIDED. ? LINT STRAINER?

4. OWNER TO BE PROVIDED WITH POOL DRAINAGE INSTRUCTIONS, BY POOL CONTRACTOR. INSTRUCTIONS SHALL INCLUDE DRAWINGS SHOWING PIPE AND VALVE LOCATIONS AS TAGGED BY THE CONTRACTOR, WHICH CLEARLY DEFINE THE REQUIRED PROCEDURE.

5. EACH VALVE SHALL HAVE A PERMANENT IDENTIFYING LABEL OR TAG ATTACHED TO IT. THE SEQUENCE OF OPERATION, BRIEFLY STATED, SHALL BE PROMINENTLY DISPLAYED.

6. ALL INLETS AND DRAIN PIPING SHALL BE NSP APPROVED SCHEDULE 40 PVC. DRAINAGE PLUGS WILL BE PROVIDED IN THE PIPING SYSTEM TO ALLOW DRAINAGE OF POOL PIPING IF POSSIBLE.

7. SUCTION PIPING TO PITCH TOWARD PUMP FOR PROPER DRAINAGE DURING FREEZING WEATHER IF POSSIBLE.

8. NO DIRECT CONNECTION SHALL BE MADE BETWEEN POTABLE WATER SUPPLY, PIPING, AND POOL OR THE PIPING THEREOF.

9. ALL WIRING SHALL CONFORM TO THE NATIONAL AND STATE ELECTRICAL CODES.

10. THE POOL SHALL BE GROUNDED AND LIGHTS, IF ANY, INSTALLED ACCORDING TO THE MANUFACTURER'S PRINTED INSTRUCTIONS.

11. CHLORINATOR SHALL BE ELECTRICALLY INTERLOCKED WITH THE POOL PUMP CONTROL CIRCUIT.

SAFETY REGULATIONS

THE FOLLOWING EQUIPMENT IS REQUIRED BY STATE CODE TO BE MOUNTED BY OWNER IN A CONSPICUOUS PLACE, BE READILY ACCESSIBLE AND KEPT IN GOOD REPAIR.

1. TELEPHONE WITH POSTED LIST OF NUMBERS OF NEAREST RESCUE SQUAD, PHYSICIAN, AMBULANCE, POLICE AND HOSPITAL. SUPPLIED BY OWNER. ✓
2. AN APPROVED 24 UNIT FIRST AID KIT. ✓
3. U.S. COAST GUARD APPROVED 20" MINIMUM DIAMETER LIFE RING WITH ROPE HAVING A LENGTH AT LEAST EQUAL TO THE MAXIMUM WIDTH OF THE POOL.
4. A LIFE POLE AT LEAST 12' LONG.
5. A SIGN INDICATING POOL CAPACITY SHALL BE POSTED. SUPPLIED BY OWNER. ✓
6. THE POOL AND ADJACENT PAVED ARES WHICH ARE INTENDED TO BE USED AFTER DAYLIGHT HOURS MUST BE PROVIDED WITH AREA LIGHTING PER ILLINOIS DEPARTMENT OF PUBLIC HEALTH CODE.
7. A LIFEGUARD SHALL BE PROVIDED AT ALL SWIMMING POOLS WHICH ALLOW BATHERS 16 YEARS OF AGE OR UNDER TO ENTER THE POOL AREA WITHOUT A RESPONSIBLE PERSON 17 YEARS OF AGE OR OLDER PRESTNT.
8. ALL SWIMMING POOLS WHICH DO NOT PROVIDE A LIFEGUARD MUST POST AND ENFORCE THE FOLLOWING RULE: " NO PERSON MAY ENTER THE POOL AREA ALONE OR SWIM ALONE".

MAINTENANCE EQUIPMENT

1. OWNER TO KEEP DAILY RECORDS ON POOL OPERATION & MAINTENANCE TO BE SUBMITTED AS REQUIRED TO THE HEALTH DEPARTMENT WHILE THE POOL IS IN OPERATION.
2. AN APPROVED DPD TEST KIT CONTAINING ALL COLOR STANDARDS AND MEANS FOR DETERMINING TOTAL ALKALINITY TO BE SUPPLIED BY POOL CONTRACTOR.
3. A VACUUM HEAD, NET & BRUSH, 8'-16' TELESCOPIC POLE, AND FLOATING HOSE TO BE SUPPLIED BY POOL CONTRACTOR.

PIPING NOTES

1. ALL PIPING DESIGNED FOR 5'/SECOND MAXIMUM SUCTION AND 10'/SECOND MAXIMUM RETURN.
2. THE MAIN DRAIN PIPING SHALL CARRY 100% OF THE RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 10'/SECOND.
3. ALL DRAIN FITTING TO CARRY 100% OF THE RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 1½'/SECOND THROUGH THE CLEAR AREA OF THE GRATE.
4. ALL PIPING SHALL BE IN ACCORDANCE WITH THE ILLINOIS STATE PLUMBING CODE.
5. ON HEATER INFLUENT/EFFLUENT LINES, RUN COPPER PIPING FOR A DISTANCE OF 6'0".

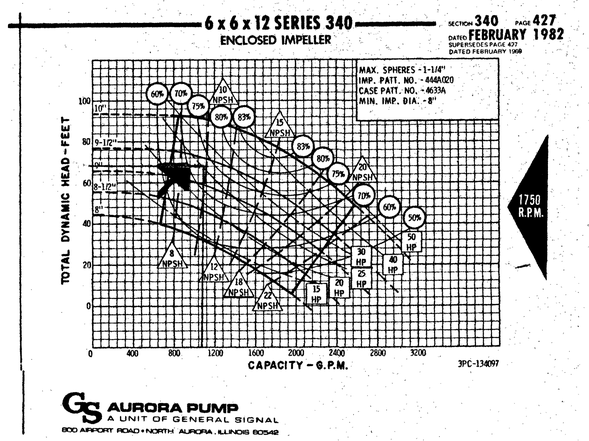
ELECTRICAL NOTES

1. ALL ASPECTS OF THE FACILITY SHALL CONFORM WITH THE NATIONAL ELECTRIC CODE.
2. ARTIFICAL LIGHTING SHALL BE PROVIDED AT ALL INDOOR POOLS AND AT ALL OUTDOOR POOLS WHERE SWIMMING IS ALLOWED AFTER SUNSET IN ACCORDANCE WITH ONE OF THE FOLLOWING:
   - a. UNDERWATER LIGHTING OF AT LEAST 8.35 LUMENS (0.5 WATTS) PER SQUARE FOOT OF POOL WATER SURFACE AREA, LOCATED TO PROVIDE ILLUMINATION OF THE ENTIRE POOL BOTTOM: PLUS AREA LIGHTING OF AT LEAST 10 LUMENS (0.6 WATTS) PER SQUARE FOOT OF DECK AREA.
   - b. IF UNDERWATER LIGHTS ARE NOT PROVIDED, AT LEAST 33.5 LUMENS (2.0 WATTS) PER SQUARE FOOT OF POOL WATER SURFACE AREA AND DECK AREA SHALL BE PROVIDED.
3. WHERE PORTABLE ELECTRIC VACUUM CLEANING EQUIPMENT IS USED, GROUNDED OUTLETS AND GROUNDED EXTENSION CORDS WITH WATER-PROOF COVERS IN GOOD REPAIR SHALL BE USED. SEPARATION BETWEEN OUTLETS SHALL BE A MAXIMUM OF 100 FEET.

	EQUIPMENT	POOLS	QUANTITY	DESCRIPTION
A	FILTER	COMBINED		STARK MODEL S1-120F FIBERGLAS HIGH RATE SAND 35 S.F. EACH @ 15 GPM/S.F. 70 S.F. TOTAL @ 1050 GPM TOTAL
	PUMPS			
B	FILTRATION	COMBINED	1	AURORA 25 H.P., MODEL 341, 6x6x12, 3 PHASE, 208 V 1750 RPM, 955 GPM @ 70' TDH
C	ACTIVITY	WATERSLIDE	1	AURORA 15 H.P. MODEL 341, 3 PHASE, 208 V, 1750 RPM 1000 GPM @ 30' TDH 6x6x9
D	ACTIVITY	WASH RIVER	1	PREMIER 7½ H.P., MODEL 658, 3 PHASE, 208 V., 3500 RPM 200 GPM @ 60' TDH WITH INTEGRAL HAIR AND LINT STRAINER AND EXTRA BASKET
E	ACTIVITY	MUSHROOM	1	AURORA 3 H.P. MODEL 341, 3 PHASE, 208 V, 1750 RPM, 300 GPM @ 30' TDH 4x5x9
E_1	ACTIVITY	GEYSERS, ROCKSLIDE, PORPOISE	1	PREMIER 7½ H.P. MODEL 658, 3 PHASE, 208 V, 3500 RPM 200 GPM @ 70' TDH WITH INTEGRAL HAIR AND LINT STRAINER AND EXTRA BASKET
F	HAIR & LINT STRAINER	MAIN FILTRATION-WATERSLIDE, MUSHROOM	3	MUELLER #155 FLANGE WITH EXTRA BASKET; 1-8" MAIN FILTRATION, 1-8" WATERSLIDE, 1-6" MUSHROOM
G	POOL HEATER	COMBINED	1	RAYPACK #2001, 2,000,000 BTU INPUT, NATURAL GAS, INDOOR VENT, 110 V. ELECTRIC REQUIRED
H	BROMINATOR	COMBINED	1	HYDROTECH-AQUABROME MODEL CB21-62 (584# CAPACITY) NSF APPROVED WITH FLOWMETER AND CONTROL VALVE. (EACH RETURN CIRCUIT TO BE PIPED INDIVIDUALLY OFF MANIFOLD)
I	CONTROLLER	COMBINED	1	STRANTROL 311B ORP & PH CONTROL WITH PVCFS CONTROL VALVE
J	PH (ACID PUMP)	COMBINED	1	LMI A-161-62 48 GPD OR EQUAL (NO CROCK REQUIRED, PUMP DIRECT, 55 GALLON DRUM)
K	FLOWMETERS	COMBINED	5	MAIN CIRCUIT, 1-EAGLE EYE DIETRICH STANDARD 0-1200 GPM FISHER PORTER DIRECT IMPACT READ 1-4" DEEP POOL INLETS 1-6" SHALLOW POOL INLETS 1-2½" CHILDREN'S POOL 1-2½" SLIDE POOL
L	FLOOR INLETS	MAIN POOL SLIDE POOL CHILDREN'S	28 4 4	FROST CO 1½" CPB MODEL A-41014 ADJUSTABLE 360° DIRECTIONAL
M	MAIN DRAINS	MAIN POOL SLIDE CHILDREN'S	3 2 2	GC POOL EQUIPMENT M230 12"x12" CYCOLAC FRAME AND GRATES 92.7 SQ.IN. OPEN AREA EACH, COMPLETE WITH FIBERGLAS SUMP WITH 6" SIDE OUTLET AND 2" HYDRO VALVE OPENING
N	GUTTERS	MAIN POOL SLIDE POOL WASH RIVER	172 L.FT. 28 L.FT. 3 L.FT.	SWIMOUT OVERFLOW COMPONENTS INC., GREENSBORO, N.C.
O	TRENCH DRAINS	MAIN POOL CHILDREN'S	108 L.FT. 27 L.FT.	GORDON BERGER CO. 1/6 PERIMETER
P	POOL LIGHTS	MAIN POOL SLIDE	7 1	AMERICAN PRODUCTS 500 W, 120 V LIGHT WITH 50' CORD STAINLESS NICHE WITH 1" OPENING, U.L. APPROVED
Q	DIVING BOARD	MAIN POOL	2	DURAFLEX 16' ALUMINUM, MANUFACTURED BY ARCADIA AIR, SPARKS, NEVADA
R	DIVING TOWERS	MAIN POOL	2	SWAN DELUXE/METER WITH HANDRAILS AND ADJUSTABLE FULCRUM MODEL #1M-100
S	LIFEGUARD CHAIRS	MAIN POOL	5	SWAN - CANTILEVER GUARD CHAIRS MODEL LG-100 PROVIDE WITH TILTING UMBRELLAS
T	LADDERS	MAIN POOL	5	SWAN 36" COMMERCIAL CROSS-BRACE 1.90 x .065 4 TREAD MODEL LFB-36-4C (STAINLESS)
U	HANDRAILS	SLIDE POOL	3	SWAN 60" 1.90 x .065 STAINLESS MODEL #2HR-5-065
V	SPECIAL RAILS	BETWEEN SLIDE POOL & MAIN POOL	1	1 - 28' FLANGE MOUNTED STAINLESS STEEL POLISHED RAIL SCHEDULE 40 STAINLESS PIPE
W	STARTING PLATFORMS	MAIN POOL	6	SWAN INSTITUTIONAL CANTILEVER STARTING PLATFORM MODEL SP-100
X	DECK ANCHORS	COMBINED	49	SWAN MODEL #1AS-100 DEEP BRASS ANCHOR, 10 LADDERS, 6 HANDRAILS, 24 (START PLATFORMS), 4 BACKSTROKE STANCHIONS, 4 FALSE START STANCHIONS, 1 SAFETY RAIL STANCHION
Y	ESCHUTEONS	COMBINED	16	SWAN MODEL #EP-100 CPB HEAVY PATTERN 10 LADDERS, 6 HANDRAILS
YY	COVER PLATES	COMBINED	33	SWAN MODEL #CP-100 STAINLESS STEEL 24 STARTING PLATFORMS, 4 BACKSTROKE STANCHIONS, 4 FALSE START STANCHIONS, 1 SAFETY ROPE STANCHION
Z	ROPE CUPS	MAIN POOL	14	FROST CO. A-41136 SQUARE CUP ANCHORS CPB

SAFETY AND MAINTENANCE EQUIPMENT

SM1	LANE DIVIDERS	MAIN POOL	6	KIEFER-MC NEIL CORP 25 METER, FLEXIBLE COMPETITION RACING LANES
SM2	STORAGE REEL ✓	MAIN POOL	1	KIEFER MC NEIL CORP. (STAR LANE REEL) PORTABLE WITH COVER
SM3	FALSE START STANCHIONS	MAIN POOL	2	SWAN MODEL FSS-100 1 - STANDARD 7'0" 1 - SPECIAL 11'7" (VERIFY)
SM4	BACKSTROKE STANCHIONS	MAIN POOL	4	SWAN MODEL ST.100 2 - STANDARD 3'4" 2 - SPECIAL 8'0" (VERIFY)
SM5	SAFETY ROPE STANCHION	MAIN POOL	1	SWAN MODEL ST.100 4'0" TOP EYE BOLT
SM6	SAFETY ROPE & FLOATS	MAIN POOL	2 18	1 - 45', 1 - 38', 3/4" ROPE WITH 3/4" CPB HOOKS 5" x 7" POSILOCK FLOATS
SM7	RESCUE SAFETY CANISTERS		5	25" CANISTERS WITH RACK FOR GUARD CHAIR
SM8	MAINTENANCE EQUIPMENT	COMBINED	2 2 1 1 1	12' x 24" TELESCOPIC POLES 2" x 50' H.D. VAC. HOSES VACUUM HEAD 24" LIFEGUARD VACUUM CART PORTABLE - REUSE FROM EXISTING POOL (POOL CONTRACTOR TO REFURBISH) 18" POOL BRUSH
SM9	TEST KIT	COMBINED	1	TAYLOR PROFESSIONAL MODEL BROMINE, TOTAL ALKALINITY, CALCIUM HARDNESS, pH



DATA	MAIN POOL	SLIDE	CHILDREN'S	TOTALS
PERIMETER	400 L.F.	104 L.F.	156 L.F.	
SURFACE AREA	9,580 S.F.	375 S.F.	1,500 S.F.	11,500 S.F.
DEPTH	0"-12'0"	3'0"	0"-1'0"	
WATER VOLUME	37,035 C.F.	900 C.F.	750 C.F.	
GALLONS(INCLUDES OPERATING SURGE LEVEL)	281,563	9,450	5,625	296,638 GALLONS
TURNOVER RATE	6 HOURS	2 HOURS	1 HOUR	
CIRCULATION RATE	782 GPM	79 GPM	94 GPM	955 GPM

PATRONS ALLOWED-
- WATER SURFACE(POOLS) 770 BASED ON 15 AND 25 S.F. PER PERSON
- DECK(ADDITIONAL) 200 BASED ON 1 ADDITIONAL PERSON PER 50 S.F. IN EXCESS OF REQUIRED DECK

TOTAL PATRONS ALLOWED 970

FILTER AREA REQUIRED $\frac{955 \text{ GPM}}{15 \text{ GPM}}$ / S.F. = 63.6 S.F. REQUIRED PROVIDED-69.6 S.F.

SURGE REQUIRED 11,544 GAL. x 0.6 GAL./S.F. = 6926 GALLONS

SURGE PROVIDED-
- GUTTERS(MAIN POOL) 172 L.F. x 2 S.F. = 344 C.F. x 7.5 = 2,580 GALLONS
- MAIN SURGE 13' x 13' x 5' EFFECTIVE = 845 C.F. x 7.5 = 6,337

TOTAL SURGE PROVIDED 8,917 GALLONS

WATER TECHNOLOGY, INC.
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P.O. Box 614, Beaver Dam, Wisconsin 53916
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DESIGNERS • ENGINEERS
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CITY OF GALENA
RECREATION PARK

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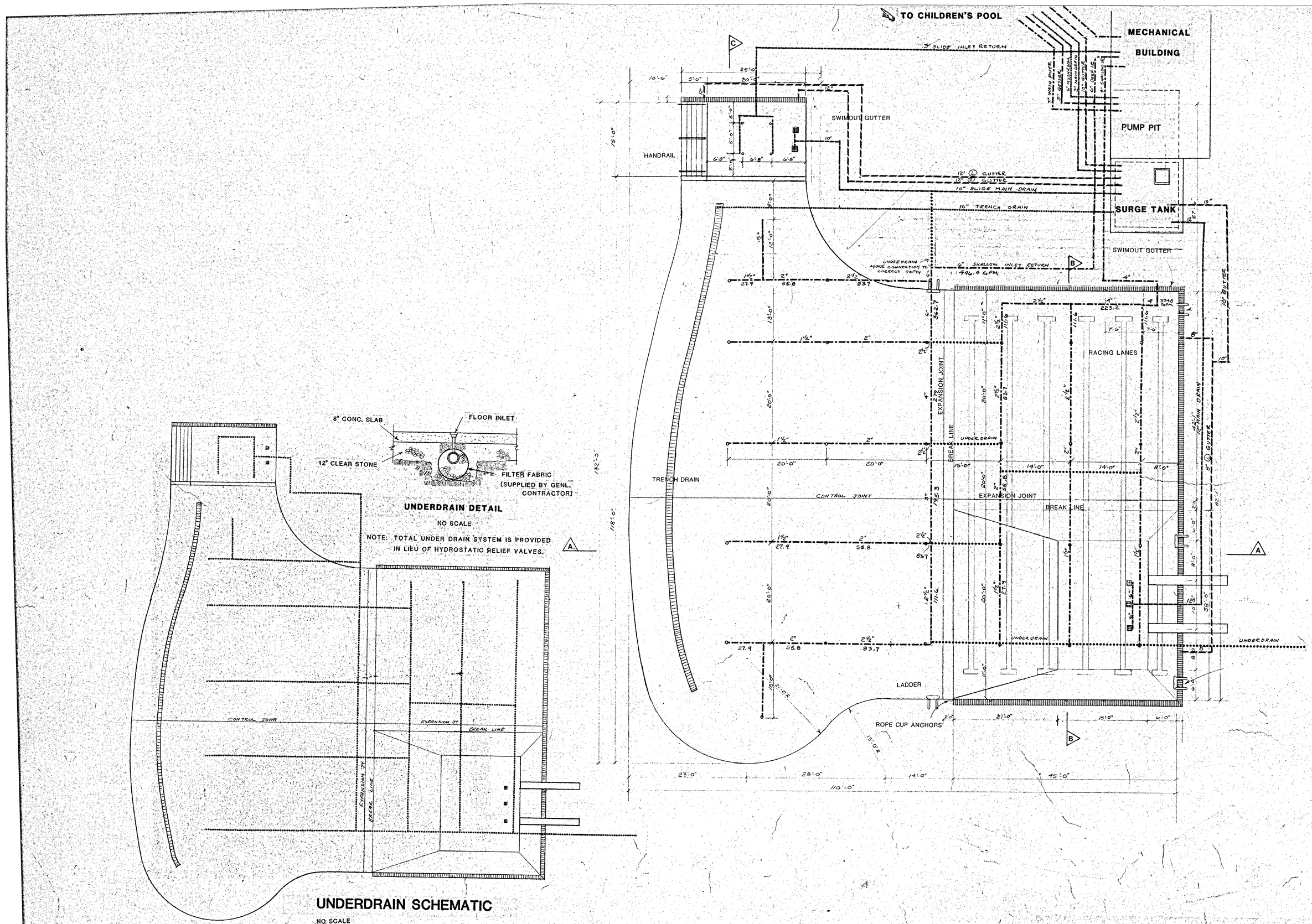
DATE	REVISION

DRAWN
CHECKED
APPROVED
DATE 10-4-86
SCALE
JOB NO. 13886
SHEET TITLE
DATA, EQUIPMENT LISTS & NOTES
SHEET NO.
M 1



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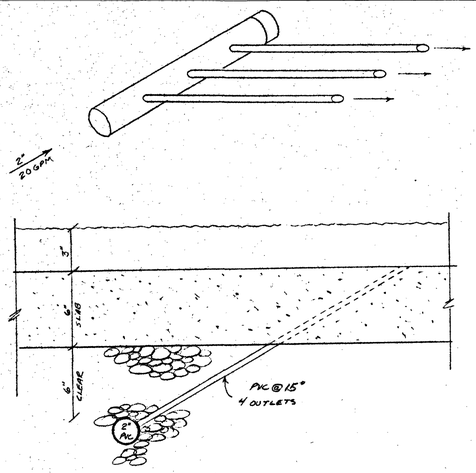
DATE	REVISION

DRAWN	LM
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	1/8" - 1'0"
JOB NO.	13886
SHEET TITLE	ACTIVITY & SLIDE POOL PIPING SCHEMATIC
SHEET NO.	M-3



RETURN DETAIL

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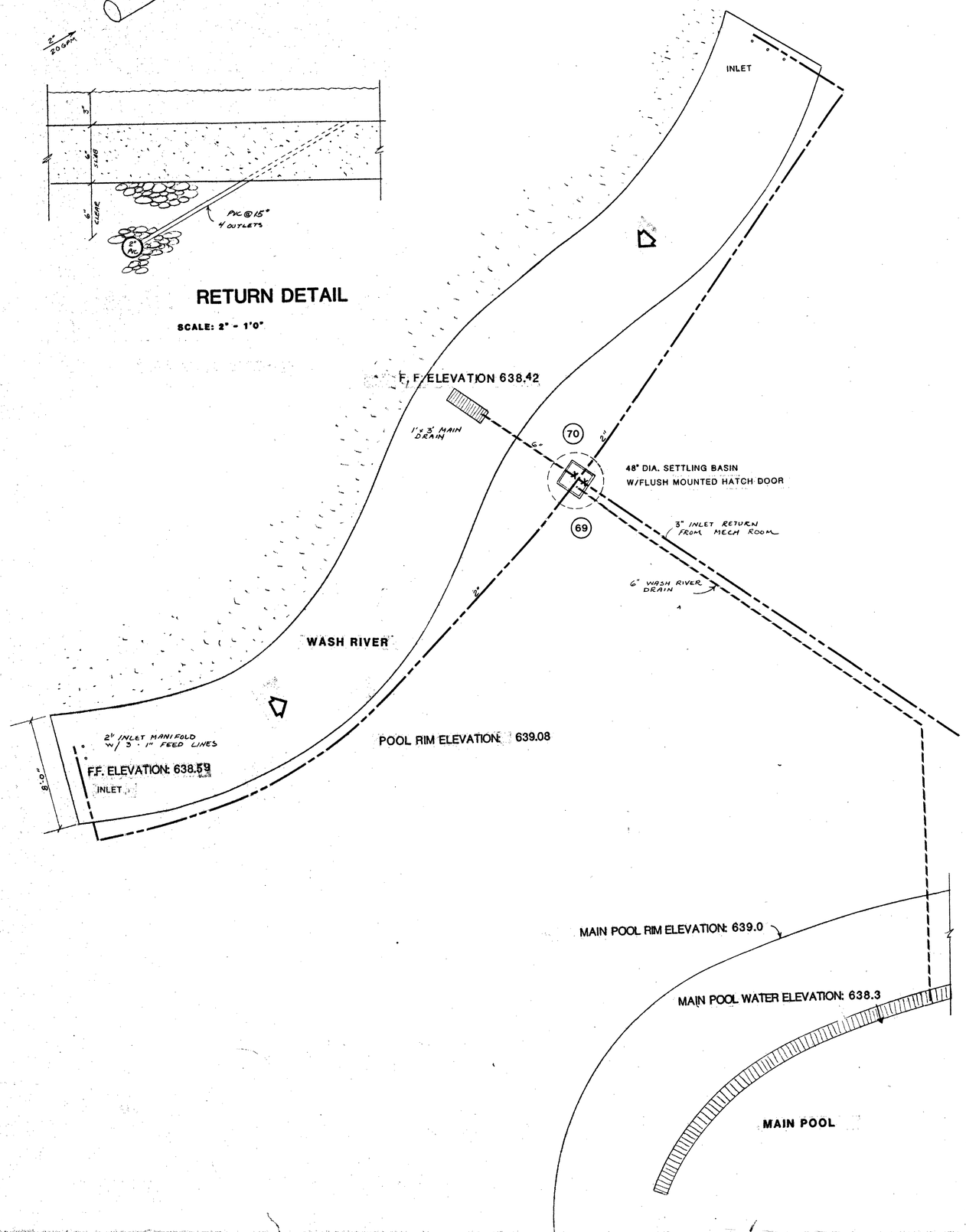
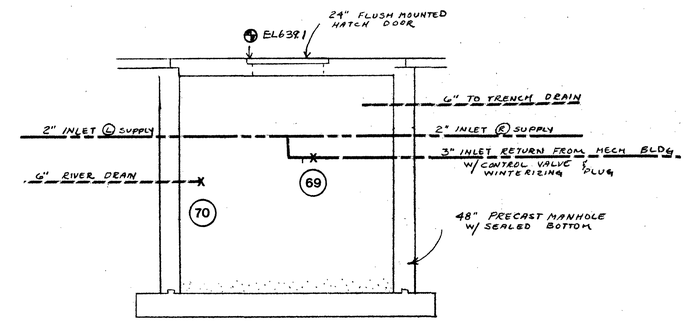
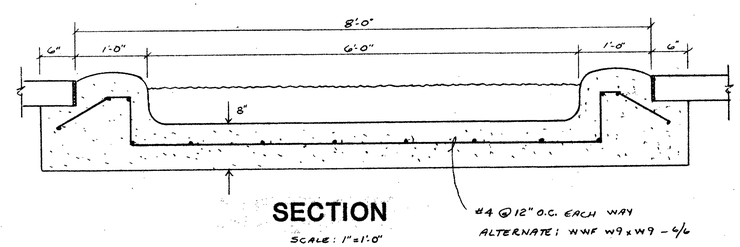




SETTLING BASIN

NO SCALE



SECTION

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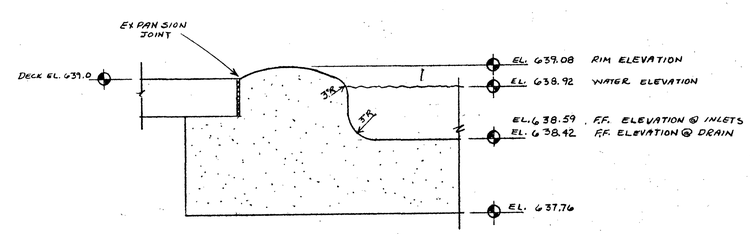

DETAIL

SCALE: 1½" = 1'-0"

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DATE	REVISION

DRAWN	LM
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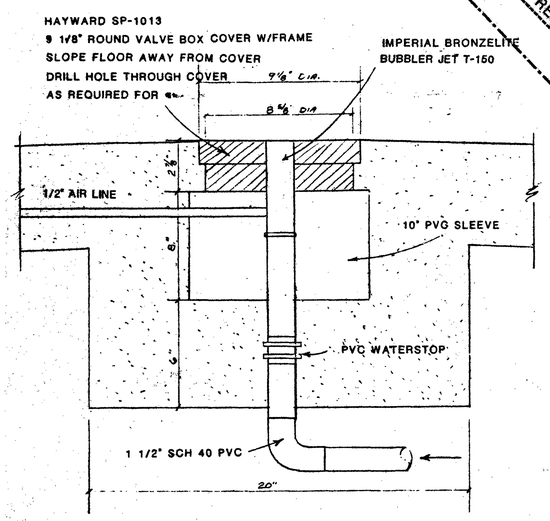
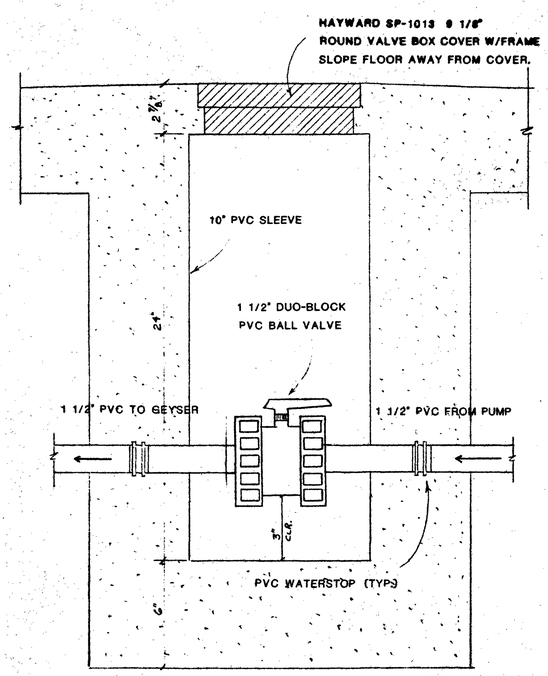
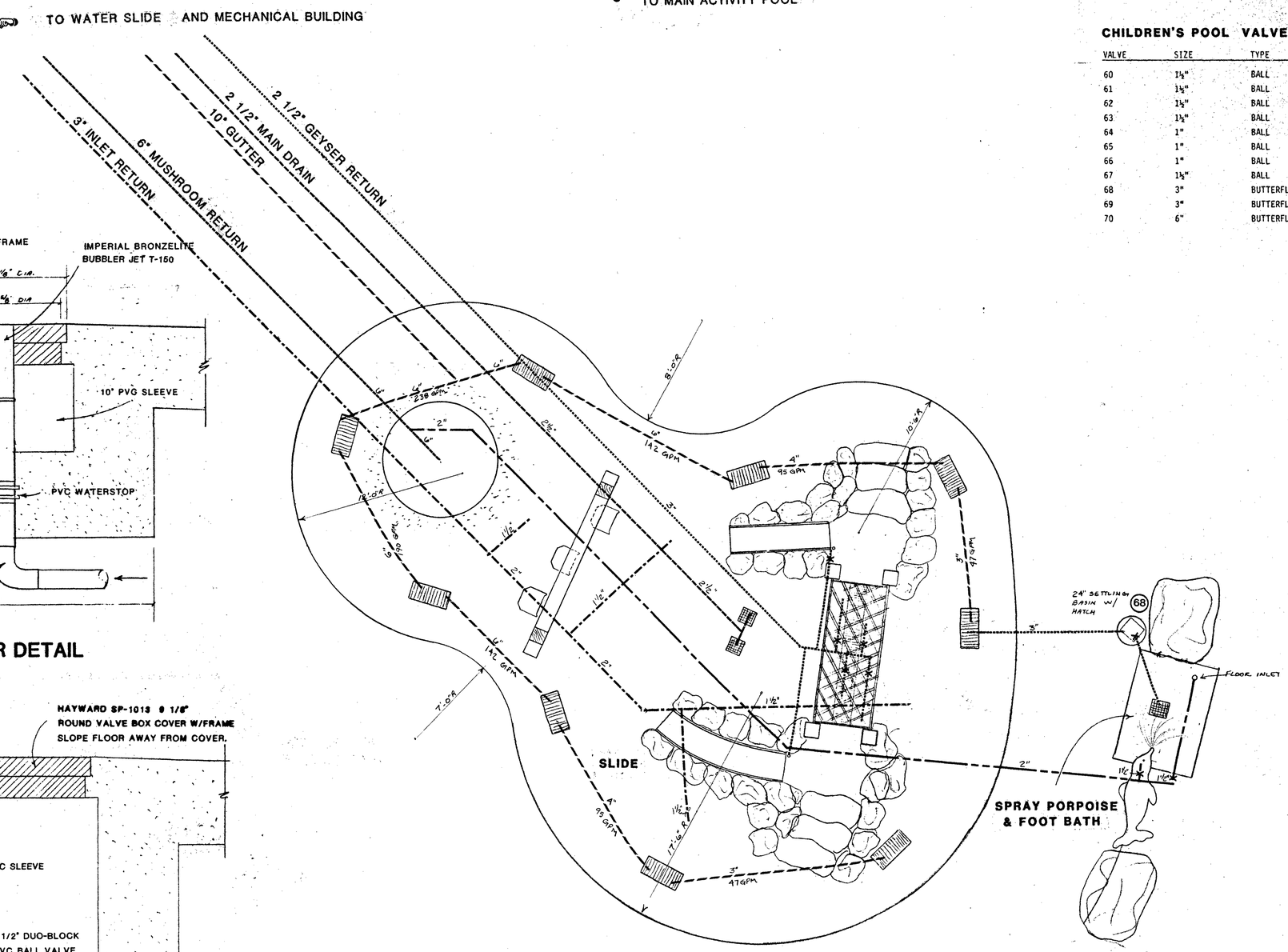
APPROVED	
DATE	10-4-86
SCALE	NOTED
JOB NO.	13886
SHEET TITLE	WASH RIVER PIPING
SHEET NO.	M-5



GEYSER DETAIL

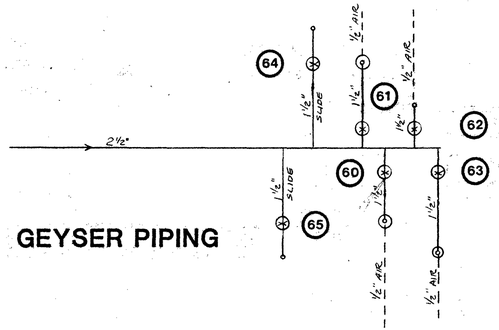


GEYSER VALVE BOX DETAIL

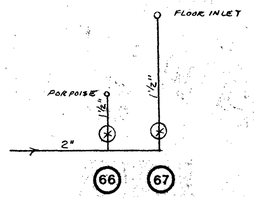


CHILDREN'S POOL VALVE LEGEND

VALVE	SIZE	TYPE	DESCRIPTION
60	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
61	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
62	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
63	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
64	1"	BALL	SLIDE CONTROL VALVE IN ROCK WORK
65	1"	BALL	SLIDE CONTROL VALVE IN ROCK WORK
66	1"	BALL	PORPOISE FEED IN VALVE BOX
67	1½"	BALL	FOOT BATH INLET IN VALVE BOX
68	3"	BUTTERFLY	FOOT BATH DRAIN IN SETTLING BASIN
69	3"	BUTTERFLY	WASH RIVER INLET RETURN IN SET.BASIN
70	6"	BUTTERFLY	WASH RIVER DRAIN IN SETTLING BASIN



GEYSER PIPING



FOOTBATH PIPING

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DATE	REVISON

DRAWN LM
CHECKED
APPROVED
DATE 10-4-86
SCALE 1/4" - 1'0"
JOB NO. 13886
SHEET TITLE
CHILDREN'S POOL
PIPING
SHEET NO.
M-4

VALVE LEGEND

VALVE	SIZE	TYPE	DESCRIPTION
1	8"	BUTTERFLY	SLIDE PUMP SUCTION
2	8"	BUTTERFLY	SLIDE PUMP DISCHARGE
3	8"	CHECK	SLIDE PUMP DISCHARGE
4	8"	BUTTERFLY	FILTRATION PUMP SUCTION
5	8"	BUTTERFLY	FILTRATION PUMP DISCHARGE
6	8"	CHECK	FILTRATION PUMP DISCHARGE
7	8"	BUTTERFLY	FILTER INLET
8	8"	BUTTERFLY	FILTER BACKWASH
9	8"	BUTTERFLY	HEATER BY PASS
10	8"	GATE	DEEP INLET RETURN
11	6"	BUTTERFLY	SHALLOW INLET RETURN
12	3"	GATE	SLIDE INLET RETURN
13	2½"	GATE	POOL INLET RETURN
14	3"	GATE	WASH RIVER PUMP SUCTION
15	3"	GATE	WASH RIVER PUMP DISCHARGE
16	3"	CHECK	WASH RIVER PUMP DISCHARGE
17	3"	GATE	GEYSER PUMP SUCTION
18	3"	GATE	GEYSER PUMP DISCHARGE
19	3"	CHECK	GEYSER PUMP DISCHARGE
20	6"	BUTTERFLY	MUSHROOM PUMP SUCTION
21	6"	BUTTERFLY	MUSHROOM PUMP DISCHARGE
22	6"	CHECK	MUSHROOM PUMP DISCHARGE
23	1¼"	BALL	BROMINATOR SOLONOID INLET
24	1¼"	BALL	BROMINATOR SOLONOID OUTLET
25	1¼"	BALL	BROMINATOR SOLONOID BY PASS
26	1¼"	BALL	BROMINATOR INLET
27	1¼"	BALL	BROMINATOR OUTLET
28	1"	BALL	BROMINE INJECTION MAIN POOL RETURN
29	1"	BALL	BROMINE INJECTION MAIN POOL RETURN
30	1"	BALL	BROMINE INJECTION SLIDE POOL RETURN
31	1"	BALL	BROMINE INJECTION CHILDRENS POOL RETURN
32	1"	BALL	ACID PUMP DISCHARGE
33	1"	BALL	ACID PUMP PRIMER
34	½"	BALL	ACID INJECTION MAIN POOL RETURN
35	½"	BALL	ACID INJECTION MAIN POOL RETURN
36	½"	BALL	ACID INJECTION SLIDE POOL RETURN
37	½"	BALL	ACID INJECTION CHILDRENS POOL RETURN
38	½"	BALL	STRANTROL MAIN SHUTOFF
39	½"	BALL	STRANTROL INLET
40	½"	BALL	STRANTROL OUTLET
41	4"	GATE	POOL HEATER INFLUENT
42	4"	GATE	POOL HEATER EFFLUENT
43	10"	BUTTERFLY GEAR OPERATED	SLIDE POOL MAIN DRAIN
44	10"	MODULATING FLOAT	SLIDE POOL MAIN DRAIN
45	12"	BUTTERFLY GEAR OPERATED	MAIN POOL MAIN DRAIN
46	12"	MODULATING FLOAT	MAIN POOL MAIN DRAIN
47	2½"	CHECK	CHILDREN'S RETURN
48	2"	BALL	CHILDREN'S RETURN:WINTERIZING
49	2"	BALL	SLIDE INLET RETURN:WINTERIZING
50	2"	BALL	MAIN POOL INLET RETURN:WINTERIZING
51	1½"	BALL	MUSHROOM RETURN:WINTERIZING
52	1½"	BALL	GEYSER RETURN:WINTERIZING
53	1½"	BALL	WASH RIVER:WINTERIZING
60	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
61	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
62	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
63	1½"	BALL	CHILDREN'S GEYSER CONTROL IN VALVE BOX
64	1"	BALL	SLIDE CONTROL VALVE IN ROCK WORK
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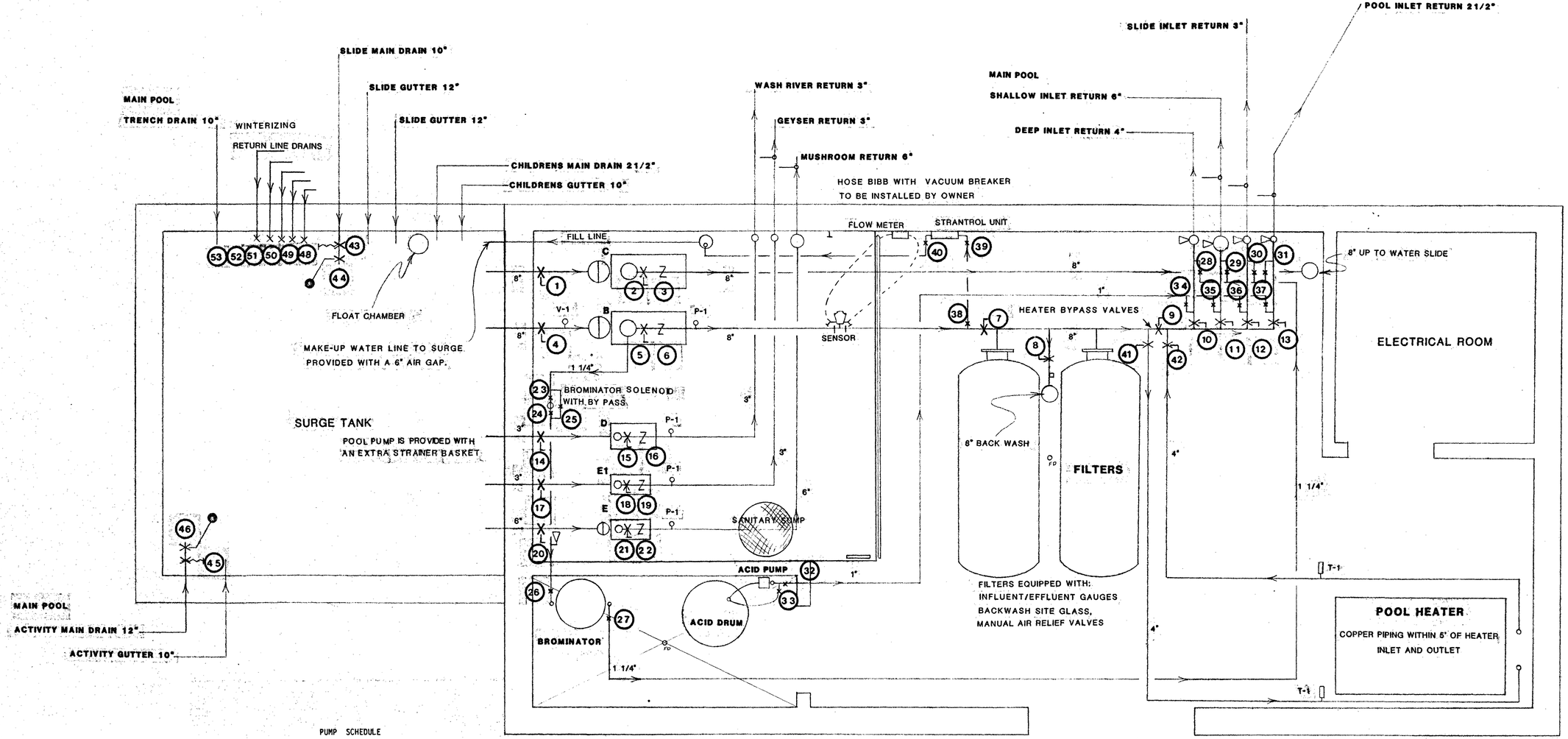
66	1"	BALL	PORPOISE FEED IN VALVE BOX
67	1½"	BALL	FOOT BATH INLET IN VALVE BOX
68	3"	BUTTERFLY	FOOT BATH DRAIN IN SETTLING BASIN
69	3"	BUTTERFLY	WASH RIVER INLET RETURN IN SET.BASIN
70	6"	BUTTERFLY	WASH RIVER DRAIN IN SETTLING BASIN

LEGEND	ITEM
P-1	PRESSURE GAUGE
V-1	VACUUM GAUGE
T-1	THERMOMETER
	VALVE HAND OPERATED
	CHECK VALVE
	BUTTER FLY VALVE GEAR OPERATED
	MODULATING FLOAT VALVE
	FLOWMETER
	DIRECTION OF FLOW



PUMP SCHEDULE

PUMP	USE	DESCRIPTION
B	FILTRATION	AURORA 25 H.P. MODEL 341
C	WATERSLIDE	AURORA 15 H.P. MODEL 341
D	WASH RIVER	PREMIER 7½H.P. MODEL 658
E	MUSHROOM	AURORA 3 H.P. MODEL 341
E_1	GEYSERS,ROCKSLIDE PORPOISE	PREMIER 7½H.P. MODEL 658

EXTRA STRAINER BASKET PROVIDED — FILTRATION PUMP.

MECHANICAL ROOM FLOORS NON-SLIP FINISH SLOPED TO FLOOR DRAINS.

BACKWASH WATER FROM SAND FILTERS TO BE DISCHARGED TO GROUND SURFACE BY OWNER.

HEATER EQUIPPED WITH:

AUTO. TEMPERATURE LIMITING DEVICE,
PRESSURE RELIEF VALVE PIPED TO WITHIN 6" OF FLOOR
TEMPERATURE GAUGES, 24" VENT,

WATER TECHNOLOGY, INC.
Beaver Dam, WI • Cedar Rapids, IA
P.O. Box 614, Beaver Dam, Wisconsin 53916
Phone 414-887-7375
DESIGNERS • ENGINEERS
Water Amusements • Institutional Pools • Water Filtration • Mechanical Systems

CITY OF GALENA
RECREATION PARK

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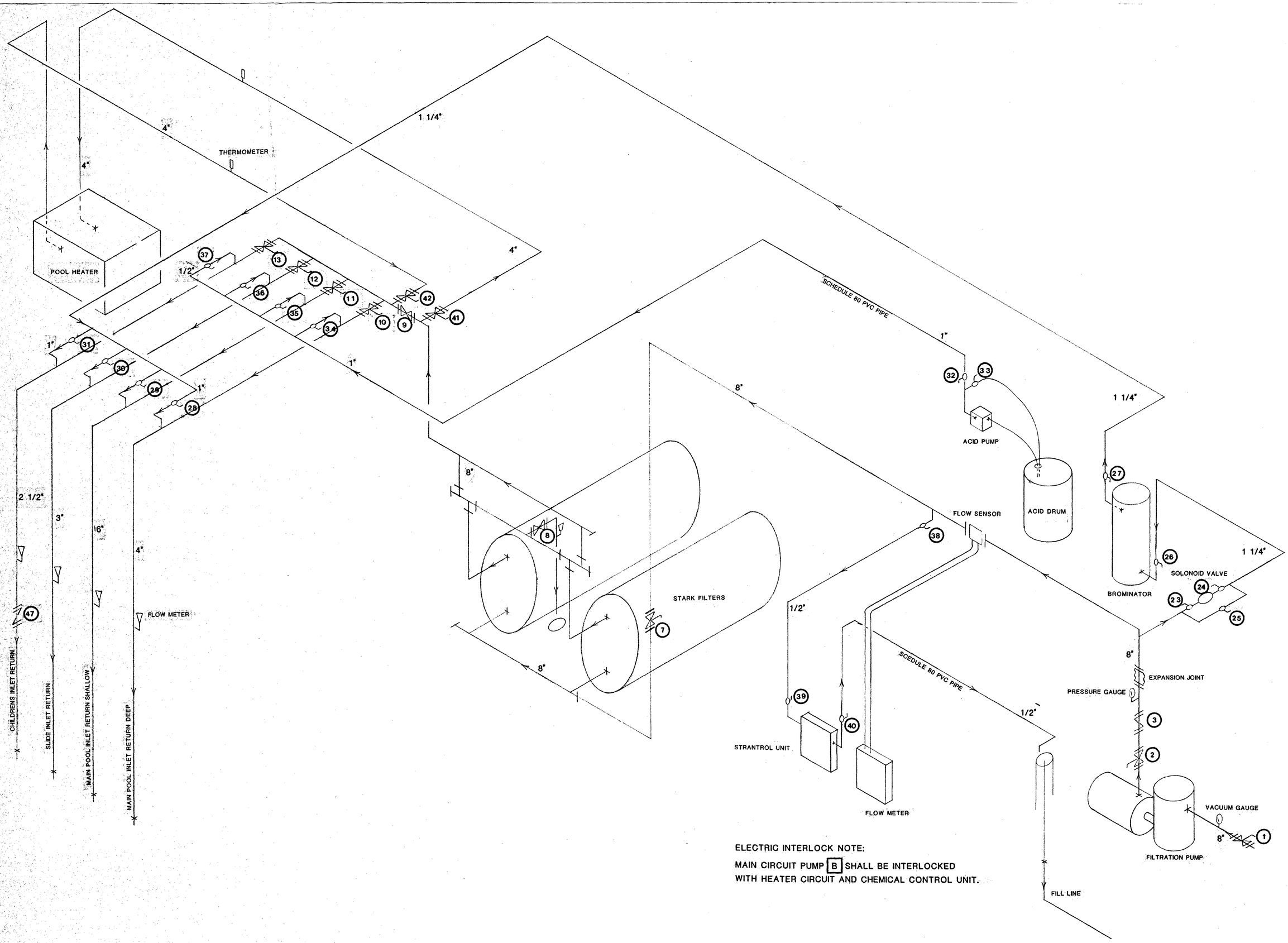
DATE	REVISION

DRAWN	TP
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	1/2" - 10"
JOB NO.	13886
SHEET TITLE	MECH. BLDG. PLBG. SCHEMATIC
SHEET NO.	M-6



ELECTRIC INTERLOCK NOTE:

MAIN CIRCUIT PUMP [B] SHALL BE INTERLOCKED WITH HEATER CIRCUIT AND CHEMICAL CONTROL UNIT.

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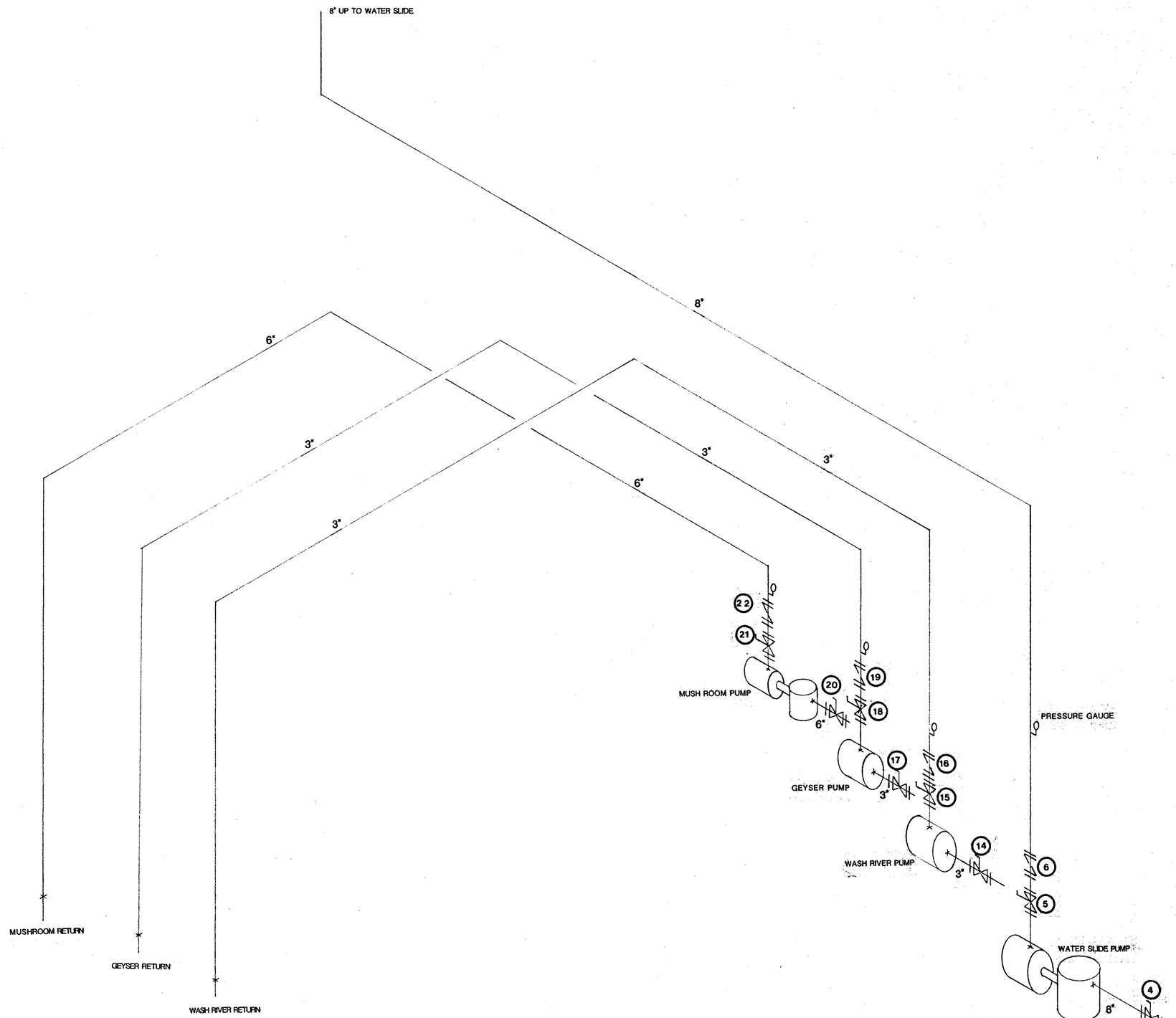
DATE	REVISON

DRAWN	TP
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	NONE
JOB NO.	13886
SHEET TITLE	FILTRATION ISOMETRIC
SHEET NO.	M-7



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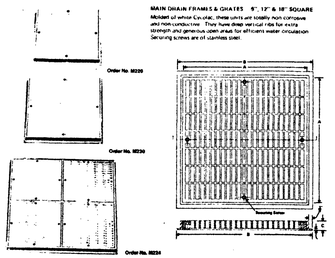
DATE	REVISON

DRAWN	TP
CHECKED	
APPROVED	
DATE	10-4-86
SCALE	
JOB NO.	13886
SHEET TITLE	ACTIVITY PUMP ISOMETRIC
SHEET NO.	M-8



MAIN DRAIN FRAMES & GRATES 8", 13" & 18" SQUARE
Molded of white Cyclolac, these units are totally non corrosive and non conductive. They have deep vertical ribs for extra strength and generous open areas for efficient water circulation. Securing screws are of stainless steel.

Order No. 80230

Order No. 80230

Order No. 80234

SPECIFICATIONS – MAIN DRAIN FRAME & GRATE

Order No.	Size	A	B	C	Opening Area	No. in Open Area	Wt. (Lbs) Wt. (Kilos)
80230	8"x8"	12 3/16"	1/8"	4	60.28	7.25	7.25
80230	12"x12"	17 3/16"	1/8"	4	87.75	8.25	8.25
80234	18"x18"	23 3/16"	1/8"	16	201.0	9.00	9.00

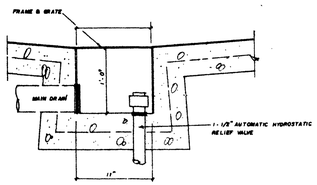
MAIN DRAINS – SIZING AND SPACING
Main drain spacing should not exceed 20 feet on centers with an outlet provided no more than 15 feet from each side wall. Open area of main drain grate should be such that when the maximum flow of water is being drawn through the outlet, the velocity is not greater than 1 1/2 feet per second.

SPECIFICATIONS – MAIN DRAIN FRAME & GRATE
Shall be of heavy duty, noncorrosive, stainless molded, white Cyclolac. Grate shall be secured to frame with stainless steel vandal proof screws. Size ___ x ___ with an open area of not less than ___ square inches.
Order No. _____

Providing Quality Products to America's Pool Distributors

Pool Equipment, Inc. 105 Hope Street, Longwood, (Orlando area) Florida 32750 (305) 339-8535

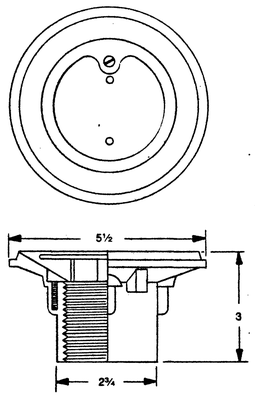
WE'RE BIG ENOUGH TO PRODUCE - SMALL ENOUGH TO BE PERSONAL



MAIN DRAIN DETAIL

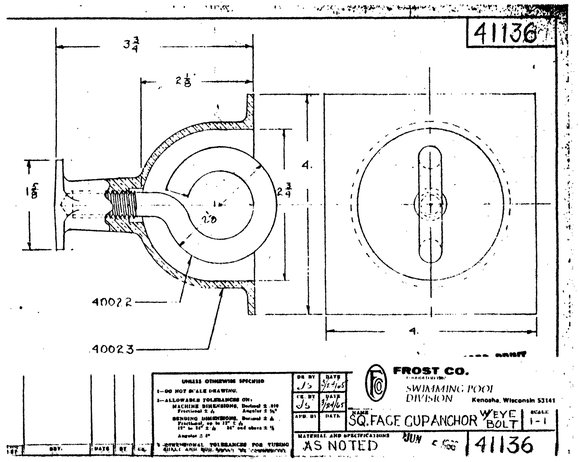
ADJUSTABLE FLOOR INLET FITTING

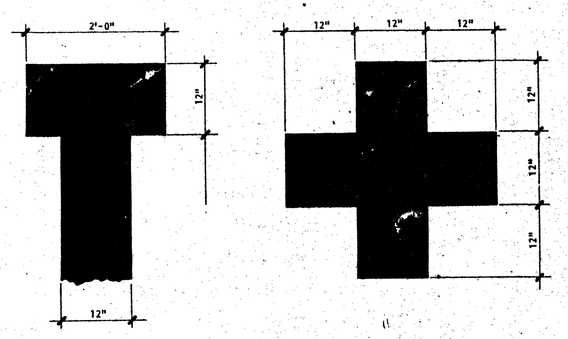
1½" FIP — 2" FIP



P.S.I.	NO. OPEN TURN	GPM
5	¼	20
10	¼	32
15	¼	39
5	½	43
10	½	64
15	½	78
5	¾	60
10	¾	89
15	¾	115
5	1	83

DUE TO THE HIGH VELOCITY WHICH WILL OCCUR AT THE INLET, THE FLOW RATE SHOULD NOT EXCEED 100 GPM.



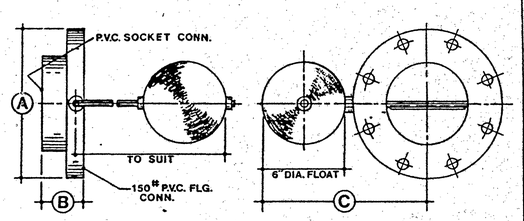


SWIMMING LANE MARKERS

NO SCALE

WHITTEN CORPORATION

UNIFLOW MODULATING VALVE "N" TYPE, 100 SERIES

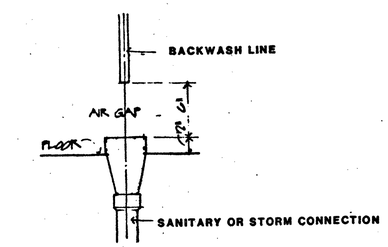


SIZE	MODEL Nº	A	B	C
4"	WMV100N-4	9"	2 3/8"	11 1/2"
6"	WMV100N-6	11"	3 1/8"	12 1/2"
8"	WMV100N-8	13 1/2"	4 5/8"	13 3/4"
10"	WMV100N-10	16"	3 1/4"	15"
12"	WMV100N-12	19"	3 7/8"	16"

Specifications

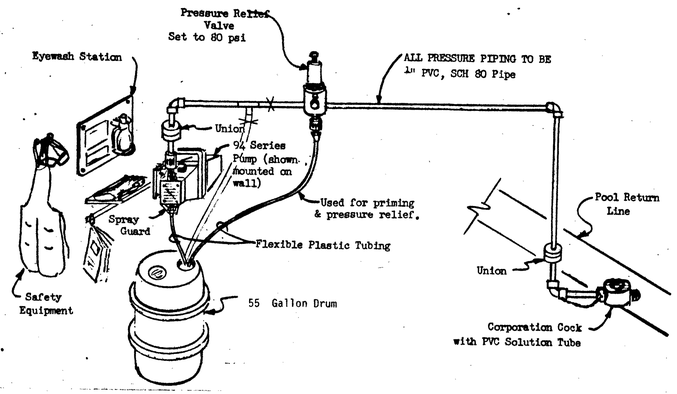
The flange and valve body of the modulating valve to be fabricated of Type I, Schedule 40 PVC. (8"and10" valves to be TypeI, Schedule 80 PVC. Valve wafer, pivotal shaft, control plate arm and float ball shall be T-304 stainless steel. Cotter Keys, retainers, and shaft bushings to be T-316 stainless steel. Valves using components of C.I., mild steel, plastic or copper floats are not acceptable due to high corrosion factors. Maximum modulated flow in closed position not to exceed 20% of total flow at 12 ft. of head. Modulating valve(s) to be as manufactured by Whitten Corporation, Mendon, Mass., Model No. or approved equal.

uniflow

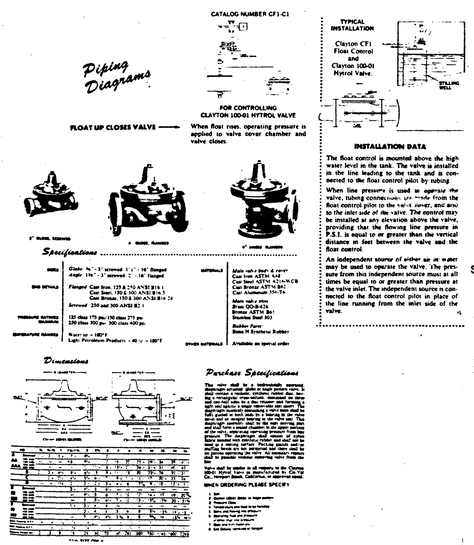


POSITIVE AIR GAP CONNECTION

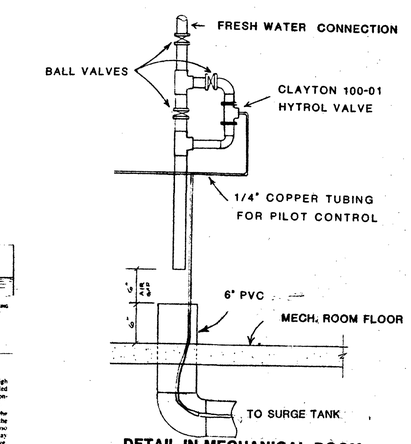
NOTE: Unions are placed so that the pump or the PVC solution tube can be removed easily for service.



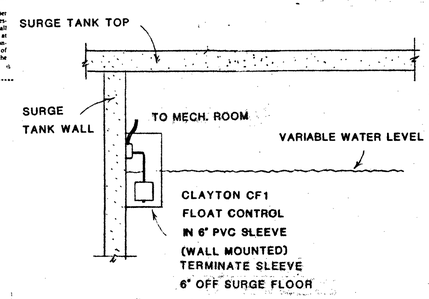
TYPICAL ACID FEED SYSTEM SCHEMATIC



CLA-VALVE AUTOMATIC FILL



DETAIL IN MECHANICAL ROOM



DETAIL IN SURGE TANK

AUTOMATIC FILL

BROMINATOR INSTALLATIONS

There are two primary types of installation for your Brominator:

1. Pressure - Suction
2. Pressure - Pressure

I. Pressure - Suction Installation

In this method of installation, the inlet line to the Brominator is connected to the discharge side of the pump (prior to the filter) and the Brominator outlet line is connected back to the suction side of the pump (on the line coming from the pool to the pump). Figures 3 and 4 show schematic diagrams of pressure - suction installations for the different Brominator designs.

Advantages

1. Insures a positive flow through the Brominator.
2. Facilitates easy draining of the Brominator by closing the inlet valve and allowing the pump to "pull" the water out of the Brominator.

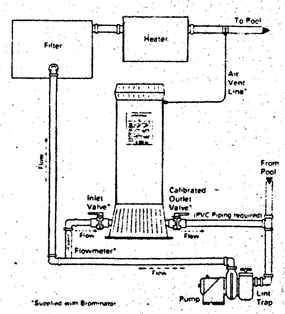


Figure 3

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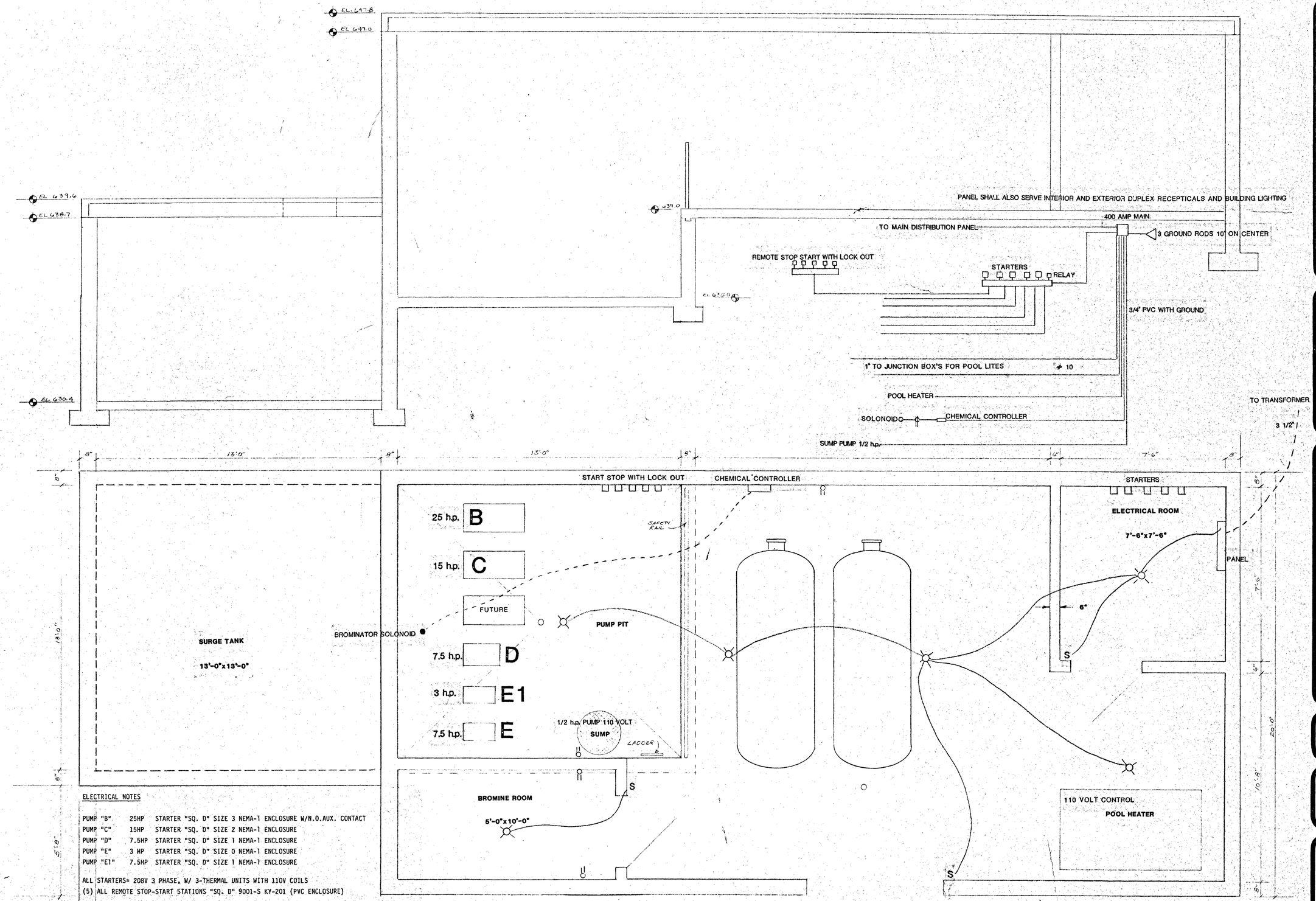
DATE	REVISION

DRAWN
CHECKED
APPROVED
DATE 10-4-86
SCALE
JOB NO. 13886
SHEET TITLE

DETAILS

SHEET NO.

M 9



ELECTRICAL NOTES

PUMP "B"	25HP	STARTER "SQ. D" SIZE 3 NEMA-1 ENCLOSURE W/N.O.AUX. CONTACT	
PUMP "C"	15HP	STARTER "SQ. D" SIZE 2 NEMA-1 ENCLOSURE	
PUMP "D"	7.5HP	STARTER "SQ. D" SIZE 1 NEMA-1 ENCLOSURE	
PUMP "E"	3 HP	STARTER "SQ. D" SIZE 0 NEMA-1 ENCLOSURE	
PUMP "E1"	7.5HP	STARTER "SQ. D" SIZE 1 NEMA-1 ENCLOSURE	

ALL STARTERS= 208V 3 PHASE, W/ 3-THERMAL UNITS WITH 110V COILS
(5) ALL REMOTE STOP-START STATIONS "SQ. D" 9001-S KY-201 (PVC ENCLOSURE)

RELAY 110V COIL WITH ONE N.O. CONTACT TO INTERLOCK POOL HEATER NEMA-1.

PANEL B 120/208 V, 3 PHASE, 4 WIRE WITH GRND BAR 400 AMP MAIN BREAKER (SURFACE)NQOB

1 =	100 AMP	3 POLE	BREAKER Q1B
1 =	90 AMP	3 POLE	BREAKER Q1B
2 =	50 AMP	3 POLE	BREAKER Q1B
1 =	20 AMP	3 POLE	BREAKER
13 =	20 AMP	1 POLE	NQOB
3 =	20 AMP	1 POLE	GFI

ACCEPT GE EQUAL

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DATE	REVISON

DRAWN T.P.
CHECKED
APPROVED
DATE
SCALE 1/2" = 1'-0"
JOB NO. 13886
SHEET TITLE
ELECTRICAL MECHANICAL ROOM
SHEET NO.
E-1