

# **Rock River Water Reclamation District Rockford, Illinois**

**Bidding Requirements and Contract Forms**

**for**

**Winnebago STP Abandonment**

**Capital Project No. 1566**

# **Rock River Water Reclamation District Rockford, Illinois**

## **Bidding Requirements and Contract Forms and *General Provisions and Technical Specifications* for *Sanitary Sewer Construction***

**for**

## **Winnebago STP Abandonment**

**Capital Project No. 1566**

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**Section I**  
**Bidding Requirements**



## Article 1 — Notice to Bidders

The Rock River Water Reclamation District (District) will receive signed and sealed bids for the Winnebago STP Abandonment, Capital Project No. 1566, at the District office located at 3501 Kishwaukee Street, Rockford, Illinois until 10:30 a.m. on Wednesday, August 21, 2019 at which time and place responsive / responsible bids will be publicly opened and read aloud.

The Winnebago STP Abandonment, Capital Project No. 1566, consists of demolition of abandoned wastewater treatment facilities, removal and transportation of biosolids from an abandoned wastewater lagoon, filling the lagoon with approved material, grading, shaping, seeding, perimeter fencing, gates, electric gate actuators, and all other appurtenances as indicated on the plans and in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders 3.8 requirements for Statement of Qualifications. Bidder must have a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL.

Disposal of all biosolids shall be completed within sixty (60) working days of the date of the Notice to Proceed. All demolition, new construction, and restoration shall be completed by July 31, 2020. Liquidated damages shall be \$300 per calendar day beyond each of the respective completion deadlines.

Bid documents may be obtained at a cost of \$50 per set (non-fundable) by contacting the District Engineering Department at 815.387.7660.

Plans and specifications may also be viewed at the offices of the Northern Illinois Building Contractors Association at 1111 S. Alpine Rd, Rockford, IL. For more information, visit the District website at [www.rwrddst.il.us](http://www.rwrddst.il.us).

All construction will be done in accordance with specifications on file with the District, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction* (Current Edition) by the Rock River Water Reclamation District of Rockford.

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount of five percent (5%) of the total bid price. This amount is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured.

**A Mandatory Pre-Bid Meeting for this project will be held on Wednesday, August 14, 2019 at 1:00 p.m. at the proposed construction site, 600 W. Soper Street, Winnebago, Illinois, 61008. All contractors that intend to bid on this project must attend the pre-bid meeting.**

The successful bidder will be required to furnish a satisfactory performance bond in the full amount of the bid or proposal. No bid shall be withdrawn without the consent of the District for a period of sixty (60) days after the scheduled time of receiving bids.

The District reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of the District.

Dated this 6th day of August, 2019.



BY: Chris Black, Business Manager

## **Article 2 — Instructions to Bidders**

### **1 General**

#### **1.1 Scope and Intent**

This section of the contract documents is concerned with furnishing detailed information and requirements for preparing bids to prospective bidders, bidders' responsibility, the preparation and the submission of bids, basis for awarding the contract and other general information concerned with bidding and executing the contract.

#### **1.2 Contradictions**

If in the case of apparent contradiction between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, District General Provisions and Technical Specifications for Sanitary Sewer Construction. The language in the first such document in which language regarding the conflict, error or discrepancy occurs shall control.

### **2 Legal Requirements**

#### **2.1 Illinois Regulations**

1. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, 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 false records is a Class B Misdemeanor.

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on standard IDOT forms.

2. Public Act 83-1030 entitled "Steel Products Procurement Act" requires that steel products used or supplied in performance of this contract or subcontract shall be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

- a. Where the contract involves an expenditure of less than \$500.
- b. Where the executive head of the public agency certifies in writing that
  - i. the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
  - ii. obtaining the specified products, manufactured or produced in the United States would increase the cost of the contract by more than 10%.
- c. When its application is not in the public interest.

3. Public Act 96-929 (30 ILCS 570) provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.
4. Public Act 99-0933 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
  - a. the illegality of sexual harassment
  - b. the definition of sexual harassment under Illinois State law
  - c. a description of sexual harassment, utilizing examples
  - d. my (our) organization's internal complaint process including penalties
  - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
  - f. directions on how to contact the Department and the Commission
  - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

Upon request, this information shall be provided to the Illinois Department of Human Rights and the District.

5. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
6. The Contractor for this project shall comply with the Occupational Safety and Health Act.
7. The Contractor for this project shall comply with the Federal Drug-Free Workplace Act.
8. Public Act 96-1416 requires the Certification of Clean Construction and Demolition Debris (CCDD) and uncontaminated soil prior to disposal at a CCDD fill site. The Contractor for this project shall comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.
  - a. In the event that contaminated soil is uncovered on the project, the Contractor shall notify the District immediately. Any extra costs resulting from the presence of contaminated soil shall be evaluated in accordance with District General Provisions & Technical Specs for Sanitary Sewer Construction; General Conditions: Article 5 – Time Provisions and Article 8 – Changes.

## **2.2 Americans with Disabilities Act**

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Rock River Water Reclamation District (District) and their representatives from all:

1. suits, claims, or actions
2. costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement

3. damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

### **3 General Instructions**

#### **3.1 Bidder's Responsibility**

Bidders are cautioned not to submit proposals until having carefully examined the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and having made all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing and handling the materials at the site, and having informed themselves thoroughly as to all difficulties involved in the completion of all the work under this Contract in accordance with its requirements.

Bidders must examine the Plans, Specifications and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amount or quantities necessary to complete fully the work in strict compliance with the Contract Documents. The Bidder must satisfy himself by making borings or test pits, or by such methods as he may prefer, as to the character and location of the materials to be encountered or work to be performed. No pleas of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill, in every detail, all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

**The Contractor is responsible for verifying the location of all existing utilities in the project areas.**

The Bidder, therefore, shall satisfy himself by such means as he may deem proper as to the location of all structures that may be encountered in construction of the work.

#### **3.2 Addenda and Interpretations**

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois. To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

### **3.3 Laws and Regulations**

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of the District in the performance of the work under this contract. The Bidder's attention is specifically called to that provision of the General Conditions regarding the rate of wage to be paid on the work.

### **3.4 Quantities Estimated Only**

Bidders are warned that the estimate of quantities of the various items of work and materials, as set forth in the proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

### **3.5 Form, Preparation, and Presentation of Proposals**

For particulars as to the quantity and quality of the supplies, materials and equipment to be furnished, and the nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of the District.

Each bid will be submitted upon the prescribed proposal form. All blank spaces for bid prices must be filled in, in ink, with the unit or total sum or both for which the proposal is made. If the proposal contains any omissions, erasures, alterations, additions or items not called for in the itemized proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the proposal, the unit price as expressed in figures will govern. In no case is the agreement form to be filled out or signed by the bidder.

***The Contractor may opt to contact the District's Engineering Department at 815.387.7660 to obtain an electronic Proposal form. If used, this form must be attached to the hard copy proposal form and appropriately signed and executed with the bid.***

The bid must be verified and be presented on the prescribed form in a sealed envelope on or before the time and at the place stated in the Advertisement for Bids, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed to Clerk of the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. The District will not accept facsimile generated bids.

### **3.6 Bid Security**

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount specified in Article One, Notice to Bidders. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured. The District's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

Within ten (10) days after the opening of bids, the deposits of all but the three lowest bidders will be returned. The deposits of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the contract, or, if no such contract has been executed, within sixty (60)

days after the date of opening bids. The deposit of the successful bidder will be returned only after he has duly executed the contract and furnished the required bond and insurance.

### **3.7 Affidavit of Compliance**

**Each proposal must be accompanied by an executed Affidavit of Compliance.** A separate Affidavit of Compliance form is enclosed with the Proposal packet. Failure to submit an executed Affidavit of Compliance with the proposal may constitute sufficient cause for rejection of the bid.

### **3.8 Statement of Qualifications**

Each proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, has a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL, and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual obligations. The bidder shall document no less than three (3) successfully completed of similar size and scope to this project within the past five (5) years having equal or greater value to the bid being submitted. The District reserves the right to request additional information as needed to evaluate bids prior to making an award.

### **3.9 Comparison of Proposals**

Bids on item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

### **3.10 Acceptance of Bids and Basis of Award**

No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days.

The contract will be awarded, if at all, to the lowest responsive, responsible bidder. The Rock River Water Reclamation District also reserves the right to reject any or all bids.

The bidder whose proposal is accepted shall enter into a written contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by the Engineering Manager of the District has been served on such bidder personally or by mailing a postpaid wrapper to such bidder at the address given in his proposal. If the bidder to whom the contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of the notice, the amount of his deposit shall be forfeited and shall be retained by the District as liquidated damage and not as a penalty. It being now agreed that said sum is a fair estimate of the amount of damages that the District will sustain in case said bidder fails to enter into a contract and furnish the required bond and insurance. No plea of mistake in the bid shall be available to the bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

#### **3.10.1 Evaluation of Responsiveness**

The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Instruction to Bidders.

### **3.10.2 Evaluation of Responsibility**

To be judged as responsible, the bidder shall:

- a. Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- b. Be able to comply with the required completion schedule for the project;
- c. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from the District;
- d. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- e. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.
- f. Have satisfactorily completed no less than three (3) contracts of similar size and scope to this project within the past five (5) years of equal or greater value to the bid being submitted.

### **3.11 The Rejection of Bids**

The District reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy the District that such bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. The District reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of the District after all proposals have been examined and canvassed.

### **3.12 Insurance and Bonding**

Contractor shall provide all necessary insurance and bonds required to complete the project. No more than ten (10) calendar days subsequent to the District's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. The District shall be the sole judge as to the acceptability of any such proof.

Contractor shall provide and maintain all insurance and bonds as required by the District.

#### **3.12.1 General**

The Contractor shall ensure that:

1. All insurance policies shall be specific to the project.
2. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for Winnebago STP Abandonment, Capital Project No. 1566.
3. The District shall be named as Additional Insured in all policies; this shall include the Owners Contractors Protective Policy option.
4. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the project and completed operations shall stay in force for two (2) years following completion of the project.



### **3.12.2 Insurance**

The Contractor shall, for the duration of the contract and for two (2) years following project acceptance, maintain the following:

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non—owned vehicles, as applicable.
3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
4. Umbrella: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
5. Errors and Omissions: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the contract.

The policies shall contain, or be endorsed to contain, the following provisions in the General Liability and Automobile Liability Coverage's:

- a. Unless otherwise provided in paragraph "c" of this section, the District, its officers, officials, employees and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the Contractor, products and completed operations of the Contractor, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officers, officials, employees, volunteers, or agents.
- b. Unless otherwise provided in paragraph "c" of this section, the Contractor's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor's insurance and shall not contribute with it.
- c. As an acceptable alternative to provisions "a" and "b" of this section, the Contractor may provide owner's and contractor's protective liability insurance with coverage limits, named insureds, and in conformity with all applicable specifications of this section.
- d. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, officials, employees, volunteers, or agents.
- e. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- f. All Coverages — Each insurance policy required by this clause shall not be suspended, voided, canceled by either party, reduced in coverage, or in limits except



after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the District.

### **3.12.3 Best's Ratings**

The District shall be the sole judge of whether or not said insurer's ratios are satisfactory. The District's decision shall be final and the District's bidding procedures contain no appeal provision.

1. Alphabetical Rating: For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to the District.
2. Financial Size Rating: Provided an insurer's alphabetical rating is satisfactory, the District will examine said insurer's financial size rating.
  - a. If Best classifies the insurer XII or larger, said insurer shall be acceptable to the District.
  - b. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to the District's Business Manager and/or the District's insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the Contractor.

### **3.12.4 Performance Bond and Labor & Materials Payment Bond Form**

The Contractor shall provide a Performance Bond and Labor & Materials Payment Bond form acceptable to the District. The performance bond shall be for either 100% of the contract price or for the Contractor's unit price times the estimated number of units, as applicable.

This Request for Bids contains a Performance Bond and a Labor & Material Bond form for the Contractor's use.

If the Contractor fails to provide acceptable bonds within the specified time, he shall be in default.

### **3.12.5 Correction of Contractor's Insurance or Bond Deficiencies**

If the District determines that the Contractor's insurance or bond documentation does not conform to these specifications, the District shall inform said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of the District's deficiency notice, he shall be in default.

### **3.12.6 Indemnification Clause**

Contractor shall protect, indemnify, hold and save harmless and defend the District, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the Contractor or District, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the Contractor or subcontractor, whether such loss, damage, injury or liability is contributed to by the negligence of the District or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful bidder shall have no liability for damages or the costs incident thereto caused by the sole negligence of the District.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the Contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers Compensation Act.

No inspection by the District, its employees, or agents shall be deemed a waiver by the District of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverages in the Contract.

**3.13 Tax Exemption**

The District is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder shall exclude those taxes from his bid. The District's tax exemption number is E9992-3696-06. The bidder shall include all applicable taxes in his bid price.

*Not to be used for bidding purposes*

## Article 3 – Detailed Specifications

### 1 General

It is the intent of these specifications to provide the description necessary to allow qualified bidders to submit formal proposals to the Rock River Water Reclamation District (District) for the *Winnebago STP Abandonment, Capital Project No. 1566*. These Detailed Specifications are concerned with the draining and cleaning an abandoned wastewater lagoon, removal and transportation of lagoon bio-solids to a pre-determined disposal facility, demolishing abandoned wastewater treatment facilities (tanks, etc.), importing clean fill to the abandoned wastewater lagoon basin, grading, shaping, installation of sidewalk, curb and gutter, perimeter fencing and appurtenances.

Throughout these specifications, the terms “Owner,” “District” and “Engineer” shall be synonymous.

The specifications entitled *General Provisions and Technical Specifications for Sanitary Sewer Construction in the Sanitary District of Rockford* (Latest revision: October 13, 1983) shall be the predominant specifications for this project.

The IDOT *Standard Specifications for Road and Bridge Construction* referenced in this specification shall be current edition.

The Contractor shall:

- Be responsible for any damages caused by his operations to existing structures above or below the ground as covered in *G.C. 12-1, Suits at Law, Pages 16 and 17 of the General Provisions and Technical Specifications for Sanitary Sewer Construction*.
- Be responsible for maintaining the current level of utility and other services to any properties affected by construction throughout the course of this project. All costs shall be incidental to contract pay items.
- Be responsible for the support, protection, relocation and/or reconstruction of all utilities, power poles, signs, lights, signals, underground utilities, etc. conflicting with the proposed construction whether temporary or permanent in accordance with *G.R. 9.1, Page 30 of the General Provisions and Technical Specifications for Sanitary Sewer Construction*. All costs shall be incidental to Contract pay items.

Suppliers shall implicitly warrant that their products and all product components are suitable and appropriate for the intended application and are free from all material, design or workmanship defects. Said warranty shall inure to the benefit of the District. The foregoing shall apply to all products and/or product components, whether fabricated or constructed as directed by the contract documents or produced independently by an outside source.

The District will not supervise, direct, control or have authority over or be responsible for the Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. The District will not be responsible for the Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

## **2 Notification, Access and Special Considerations**

### **2.1 General**

The Contractor shall notify all utility companies prior to beginning any work. All underground utilities shall be located by the utility involved and special care shall be taken when excavating near underground utilities to avoid damage.

The Contractor shall provide a detailed project schedule to the District prior to beginning work and notify the District forty-eight (48) hours minimum prior to mobilizing equipment or personnel to the site.

The Contractor shall be responsible for the temporary maintenance of all roadways and drives over the course of this project and shall maintain access to District and Village personnel at all times (i.e. drives, roadways, ramps, etc., must remain open or temporary access must be provided). All materials, equipment, labor, etc., necessary to assure this shall be considered incidental to the contract.

Access to the site is controlled by gate. Contractor will be provided two (2) remote gate actuators to access the site. Actuators shall be returned upon completion of construction and before final payment.

The Contractor shall clean up areas from which spoil has been removed at the end of each day by sweeping, washing or other approved methods. When the work is halted by rain, the Contractor shall clean work areas before leaving the site.

### **2.2 Required Submittals**

1. Detailed Construction Schedule.

### **2.3 Measurement and Payment**

No payment shall be made for costs associated with notification, access, and special considerations, this work shall be considered incidental to the contract.

## **3 Lagoon Bio-Solids Disposal**

### **3.1 General**

The Contractor shall be responsible to remove surface water from the abandoned wastewater lagoon, to facilitate drying of the bio-solids and collecting and transporting bio-solids to the approved disposal site.

### **3.2 Lagoon Dewatering**

The Contractor shall remove surface water from the existing lagoon by pumping to the adjacent District pump station (See plans for proximity). Discharge to the station may be routed through the pump station vent pipe (8" dia.) or hatch, provided appropriate safety measures are installed to prevent entry to the wet-well. The maximum discharge rate to the pump station shall be 300 GPM. The Contractor shall provide provisions that protect the dewatering pump from debris, i.e. screens, baskets, etc. The District may demand discharge is reduced or halted due to wet weather and/or influent flow rates to the station. The Contractor is responsible for providing electricity to

the dewatering pump(s) by means of a temporary generator or other District approved method. The Contractor shall submit the proposed pumping plan to the District for approval. The pumping plan shall include sump location, pipe routing, details of discharge set-up, pump specifications, proposed temporary generator location and technical specifications.

### **3.3 Drying Bio-solids**

After surface water is removed from the wastewater lagoon, the Contractor shall facilitate drying of the bio-solids remaining in the lagoon. The Contractor may use earth-moving equipment, drags, disks, plows, rakes, etc., as he deems fit so long as all bio-solids are kept confined to the lagoon basin until they are removed from the site permanently. Prior to transport to the disposal facility, the bio-solids must pass a paint-filter test. The Contractor shall coordinate sampling and testing with the District's Project Engineer prior to loading bio-solids for transport. The Contractor shall submit a narrative of the proposed drying methods for District concurrence prior to beginning work.

### **3.4 Transporting and Disposal of Bio-Solids**

Once bio-solids are dried to the satisfaction of the District, and a paint filter test is passed, the Contractor shall remove the bio-solids from the lagoon basin and transport the bio-solids to the approved disposal facility:

Orchard Hills Landfill  
8290 Highway 251  
Davis Junction, IL 61020

All disposal fees/tipping fees will be paid directly to the landfill by the District under a separate agreement. The Contractor shall not include these costs in his proposal. The Contractor is responsible to maintain accurate records of tonnage of bio-solids delivered to the landfill. Confirmed delivery receipts which will serve as the basis of payment for this work.

### **3.5 Required Submittals**

1. Lagoon Dewatering Plan, including:
  - a. Sump location.
  - b. Piping route.
  - c. Details of discharge set-up.
  - d. Pump specifications.
  - e. Temporary generator specifications and proposed location.
2. Narrative plan for proposed bio-solids drying.

### **3.6 Payment**

Payment shall be made at the Contract unit price per Ton (TON) of material delivered to the approved disposal facility for *Lagoon Bio-Solids Disposal*. Tonnage for payment shall be based on receipts for tonnage delivered, as measured by the disposal facility.

## **4 Demolition**

### **4.1 General**

The Contractor shall be responsible for the demolition and removal of structures, portions of structures, utilities and other as shown on the plans and in *Section III*, and as directed by the District.

Prior to beginning any demolition work, the Contractor shall inspect the plans and record drawings provided in *Section III – Demolition Index* to determine the extent of work. The Contractor shall take necessary precautions to protect existing items that are to remain in place. The Contractor shall replace or repair damaged items to the satisfaction of the District.

The Contractor shall perform demolition work in a manner that will prevent hazards to persons and property and minimize impact to the use of adjacent areas. The Contractor shall install and maintain fences, barricades, or similar items around open excavations until such excavations have been filled to final grade.

### **4.2 Utilities**

The Contractor shall verify that all utility service lines to structures to be removed have been abandoned prior to beginning demolition. All abandoned lines shall be cut at the limits of excavation and capped or plugged with an approved non-shrink grout. Grout shall be allowed to cure prior to backfilling.

### **4.3 Salvage to District**

The following items shall remain District property. The Contractor shall stockpile these items at a mutually agreed upon location on site for District collection at a later date.

1. All aluminum grating from existing wastewater treatment structures.
2. Suspended natural gas unit heater located in grit and washer building (Refer to Demolition Item 2A on plans and in *Section III – Demolition Index*).

### **4.4 Demolition of Existing Structures**

The Contractor shall completely demolish and remove structures, including all related or connected appurtenances to a minimum depth of 3' below proposed final grade. Concrete debris generated in demolition operations may be utilized as fill in approved locations provided the concrete pieces used do not have any protruding rebar. See the *Plan Sheet 3 - Site Demolition Plan* for approved locations.

*Items 2A and 10 on the Demolition Plan* include demolition of items within buildings that are to remain in place. Only those items approved for demolition by the District shall be removed. Wall penetrations that remain from removal of piping or electrical conduit shall be grouted flush with existing surface with an approved non-shrink grout. All debris generated in demolition shall become the property of the Contractor and shall be disposed of in compliance with all applicable federal, state or local permits, rules and/or regulations.

#### **4.5 Payment**

Payment shall be made at the Contract Lump Sum (LS) price for *Demolition* of all items identified on the plans and in *Section III – Demolition Index*. Partial progress payments shall be made based on the percentage of total demolition work complete, as determined by the District.

### **5 Grading & Shaping**

#### **5.1 General**

This work shall include all labor, equipment and materials necessary to grade the existing site to the proposed elevations indicated on the plans. All work shall conform to *Articles 202, 204, 205, 211 and 212 of IDOT Standard Specifications*. Clearing of saplings, bushes and roots will not be measured for payment.

This project will require a significant quantity of imported fill material. All imported fill material must be uncontaminated and the Contractor shall submit location and soil information from proposed borrow site(s) for District approval prior to delivery. Imported fill shall be included in the grading and shaping unit price.

Grading and shaping work shall not begin until lagoon bio-solids disposal operations are complete (see *Part 3* of these specifications).

Refer to the *Site Grading Plan* for net cut/fill volumes for the total project site.

#### **5.2 Required Submittals**

1. Borrow site location and soil information.

#### **5.2 Payment**

Payment shall be made at the Contract unit price per Acre (ACRE) for *Grading & Shaping*. No payment for this work outside the limits defined on the plans will be made without a Contract Change Order approved prior to performance of the additional work.

### **6 Abandon Existing Sanitary Manhole**

#### **6.1 General**

This work shall include all labor, equipment and material to abandon existing sanitary manholes. Work shall include removal and disposal of the existing manhole cone section, frame and lid, plugging existing pipes in the manhole with a concrete bulkhead, filling the manhole void with approved compacted backfill material.

Work shall conform to *Articles 605.03-605.05 of IDOT Standard Specifications*.

#### **6.2 Payment**

Payment shall be made at the Contract unit price per Each (EA) for *Abandon Existing Sanitary Manhole*.

## **7 Adjust Existing Sanitary Manhole**

### **7.1 General**

This work shall include all labor, equipment and materials needed to adjust existing sanitary manhole castings in accordance with the Rock River Water Reclamation District's *Standard Detail Sheet*. Work shall include removal of existing manhole frame and lid, and re-installing the frame and lid after adjusting ring(s) are installed or removed per the *Standard Detail Sheet*. Work shall also include furnishing and installing an exterior chimney seal as shown on the *Standard Detail Sheet*.

### **7.2 Materials**

Concrete adjusting rings, butyl rubber sealants, and external chimneys seals meeting requirements indicated on *Standard Detail Sheet*.

### **7.3 Required Submittals**

1. Precast concrete adjusting rings shop drawings.
2. Butyl rubber sealant material specifications: EZ Stik, Kent seal or approved equal.
3. External Chimney Seal: Cretex, MacWrap, or CanUSA

### **7.4 Payment**

Payment shall be made at the Contract unit price per each (EA) for *Adjust Existing Sanitary Manhole*.

## **8 Sidewalk Removal**

### **8.1 General**

This work shall include all equipment, labor and materials required to remove existing portland cement concrete (PCC) sidewalk and other PCC slabs to the limits shown on the plans. Work shall be done in accordance with *Section 440* of the *IDOT Standard Specifications*.

Sidewalk shall be saw-cut (full depth) at removal limits prior to removal unless an existing construction joint exists. Disposal of removed material is incidental.

### **8.2 Payment**

Payment shall be made at the Contract unit price per square foot (SF) for *Sidewalk Removal*.

## **9 PCC Sidewalk, 5"**

### **9.1 General**

This work shall be in accordance with *Article 424* of *IDOT Standard Specifications* and shall be performed to the District's satisfaction.

### **9.2 Materials**

Portland cement concrete sidewalk shall be 5" thick, placed over 4" of compacted aggregate base course. Concrete shall be class "SI" as defined in *Article 1020* of *IDOT Standard Specifications*. Aggregate base course shall be of CA-6 gradation in accordance with *Article 1040.01* of *IDOT Standard Specifications* and shall be incidental to the PCC sidewalk pay item.



### **9.3 Required Submittals**

1. Concrete mix design.

### **9.4 Measurement and Payment**

Payment shall be made at the Contract unit price per Square Foot (SF) for *PCC Sidewalk, 5"*.

## **10 PCC Curb and Gutter, Type M-4.18**

### **10.1 General**

This work shall consist of all labor equipment and materials required to install new concrete curb and gutter on compacted existing subgrade.

Curb and gutter shall be Type M-4.18 in accordance with *IDOT Highway Standard 606001-06*. Construction of new PCC curb and gutter shall be in accordance with *Section 606 of IDOT Standard Specifications*.

### **10.2 Materials**

Concrete shall be Class SI in accordance with *Section 1020 of IDOT Standard Specifications*.

### **10.3 Required Submittals**

1. Concrete mix design.

### **10.4 Measurement and Payment**

Payment shall be made at the Contract unit price per Linear Foot (LF) for *PCC Curb & Gutter, Type M-4.18*.

## **11 Recycled Asphalt Pavement**

### **11.1 General**

This work shall consist of placing 10" of compacted aggregate base course followed by a 4" compacted lift of recycled asphalt pavement aggregate. This work shall include subgrade preparation, removal and disposal of excess material, furnishing, placing and compacting course aggregates to the specified thicknesses. All work shall conform to *Articles 351 and 402 of IDOT Standard Specifications*.

### **11.2 Materials**

Both aggregate base course and recycled asphalt pavement aggregate surface course shall be of CA-6 or CA-10 gradation in accordance with *Article 1004.01 of IDOT Standard Specifications*.

### **11.3 Required Submittals**

1. Aggregate base course gradation report.
2. Recycled asphalt pavement aggregate gradation report.

### **11.4 Measurement and Payment**

Payment shall be made at the Contract unit price per square yard (SY) for *Recycled Asphalt Pavement*.

## **12 Aggregate Surface**

### **12.1 General**

This work shall consist of placing a compacted 4" lift of aggregate surface course on prepared subgrade. This work shall include subgrade preparation, removal and disposal of excess material, furnishing, placing and compacting course aggregates to the specified thicknesses. This work shall conform to *Articles 351 and 402 of IDOT Standard Specifications*.

### **12.2 Materials**

Aggregate surface course shall be of CA-6 or CA-10 gradation in accordance with *Article 1004.01 of IDOT Standard Specifications*.

### **12.3 Required Submittals**

1. Aggregate surface gradation report.

### **12.4 Payment**

Payment shall be made at the Contract unit price per Square Yard (SY) for *Aggregate Surface*.

## **13 Fencing**

### **13.1 General**

This work shall consist all equipment, materials and labor to remove portions of existing perimeter fencing and installing new perimeter fencing, gates, actuators and appurtenances as shown in plans as detailed in these specifications.

### **13.2 Remove Existing Fence**

The Contractor shall remove and dispose of existing fence to the limits as shown in the plans. The Contractor shall take measures necessary to protect fencing that is to remain in place and shall repair or replace damaged fencing not scheduled for removal at no cost to the District.

### **13.3 Perimeter Fence**

New perimeter fencing shall be chain-link fence as manufactured by Master Halco or District-approved equivalent. All piping, poles, mesh, fitting and accessories shall be hot-dipped galvanized metal. Mesh shall be galvanized after weaving. Finished fence height shall be 7'. Poles/posts shall be sized per manufacturer's recommendations for fencing and gates for the application depicted on plans and driven a minimum of 3.5' below proposed grade. Poles supporting gates shall be set in concrete, minimum 6" around the outside diameter of the pole. Mesh size shall be 2" x 2 1/4". Wire size shall be 9 gauge, minimum.

### **13.4 Access Gates**

New access gates shall be cantilever slide gates as manufactured by Master Halco or District-approved equivalent. Width of gate openings shall be as shown on the plans. Materials of construction shall be the same as *11.3, Perimeter Fence*.

### **13.5 Electric Gate Actuator**

New gate actuator(s) shall be 1/2 HP variable speed electric actuator model VS-GSLG-2 as manufactured by Linear or District approved equivalent. Poles/posts used for mounting actuator enclosure shall be of same materials specified in *11.3, Perimeter Fence* and included in the gate actuator cost.

### **13.6 Payment**

Payment shall be made at the Contract unit price per linear foot (LF) for *Perimeter Fence Removal*, the Contract unit price per linear foot (LF) for *Perimeter Fence*, the Contract unit price per each (EA) for *Access Gates* of the width specified and at the Contract unit price per (EA) for *Electric Gate Actuators*

## **14 Seeding & Fertilizing**

### **14.1 General**

This work shall include all equipment, labor and materials required to prepare and fertilize the seedbed, spread seed and maintain the seeded area until the required coverage of vegetation is established.

Seedbed preparation shall be done according to *Article 250.05 of IDOT Standard Specifications*. The minimum depth of topsoil is 4".

Fertilizer work shall be done in accordance with *Article 250.04*. Fertilizer shall have a 10-10-10 composition and shall be applied at the rate of 400 lbs./acre.

Seeding shall be *Class 1* or *Class 4* in accordance with *Article 250.07 of IDOT Standard Specifications* at locations shown on the plans.

Straw mulch shall be per *Method 2* and done in accordance with the applicable portions of *Section 251 of IDOT Standard Specifications* with the following exceptions:

The rate of application for mulch will be 4,000 lbs./acre using Hydro Tack at a rate of 400 lbs./acre for stabilization. This specification describes mulch for use with the hydraulic application of grass seed which shall consist of specially prepared wood cellulose fiber. It shall be processed in such a manner that it will not contain any growth or germination-inhibiting factors, and shall be dyed in an appropriate color to facilitate metering of the material. It shall be manufactured in such a manner that after additions and agitations in slurry tanks with fertilizers, grass seeds, water and any other approved additives, the fibers in the material will become uniformly suspended to form a homogenous slurry, and that when hydraulically sprayed on the ground, the material will form a blotter-like cover impregnated uniformly with grass seed, and which after application will allow the absorption of moisture and percolation of rainfall or mechanical watering of the underlying soil.

The mulch material described above shall be supplied in packages having a gross weight not in excess of 55 pounds. The packages shall be adequately wrapped in paper, polyethylene or other suitable material to prevent loss or spillage during handling. Weight specifications of this material from suppliers, and for all applications, shall refer only to air dry weight of the fiber material. Absolute air dry weight is based on the normal weight standard of the Institute of the Pulp and Paper Industry for wood cellulose and is considered equivalent to ten percent (10%) moisture. Each package of the cellulose fiber shall be marked by the manufacturer to show the air-dry weight content.

At the direction of the District, the Contractor shall provide steep slope protection over turf areas disturbed by construction in accordance with *Articles 251.03 and 251.04 of IDOT Standard Specifications*.

#### **14.4 Required Submittals**

1. Seeding specifications
2. Fertilizer specifications.

#### **14.5 Payment**

Payment shall be made at the Contract price per Acre (ACRE) for *Seeding & Fertilizing*. No additional payment will be made for restoration and seeding outside the limits defined on the plans without a Contract Change Order approved prior to performance of additional work.

### **15 Erosion & Sediment Control**

#### **15.1 General**

The Contractor shall comply with all the requirements of the *IEPA Illinois Urban Manual*, current edition, and *Article 280* of the *IDOT Standard Specifications*.

The Contractor shall take whatever measures the District deems necessary to eliminate excessive erosion or siltation. This shall include but is not limited to: straw baling of ditches, stabilizing slopes with an approved geo-fabric and/or mulch, seeding, sodding, silt fence installation, rip rap, etc. Sediment control shall be provided around the perimeter of all stockpile areas.

Provisions shall be made to minimize the transport of sediment (mud) by runoff or vehicle tracking onto roadways. Mud and debris shall be removed daily from roadway surfaces at the end of each workday or as necessary.

The Contractor shall remove and dispose of all temporary erosion control devices within 30 days of final site stabilization and District approval.

The Contractor shall follow any measures prescribed by the District to prevent or eliminate excessive erosion. Actual field conditions may require additional measures beyond those cited.

The Contractor shall maintain storm water flow in all ditches and storm water conveyance systems (storm inlets, pipes, culverts, etc.) disturbed as a result of construction. Ditches shall be rough graded at the end of each day and whenever rain is imminent.

#### **15.2 Silt Fencing**

Silt fencing shall conform to Standard 280001-07 of the *IDOT Highway Manual*. Silt fencing shall be Amoco 2127, or approved equivalent. Posts shall be 1.5" x 1.5" x 4' long, minimum, spaced 5' maximum on center. Silt fencing shall be installed prior to excavation or stockpiling of materials.

#### **15.3 Stabilized Construction Entrance**

Where required or as directed, a temporary construction entrance shall be provided to the project site at a location mutually agreed upon by the Contractor and the District. The Contractor shall place one-inch (1") to three-inch (3") graded washed stone to a minimum thickness of six-inches (6") on non-woven geo-technical fabric. Unless otherwise directed by the District, the stabilized entrance shall be 20' W x 40' L minimum. At the District's discretion and direction, the dimensions and location of the stabilized construction entrance may be adjusted to accommodate specific field needs and site conditions. The entrance surface shall be routinely washed, as necessary, to prevent tracking on public roadways.

#### **15.4 Storm Inlet and Pipe Protection**

This work shall consist of the furnishing, installing, maintaining and retrieval of District-approved drainage inlet protection filters to retain storm water runoff sediment as required or as directed by the District. Inlet protection shall be drop-in type installed in accordance with *Illinois Urban Manual* detail 561D. Filters shall be 9" or 12" diameter sediment logs, erosion eels or straw wattles as manufactured by North American Green (or District-approved equal).

Erosion control devices shall remain in place until removal is directed by the District. All erosion control devices shall remain the property of the Contractor. Upon stabilization and approval, the Contractor shall remove and dispose of all erosion control devices as well as all debris and silt accumulations.

#### **15.5 Notice of Intent**

The District has filed a "Notice of Intent" (NOI) with the IEPA. The Contractor shall furnish, install and maintain all erosion and sediment control equipment, devices and materials needed for the duration of construction and shall comply with all NPDES requirements, including all inspection and record keeping requirements.

#### **15.6 Materials**

Temporary erosion control measures shall conform to *IL Urban Manual* and *Article 1081 of IDOT Standard Specifications*.

#### **15.7 Required Submittals**

1. Silt fencing specifications.
2. Pipe protection device specifications.
3. Aggregate gradation for stabilized construction entrance.

#### **15.8 Payment**

Payment shall be made at the Contract unit price per Linear Foot (LF) for *Silt Fence*, at the Contract Unit Price per Each (EACH) for *Pipe Protection*, and at the Contract unit price per Square Yard (SY) for *Stabilized Construction Entrance*.

Maintenance and removal of installed erosion control devices shall be included in the applicable Contract unit prices.

### **16 Electrical**

#### **16.1 General**

This section covers the furnishing and installation of all equipment, materials, installation and interconnection of electrical equipment furnished under other sections, except electrical items designated to be installed under those sections.

Electrical materials furnished and installed under this section shall be fabricated, assembled, erected, and placed in readiness for proper operating condition in full conformity with the Drawings, Specifications, engineering data, instructions, and recommendations of the equipment manufacturer, unless exceptions are noted by the District.

Electrical work shall be coordinated with the construction schedule and progress of other trades.

**CODES AND PERMITS.** All work shall be performed and materials shall be furnished in accordance with the NEC - National Electrical Code, the NESC - National Electrical Safety Code, and the following standards where applicable:

ANSI	American National Standards Institute.
ASTM	American Society for Testing and Materials.
AWG	American Wire Gauge.
Fed Spec	Federal Specification.
ICEA	Insulated Cable Engineers Association.
IEEE	Institute of Electrical and Electronics Engineers.
IESNA	Illuminating Engineering Society of North America.
NEIS	National Electrical Installation Standards
NEMA	National Electrical Manufacturers Association.
NFPA	National Fire Protection Association.
UL	Underwriters' Laboratories.

Equipment covered by this section shall be listed by UL, or by a nationally recognized third party testing laboratory. All costs associated with obtaining the listing shall be the responsibility of Contractor. If no third-party testing laboratory provides the required listing, an independent test shall be performed at Contractor's expense. Before the test is conducted, Contractor shall submit a copy of the testing procedure to be used.

## **16.2 Identification**

### **16.2.1 Conductors**

All conductors in power, control, and instrumentation circuits shall be identified and color coded as described herein.

Except for lighting and receptacle circuits, each individual conductor in power, control, and instrumentation circuits shall be provided with wire identification markers at the point of termination.

The wire markers shall be of the heat-shrinkable tube type, with custom typed identification numbers.

Power conductors shall be color coded as indicated below. For conductors 6 AWG and smaller, the color coding shall be the insulation finish color. Equipment grounding conductors shall be green or green with one or more yellow stripes if the conductor is insulated.

The following color coding system shall be used:

24VDC - blue

120/240V single-phase — black, red, and white

480V three phase – brown, orange, and yellow

### **16.2.2 Circuit Breakers**

Circuit breakers shall contain a visual trip indicator. Circuit breakers shall be provided with nameplates identifying related equipment. Nameplates shall be laminated black-over-white plastic, with 1/8 inch engraved letters, and shall be securely fastened to the circuit breakers. Any breaker 40 amps or larger shall be adjustable for LSIG.

### **16.3 Protection and Storage**

During construction, the insulation on all electrical equipment shall be protected against absorption of moisture, and metallic components shall be protected against corrosion by strip heaters, lamps, or other suitable means. This protection shall be provided immediately upon receipt of the equipment and shall be maintained continuously.

### **16.4 Products**

#### **16.4.1 Cable & Conductors**

All cables of each type shall be from the same manufacturer.

Cable for electronic circuits to instrumentation, metering, and other signalling and control equipment shall be two- or three-conductor instrument cable twisted for magnetic noise rejection and protected from electrostatic noise by a total coverage shield. Control cable shall be Belden 89418 or District approved equal.

Conductors for power circuits shall be stranded, uncoated copper with max operating temperature of 90°C dry and 75°C wet. Conductor insulation shall be polyvinyl chloride, UL 83, type THWN or THHN.

#### **16.4.2 Conduit**

Conduit and raceways shall be as described in the following paragraphs:

Interior locations shall be rigid steel conduit shall be heavy wall, hot-dip galvanized, shall conform to ANSI C80.1, and shall be manufactured in accordance with UL 6.

Exposed exterior locations and inside proposed wet well and valve vault shall be PVC coated metal conduit and shall conform to NEMA RN1, ANSI C80.1.

Buried locations shall be nonmetallic (PVC) conduit - concrete encased, PVC conduit shall be heavy wall, Schedule 40, UL labelled for aboveground and underground uses, and shall conform to NEMA TC-2 and UL 651. Concrete encasement shall have a minimum thickness of six (6") around exterior wall of conduit(s).

#### **16.4.3 Junction Boxes and Pull Boxes**

Unless noted otherwise in plans, indoor boxes (larger than switch, receptacle, or fixture type) and outdoor boxes shall be NEMA Type 12 and shall be rigidly supported by PVC-coated or stainless steel framing materials. All exterior boxes shall be NEMA 4X stainless steel and rigidly supported with stainless steel framing materials. Mounting

hardware, which includes nuts, bolts, and anchors, shall be stainless steel. All damaged coatings shall be repaired according to the manufacturer's instructions.

Bolt-on junction box covers 3 feet square or larger, or heavier than 25 lbs, shall have rigid handles. Covers larger than 3 by 4 feet shall be split.

Where indicated on the Drawings, junction and pull boxes with a removable side opposite the underground conduits shall be provided over building ends of underground conduit banks. Boxes shall be sized in accordance with the National Electrical Code, including space for full size continuations of all underground conduits not originally continued.

#### **16.5 Submittals**

Contractor shall submit material and installation specifications for the following:

1. Rigid steel conduit, including mounting hardware.
2. Rigid non-metallic conduit.
3. Concrete mix designs
4. Conduit sealing compound.
5. Junction boxes.
6. Conductors.
7. Control Cable.

#### **16.6 Execution**

All material, equipment, and components specified herein shall be installed, tested, and commissioned for operation in compliance with NECA 1000 – NEIS Specification System. Where required in NECA 1000, testing and commissioning procedures shall be followed prior to energizing equipment.

##### **16.6.1 Cable/Conductor Installation**

Except as otherwise specified or indicated on the Drawings, cable shall be installed according to the following procedures, taking care to protect the cable and to avoid kinking the conductors, cutting or puncturing the jacket, contamination by oil or grease, or any other damage. Circuits to supply electric power and control to equipment and devices, communication and signal circuits as indicated on the one-line diagrams shall be installed continuous and may not be spliced unless approved by the Engineer.

- a. Stranded conductor cable shall be terminated by lugs or pressure type connectors. Wrapping stranded cables around screw type terminals is not acceptable.
- b. Stranded conductor cable shall be spliced by crimp type connectors. Twist-on wire connectors may be used for splicing solid cable and for terminations at lighting fixtures.
- c. Splices may be made only at readily accessible locations.



- d. Cable terminations and splices shall be made as recommended by the cable manufacturer for the particular cable and service conditions. All shielded cable stress cone terminations shall be IEEE Class 1 molded rubber type. Shielded cable splices shall be tape or molded rubber type as required. Shielded cable splices and stress cone terminations shall be made by qualified splicers. Materials shall be by 3M Company, Plymouth/Bishop, or equal.
- e. Cable shall not be pulled tight against bushings nor pressed heavily against enclosures.
- f. Cable-pulling lubricant shall be compatible with all cable jackets; shall not contain wax, grease, or silicone; and shall be Polywater "Type J".
- g. Where necessary to prevent heavy loading on cable connections, in vertical risers, the cable shall be supported by Kellems, or equal, woven grips.
- h. Spare cable ends shall be taped, coiled, and identified.
- i. Cables shall not be bent to a radius less than the minimum recommended by the manufacturer.
- j. All cables in one conduit, over 1 foot long, or with any bends, shall be pulled in or out simultaneously.
- k. Circuits to supply electric power and control to equipment and devices are indicated on the one-line diagrams and shall be in separate conduits. Conductors in designated numbers and sizes shall be installed in conduit of designated size. Circuits shall not be combined to reduce conduit requirements unless acceptable to Engineer.

#### **16.6.2 Conduit Installation**

Contractor shall be responsible for routing all conduits. This shall include all conduits indicated or shown on the plan Drawings. Conduits shall be routed as defined in these Specifications. Where conduit routing is shown on plans, it shall be considered a general guideline and shall be field verified to avoid interferences.

Except as otherwise specified or indicated on the Drawings, conduit installation and identification shall be completed according to the following procedures.

##### **16.6.2.1 Installation of Interior and Exposed Exterior Conduit**

This section covers the installation of conduit inside structures, above and below grade, and in exposed outdoor locations.

Unless otherwise indicated on the Drawings, Contractor shall be responsible for routing the conduit to meet the following installation requirements:

- a. Conduit installed in all exposed indoor locations, except corrosive areas indicated on the Drawings, and in floor slabs, walls, and ceilings of hazardous (classified) locations, shall be rigid steel metal. Exposed conduit shall be rigidly supported by hot-dip galvanized hardware and framing materials, including nuts and bolts.
- b. Conduit installed in all exposed outdoor locations and in proposed wet well and valve vault shall be PVC-coated rigid steel, rigidly supported by PVC-coated framing materials. Mounting hardware, which includes nuts, bolts, and anchors, shall be stainless steel. All damaged coatings shall be repaired according to the manufacturer's instructions.
- c. Terminations and connections of rigid steel and intermediate metal conduit shall be taper threaded. Conduits shall be reamed free of burrs and shall be terminated with conduit bushings.
- d. Exposed conduit shall be installed either parallel or perpendicular to structural members and surfaces.
- e. Two or more conduits in the same general routing shall be parallel, with symmetrical bends.
- f. Conduits shall be located at least 6 inches away from high temperature piping, ducts, and flues.
- g. Schedule 40 PVC conduit shall have supports and provisions for expansion as required by NEC Article 352.
- h. Metallic conduit connections to sheet metal enclosures shall be securely fastened by locknuts inside and outside.
- i. Schedule 40 PVC conduit shall be secured to sheet metal device boxes using a male terminal adapter with a locknut inside or by using a box adapter inserted through the knockout and cemented into a coupling.
- j. Conduit shall be clear of structural openings and indicated future openings.
- k. Conduit installed through any openings cut into non-fire rated concrete or masonry structure elements shall be neatly grouted.
- l. Conduits shall be capped during construction to prevent entrance of dirt, trash, and water.
- m. Horizontal conduit shall be installed to allow at least 7 feet of headroom, except along structures, piping, and equipment or in other areas where headroom cannot be maintained.
- n. Conduit shall not be routed across the surface of a floor, roof, or walkway unless approved by Engineer.

- o. PVC-coated rigid steel conduit shall be threaded and installed as recommended by the conduit manufacturer's installation procedure using appropriate tools.
- p. All conduits that enter enclosures shall be terminated with acceptable fittings that will not affect the NEMA rating of the enclosure.

#### **16.6.2.2 Underground Duct Bank Installation**

All excavation, backfilling, and concrete work shall conform to the respective sections of these Specifications. Underground conduit shall conform to the following requirements:

- a. All underground conduits shall be concrete encased unless indicated otherwise on the Drawings. Minimum concrete cover around conduit shall be 6".
- b. Concrete encased conduit shall be PVC utility schedule 40 PVC. Conduits shall have PVC-coated rigid steel coupling embedded a minimum of 3 inches when emerging from walls and the coupling shall extend 2 inches from the wall. All PVC joints shall be solvent welded in accordance with the recommendations of the manufacturer.
- c. Underground conduit bend radius shall be at least 2 feet at vertical risers and at least 3 feet elsewhere.
- d. Conduits encased in concrete and passing through walls, which have one side in contact with earth, shall be sealed watertight with special rubber-gasketed sleeve and joint assemblies or with sleeves and modular rubber sealing elements.
- e. Underground conduits shall be sloped to drain from buildings to manholes.
- f. Control/instrument cables shall not be installed in raceways, conduits, boxes, manholes, or hand holes containing other types of circuits.
- g. Control/instrument cables shall be separated the maximum possible distance from all power wiring in pull-boxes, manholes, and hand holes.

#### **16.6.2.3 Sealing of Conduits**

After cable has been installed and connected, conduit ends shall be sealed by forcing non-hardening sealing compound into the conduits to a depth at least equal to the conduit diameter. This method shall be used for sealing all conduits at hand-holes, manholes, and building entrance junction boxes, and for 1 inch and larger conduit connections to equipment.

### **16.7 Setting of Equipment**

All equipment and boxes shall be installed level and plumb. Boxes, equipment enclosures, metal raceways, and similar items mounted on water- or earth-bearing walls shall be separated from the wall by at least 1/4-inch thick corrosion-resistant spacers. Where boxes, enclosures, and raceways

are installed at locations where walls are not suitable or available for mounting, concrete equipment pads, framing material, and associated hardware shall be provided.

### **16.8 Grounding**

The electrical grounding system materials, equipment and installation shall comply with the National Electrical Code, UL 467 and the following requirements:

- a. All ground conductors shall be at least 12 AWG soft drawn copper cable or bar, bare or green-insulated in accordance with the National Electrical Code.
- b. Ground cable splices and joints, ground rod connections, and equipment bonding connections shall meet the requirements of IEEE 142, and shall be exothermic weld connections or irreversible high-compression connections, Cadweld "Exothermic" or Burndy "Hyground". Mechanical connectors will not be acceptable. Cable connections to bus bars shall be made with high-compression two-hole lugs.
- c. All powered equipment, including lighting fixtures and receptacles, shall be grounded by a copper ground conductor in addition to the conduit connection.
- d. Ground connections to equipment and ground buses shall be made with copper or high conductivity copper alloy ground lugs or clamps. Connections to enclosures not provided with ground buses or ground terminals shall be made with irreversible high-compression type lugs inserted under permanent assembly bolts or under new bolts drilled and inserted through enclosures, other than explosion proof enclosures, or by grounding locknuts or bushings. Ground cable connections to anchor bolts; against gaskets, paint, or varnish; or on bolts holding removable access covers will not be acceptable.
- e. Ground conductors shall be solid for No. 8AWG or smaller and stranded for #6 AWG or larger. Conductors shall be routed as directly as possible, avoiding unnecessary bends. Ground conductor installations for equipment ground connections to the grounding system shall have turns with minimum bend radii of 12 inches.

### **16.9 Modifications to Existing Equipment**

Modifications to existing equipment shall be completed as specified herein and indicated on the Drawings. All existing facilities shall be kept in service during construction. Temporary power or relocation of existing power and control wiring, equipment, and devices shall be provided as required during construction. Coordination and timing of outages shall be as specified in other sections of these Specifications. Electrical power interruptions will only be allowed where agreed upon in advance with the District.

#### **16.9.1 Demolition**

Unless otherwise specified or indicated on the Drawings, all cable and all exposed conduit for power and control signals of equipment indicated to be removed shall be demolished. Conduit supports and electrical equipment mounting hardware shall be removed, and holes or damage remaining shall be grouted or sealed flush. Conduit partially concealed shall be removed where exposed, and plugged with expanding grout flush with the floor or wall. Repairs shall be refinished to match the existing surrounding surfaces. Demolished equipment shall be discarded or salvaged as indicated on the Drawings and as specified in other sections of these Specifications.

#### **16.10 Payment**

Payment shall be made at the contract unit price per Linear Foot (LF) for *Electrical Duct Bank* and at the contract unit price per Each (EA) for *Underground Junction Boxes*.

Payment for supplying and installing all other electrical material components will be made at the contract Lump Sum (LS) price for *General Electrical*. Partial progress payments will be based on percentage of work complete as determined by the District.

### **17 Warranty**

The Contractor shall unconditionally warrant all products installed for a period of two (2) years commencing on the date installation of the entire system is completed and accepted, in writing, by the District. The Contractor shall repair, at his own expense, any defects in work that will affect the integrity of the manhole. All repairs will be performed in a manner that is mutually agreed upon by the District and the Contractor. Any such repairs shall likewise be covered by the same warranty period from the date of subsequent installation and written approval by the District.

**Section II**  
**Contract Forms**

## Proposal

**Project:** Winnebago STP Abandonment, Capital Project No. 1566

**Location:** Winnebago's Sanitary Treatment Plant, 600 W. Soper Street, Winnebago, Illinois

**Completion Dates:** All biosolids removed within sixty (60) working days of the date of the Notice to Proceed. All demolition, new construction and restoration by July 31, 2020

**Liquidated Damages:** \$300/calendar day per each completion date deadline

To: Board of Trustees  
Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

From: \_\_\_\_\_  
(Individual, Partnership or Corporation, as case may be)

\_\_\_\_\_  
(Address of Individual, Partnership or Corporation)

Gentlemen:

I (We), the undersigned, hereby propose to furnish all materials, equipment, tools, services, labor, and whatever else may be required to construct and place in service the above subject Sanitary Sewer for the Rock River Water Reclamation District all in accordance with the plans and specifications, provided by the Rock River Water Reclamation District. The undersigned also affirms and declares:

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.
3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.

4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Rock River Water Reclamation District, which it is agreed, shall be retained as liquidated damages by said Rock River Water Reclamation District if the undersigned fails to execute the Contract in conformity with the contract documents incorporated in the contract documents and furnish bond as specified, within ten (10) days after notification of the award of the contract to the undersigned.
5. The Bidder is of lawful age and that no other person, firm or corporation has any interest in this Proposal or in the Contract proposed to be entered into.
6. The Bidder is not in arrears to the Rock River Water Reclamation District, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Rock River Water Reclamation District.
7. No officer or employee or person whose salary is payable in whole or in part by the District is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the District and the District's representatives.

In regard to participation in an approved Apprenticeship program, upon request, Contractor will be required to provide written proof of participation.

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 99-093 and will make this information available upon request.
10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including the Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, 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 false records is a Class B Misdemeanor. The successful Bidder shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Prevailing wage rates may be found on the Illinois Department of Labor website at [www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx](http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx).

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (SBE 348) or other approved equal.



11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.
12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act".
13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents' employment.
14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.
15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by the Rock River Water Reclamation District to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of sixty (60) days from the opening thereof.

The undersigned further declares that he (they) has (have) carefully examined the following items of work and that the cost of all the work to complete this project is given in this Proposal.

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	4,300	TON	Lagoon Biosolids Disposal			
2	1	LS	Demolition			
3	6	ACRE	Grading & Shaping			
4	3	EA	Abandon Sanitary Manhole			
5	1	EA	Adjust Sanitary Manhole			
6	1,374	SF	Sidewalk Removal			
7	296	SF	PCC Sidewalk, 5"			
8	116	LF	PCC Curb & Gutter, Type M-4.18			
9	4,372	SY	Recycled Asphalt Pavement			
10	1,190	SY	Aggregate Surface Course			
11	1,165	LF	Perimeter Fence Removal			
12	1,431	LF	Perimeter Fence			
13	2	EA	Access Gate, 24' Wide			
14	1	EA	Electric Gate Actuator			
15	4.9	ACRE	Seeding & Fertilizing			
16	1,410	LF	Silt Fence			
17	1	EA	Pipe Protection			
18	90	SY	Stabilized Construction Entrance			
19	321	LF	Electrical Duct Bank, 2-1", 1-2"			
20	2	EA	Underground Junction Box			
21	1	LS	General Electrical			
<b>TOTAL BID PRICE:</b>						
				(In Writing)	(In Figures)	

The undersigned acknowledges receiving Addendum numbers \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and realizes that all Addenda are considered part of the contract.

By: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

# Fair Employment Practices Affidavit of Compliance

PROJECT: Winnebago STP Abandonment, Capital Project No. 1566

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE ROCK RIVER WATER RECLAMATION DISTRICT CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

\_\_\_\_\_, being first duly sworn, deposes and says that:

(Name of person making affidavit)

They are: \_\_\_\_\_ of \_\_\_\_\_  
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.
4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 Ill. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

## Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

\_\_\_\_\_ (hereinafter called the Principal) and

\_\_\_\_\_ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of \_\_\_\_\_ with its principal offices in the City of \_\_\_\_\_ and authorized to do business in the State of Illinois are held and firmly bound onto the Rock River Water Reclamation District of Winnebago County, Illinois (District), in the full and just sum of: **FIVE PERCENT (5%) OF THE TOTAL BID PRICE** good lawful money of the United States of America, to be paid upon demand of the District, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to the District, a proposal for constructing Sanitary Sewers and Appurtenances.

WHEREAS, the Principal desires to file this bond, in accordance with law, to accompany this Proposal.

NOW THEREFORE, The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within ten days after the date of receipt of a written notice of award of Contract, execute a Contract in accordance with the Proposal and upon the terms, conditions, and prices set forth therein, in the form and manner required by the District, and execute a sufficient and satisfactory Contract Performance Bond payable to said District in an amount of one hundred percent (100%) of the Contract price (including alternates) in form and with security satisfactory to said District, then this obligation to be void, otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid District, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed  
and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
**Principal**

(Seal)

By \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Secretary

**Surety**

(Seal)

By \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

# Agreement

## 1. General

THIS AGREEMENT, made and concluded this \_\_\_\_ day of \_\_\_\_\_, 2019, between the Rock River Water Reclamation District, Rockford, Illinois (District), acting by and through the Board of Trustees, and \_\_\_\_\_, his/their executors, administrators, successors or assigns:

## 2. Scope of Work

WITNESSETH: That for and in consideration of the payments and agreements made in the Proposal attached hereto, to be made and performed by the District and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with the District at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the District and its representative.

And it is also understood and agreed that the Bidding Requirements, Detailed Specifications, Contract Forms, General Conditions, General Requirements, Technical Specifications, Plans, Addenda, and provisions required by law are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

## 3. Contract Price

The District shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, subject to any additions or deductions provided for hereby, in current funds, the Total Contract Price of \_\_\_\_\_ and 00/100 (\$\_\_\_\_\_).

Payments are to be made to the Contractor in accordance with and subject to the provisions of Section 7 of this Agreement, which is a part of this Contract.

## 4. Bond

The Contractor has entered into and herewith tenders a bond of even date herewith, in the penal sum of \_\_\_\_\_ and 00/100 (\$\_\_\_\_\_ ) to insure the faithful performance of this Contract, which said bond is hereby made a part of this Contract by reference.

## 5. Maintenance and Guarantee

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to the District all work for a period three years from the date of final acceptance of the Contract for trench settlement and for a period of two years all other work, except where periods of maintenance and guarantee are provided for. The Contractor shall, for this

period, indemnify and save harmless the District, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by the District, the District shall have the right to have the work done by others and to call on the Contractor and his bondsman to pay the costs thereof.

## **6. Contract Execution**

IT IS EXPRESSLY UNDERSTOOD AND AGREED that the entire improvement shall be done in a thorough and workmanlike manner, under the direction and to the satisfaction of the District and in full compliance with all the requirements of its representative under them. All loss or damage arising out of the nature of the work to be done, or from any detention of unforeseen obstruction or difficulty which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

The Contractor will be held responsible for all accidents, and hereby agrees to indemnify and protect the District from all suits, claims, and actions brought against it, and all cost, and damages which the District may be put to by reason of an injury or alleged injury, to the person or property of another in the execution of this contract, or the performance of the work, or in guarding the same, or for any material used in its prosecution or in its construction.

Any person employed on the work who shall refuse or neglect to obey the directions of the District or its representative, or who shall be deemed by the District to be incompetent, or who shall be guilty of any disorderly conduct, or who shall commit any trespass on any public or private property in the vicinity of the work, shall at once be removed from the work by the Contractor when so requested by the District.

Any request to extend the contract completion date must be considered by the Board at the Board meeting prior to the then-existing contract termination date. Any deviation from this action will result in the liquidated damage clause in the contract to be exercised.

## **7. Payments to Contractor**

The District hereby covenants and agrees, in consideration of the covenants and agreements in this Contract, specified to be kept and performed by the Contractor and subject to the conditions herein contained, and if the District receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the District Engineering Manager, the District shall issue payment before the fifth day of the succeeding month. If the District receives an acceptable invoice on or after the tenth day of the month, the District shall issue payment before the fifth day of the second succeeding month.

The District reserves the right at all times to refuse to issue payment in case the Contractor has neglected or failed to pay any subcontractors, workmen or employee on the work.

## **8. Subcontracts**

No part of the work herein provided for shall be sublet or subcontracted without the express consent of the District, to be entered in the records, and in no case shall consent relieve the Contractor from the obligation herein entered into, or change the terms of this Agreement.

## **9. Contractor's Responsibility**

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to him, the Contractor represents and warrants: that he is not in arrears to the District upon debt of the Contract and that he is not a defaulter, as surety, contractor or otherwise; that he is financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in his proposal and the information given by him is true and correct in all respects, and that he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that his information was secured by personal investigation and research.

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (Form SBE 348).

In regard to nondiscrimination in employment, Contractor will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations as provided herein.

The Contractor shall comply with the American Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify the District and their representatives from all:

- (a) suits, claims, or actions;
- (b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement, and;
- (c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

Contractor shall also comply with Public Act 99-0933, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment
- (b) the definition of sexual harassment under Illinois State law;
- (c) a description of sexual harassment, utilizing examples;
- (d) my (our) organization's internal complaint process including penalties;
- (e) through the Illinois Department of Human Rights and the Illinois Human Rights Commission;



- (f) directions on how to contact the Department and the Commission; and
- (g) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

Upon request this information will be provided to the Illinois Department of Human Rights. Upon District award of a contract, the District will be provided this information described no more than ten working days after the District issues its award notification.

The Contractor shall comply with Article 2 of Public Act 83-1472 which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

The Contractor shall comply with all rules and regulations of OSHA during the execution of this Contract.

The Contractor shall comply with the Federal Drug Free Workplace Act.

The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.

The Contractor shall comply with Public Act 96-1416 regarding the disposal of CCDD and uncontaminated soil at CCDD fill sites as explained in the Instructions to Bidders.

## **10. Time**

Work under this Agreement shall be commenced upon written Notice to Proceed. All biosolids shall be removed from the site within sixty (60) working days of issuance of the Notice to Proceed. Working days shall be defined by Article 108.04 of the *IDOT Standard Specifications* except that working days may be any calendar day from May 1<sup>st</sup> – December 31<sup>st</sup> except for Saturdays, Sundays, and legally observed holidays.

All demolition, new construction, and restoration shall be completed by July 31, 2020.

## **11. Liquidated Damages**

The amount of liquidated damages shall be \$300.00 per calendar day beyond each of the respective completion dates.

## **12. Counterparts**

This Agreement may be executed and recorded in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument. The Parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called “pdf” format shall be legal and binding and shall have the same full force and effect as if an original of this Agreement had been delivered. Each of the parties (a) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (b) are aware that the other party will rely on such signatures, and (c) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signature.

**13. Seals**

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

**Rock River Water Reclamation District  
Winnebago County, Illinois**

(Seal)

By \_\_\_\_\_  
President, Board of Trustees

ATTEST: \_\_\_\_\_  
Clerk of the Board

**Contractor**

(Corporate Seal)

By \_\_\_\_\_  
Contractor's Officer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST: \_\_\_\_\_

as Principal, and \_\_\_\_\_  
a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound  
unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as  
hereinafter defined in the amount of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment  
where of Principal and Surety bind themselves, their heirs, executors, administrators, successors  
and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ 20\_\_\_\_ Entered into a  
Contract with Obligee for \_\_\_\_\_ in accordance with  
contract documents prepared by the Rock River Water Reclamation District which Contract is by  
reference made a part hereof, and is hereinafter referred to as "the Contract".

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if  
Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the  
Contract, and not less than the general prevailing rate of hourly wages of a similar character in the  
locality in which the work is performed, as determined by the State of Illinois Department of Labor  
pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or  
reasonably required for use in the performance of the Contract, then this obligation shall be void;  
otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal  
or with any of Principal's subcontractors for labor or materials furnished in the performance  
of the Contract on account of which this Bond is given.

\_\_\_\_\_  
Contractor City, State

That \_\_\_\_\_ (Contractor)

a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of \_\_\_\_\_

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ 20\_\_\_\_ Entered into a Contract with Obligee for \_\_\_\_\_ in accordance with contract documents prepared by the Rock River Water Reclamation District which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of

business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.
5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

**CONTRACTOR      SURETY**

*Contractor Firm Name*

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
Title                  Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

## Performance Bond

**KNOW ALL MEN BY THESE PRESENTS**, that WHEREAS, the Rock River Water Reclamation District has awarded to: \_\_\_\_\_ hereinafter designated as the “Principal”, a contract, dated, \_\_\_\_\_, for the Rock River Water Reclamation District.

**WHEREAS**, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract (the “Bond”);

**NOW, THEREFORE**, we the Principal and \_\_\_\_\_, as Surety, are firmly bound unto the Rock River Water Reclamation District in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents for a performance bond. The conditions of this obligation is such that if the said Principal does well and faithfully performs all the conditions and covenants of said Contract, according to the true intent and meaning thereof, upon its part to be kept and performed, then the above obligation is to be null and void, otherwise to remain in full force and effect.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Rock River Water Reclamation District, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Rock River Water Reclamation District shall be named as beneficiary on this Performance Bond.

**IN WITNESS WHEREOF**, the above-bounden parties have executed this instrument under their seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**CONTRACTOR**

Contractor Firm Name:

**SURETY**

By: \_\_\_\_\_

By: \_\_\_\_\_ Signature

Attorney-in-Fact

\_\_\_\_\_  
Title

\_\_\_\_\_  
Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

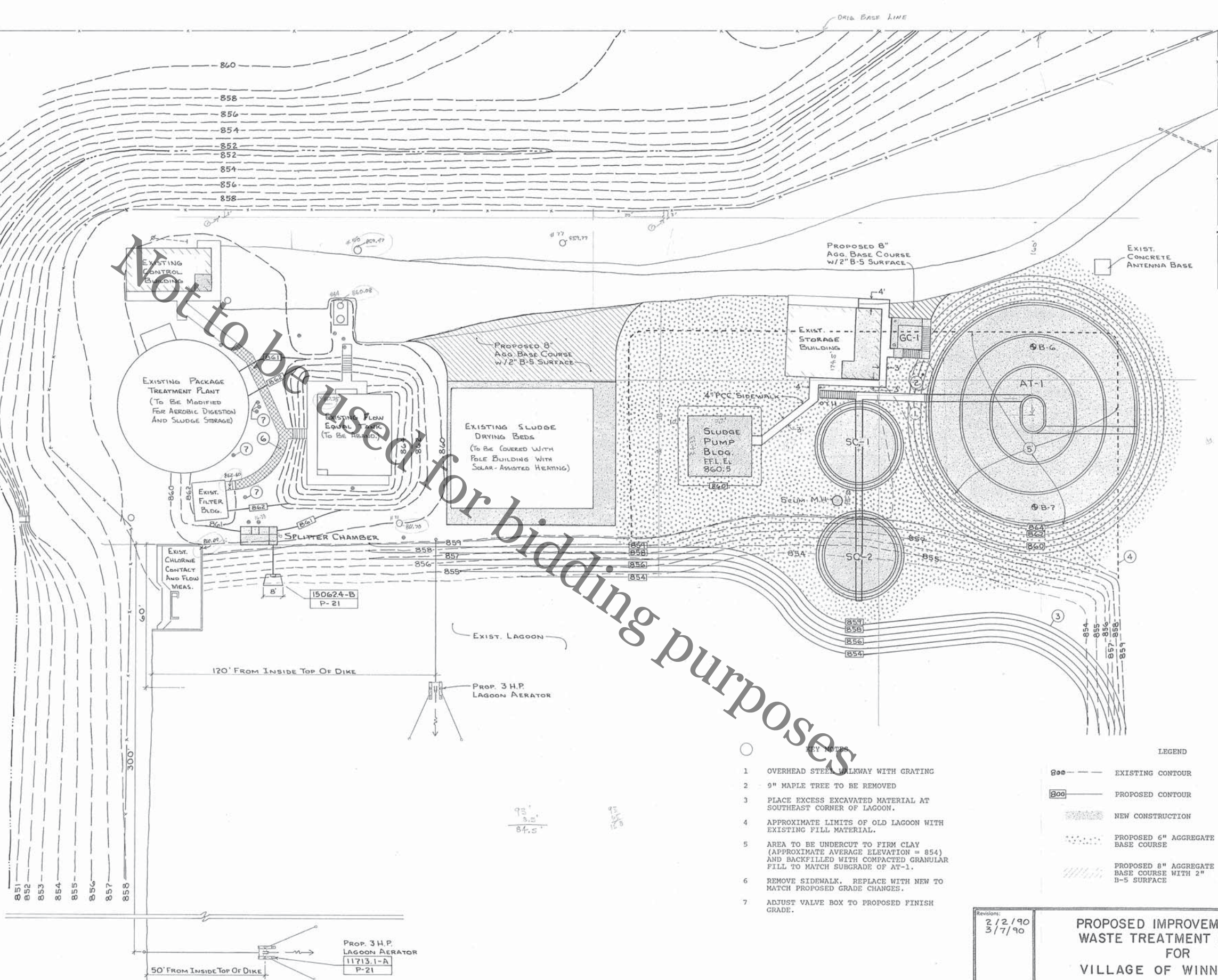
**Section III**  
**Demolition Index**

# DEMOLITION ITEM #1

## OXIDATION DITCH







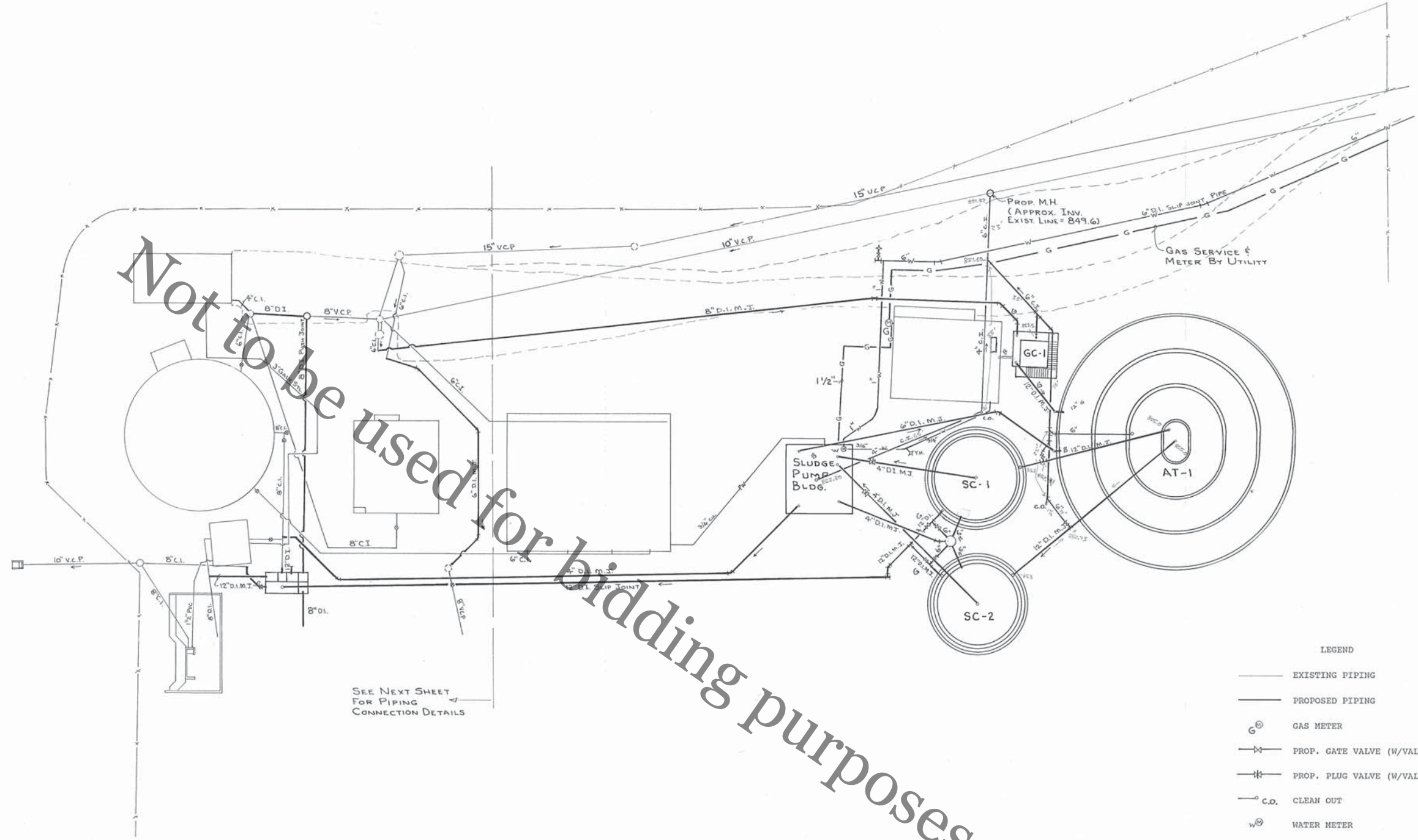
- KEY NOTES
- OVERHEAD STEEL WALKWAY WITH GRATING
  - 9" MAPLE TREE TO BE REMOVED
  - PLACE EXCESS EXCAVATED MATERIAL AT SOUTHEAST CORNER OF LAGOON.
  - APPROXIMATE LIMITS OF OLD LAGOON WITH EXISTING FILL MATERIAL.
  - AREA TO BE UNDERCUT TO FIRM CLAY (APPROXIMATE AVERAGE ELEVATION = 854) AND BACKFILLED WITH COMPACTED GRANULAR FILL TO MATCH SUBGRADE OF AT-1.
  - REMOVE SIDEWALK. REPLACE WITH NEW TO MATCH PROPOSED GRADE CHANGES.
  - ADJUST VALVE BOX TO PROPOSED FINISH GRADE.

- LEGEND
- 850 --- EXISTING CONTOUR
  - 800 --- PROPOSED CONTOUR
  - NEW CONSTRUCTION
  - PROPOSED 6" AGGREGATE BASE COURSE
  - PROPOSED 8" AGGREGATE BASE COURSE WITH 2" B-5 SURFACE

Revisions: 2/2/90 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>		
<b>SITE PLAN</b>				
Drawn: L.B.	Chd. Q.H.D.		FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5090	Job No. 29251
Date 11/15/89				Sheet No. P-2 of 53



Paint 16



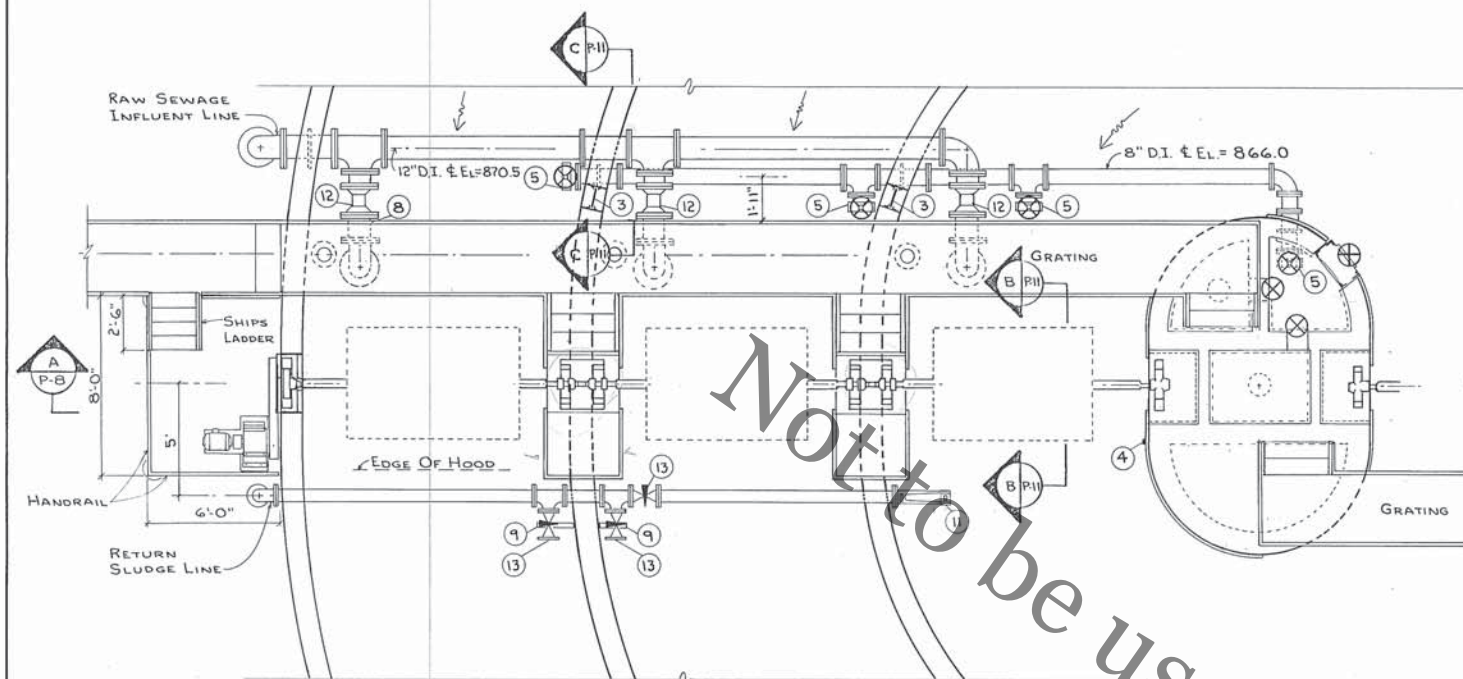
SCALE - 1" = 20'

SEE NEXT SHEET  
FOR PIPING  
CONNECTION DETAILS

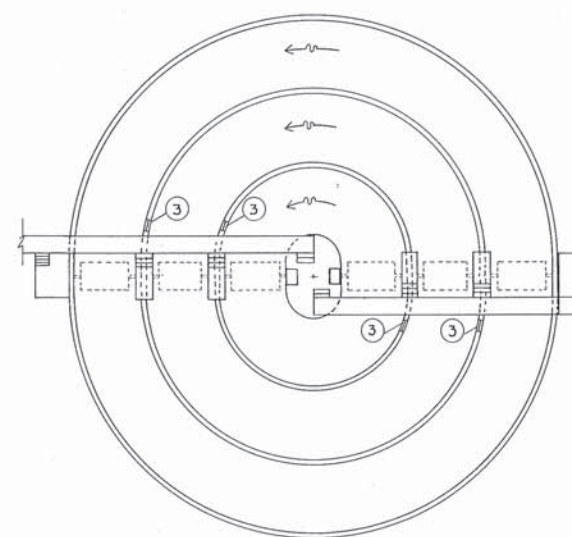
LEGEND

- EXISTING PIPING
- PROPOSED PIPING
- G<sup>Ⓜ</sup> GAS METER
- PROP. GATE VALVE (W/VALVE BOX)
- PROP. PLUG VALVE (W/VALVE BOX)
- C.O. CLEAN OUT
- W<sup>Ⓜ</sup> WATER METER
- BURIED GAS PIPING
- POTABLE WATER LINE
- PW — PROTECTED WATER LINE
- MC MECHANICAL CONTRACTOR

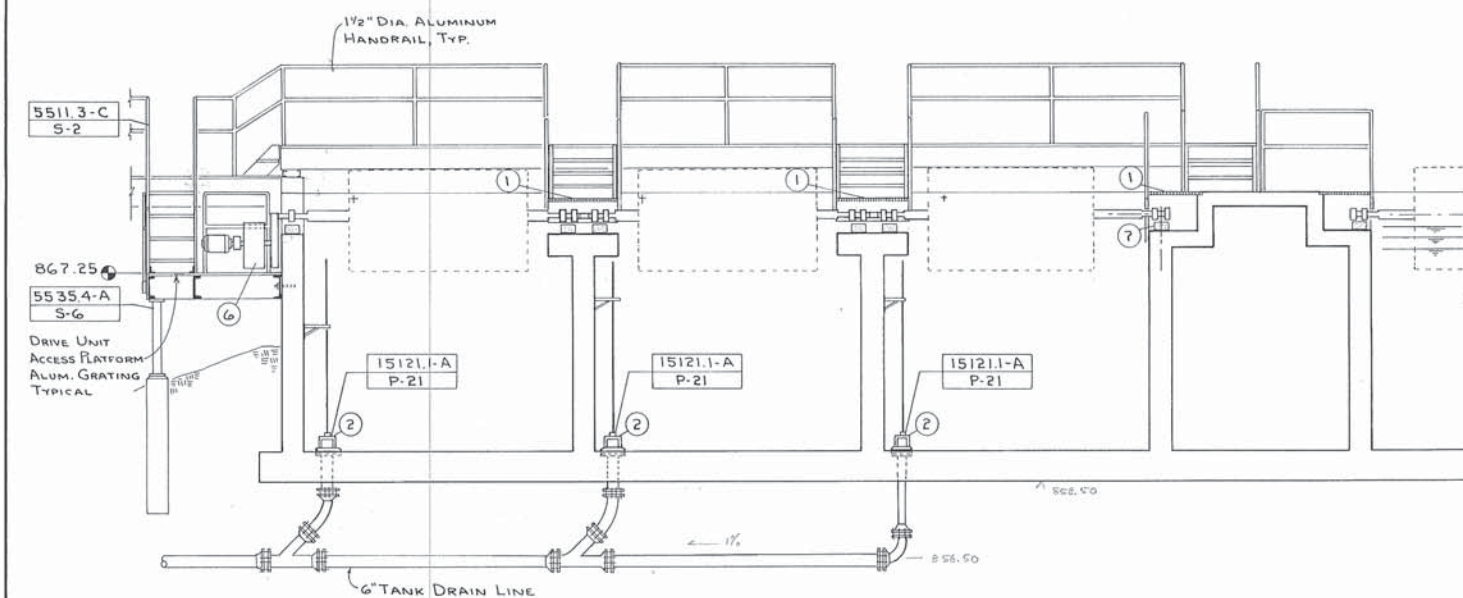
Revisions: 2/2/90 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO		Job No. 29251
FINISH PIPING PLAN				
Drawn: TJM	Chd: QHD	 FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5098		Sheet No. P-3 of 53
Date: 11/15/89				



OXIDATION DITCH PARTIAL PLAN  
SCALE: 1/4" = 1'-0"



OXIDATION DITCH PLAN  
SCALE: 1/16" = 1'-0"



SECTION A-A  
SCALE: 1/4" = 1'-0"

- KEY NOTES
- 1 REMOVABLE GRATING
  - 2 6" MUD VALVE
  - 3 12" WIDE ALUM. STOP PLATE WITH SURFACE MOUNTED GUIDE FRAME, INV. = 867.75.
  - 4 0 - 2 FT. STAFF GAUGE, STEVENS STYLE C OR EQUAL. MOUNT ON CONCRETE WALL WITH ZERO POINT LEVEL WITH BOTTOM OF AERATION DISKS.
  - 5 SLUICE GATE, CLOW F-5350 OR EQUAL
  - 6 MOUNT DRIVE UNIT PER EQUIPMENT MANUFACTURER'S SHOP DRAWINGS (2 REQUIRED).
  - 7 MOUNT BEARING SUPPORTS ON GROUT PER EQUIPMENT MANUFACTURER'S SHOP DRAWINGS (TYP.)
  - 8 PROVIDE PIPE HANGER FROM BRIDGE STRINGER (TYP.)
  - 9 WALL MOUNTED SUPPORT BRACKET GRINNEL FIG. 195, OR EQUAL.
  - 10 PROVIDE PIPE STANCHION SADDLE.
  - 11 6" FRP OPEN FLOW NOZZLE (BADGER METER CO.), 6" C.I. KENNISON NOZZLE (GENERAL SIGNAL - B.I.F.), OR EQUAL. FLOW CAPACITY 0.26 MGD MINIMUM.
  - 12 GATE VALVE
  - 13 PLUG VALVE



Revisions:  
2/2/90  
2/12/90  
2/13/90  
3/7/90

PROPOSED IMPROVEMENTS TO  
WASTE TREATMENT FACILITY  
FOR  
VILLAGE OF WINNEBAGO

OXIDATION DITCH AT-1

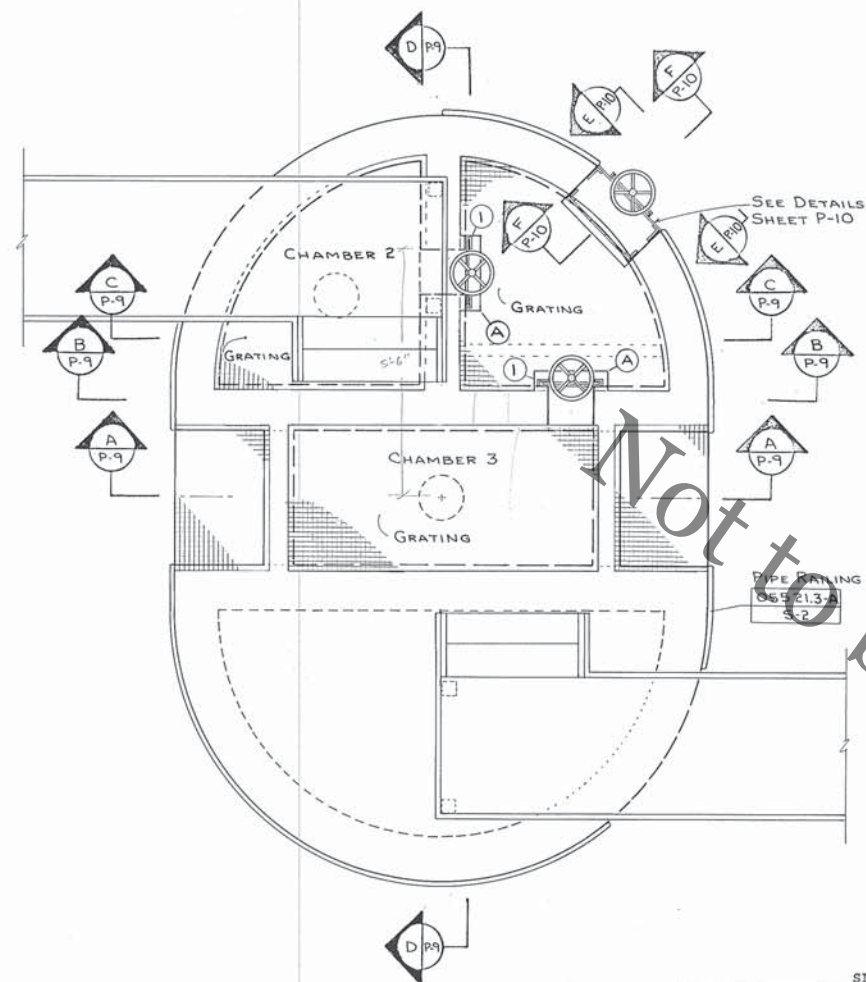
Drawn: G.B.  
Checked: Q.H.D.  
Date: 11/15/89



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ENGINEERING AND SCIENCE CONSULTANTS  
660 W. STEPHENSON ST., FREEPORT, ILLINOIS  
815/235-7643 61032-5098

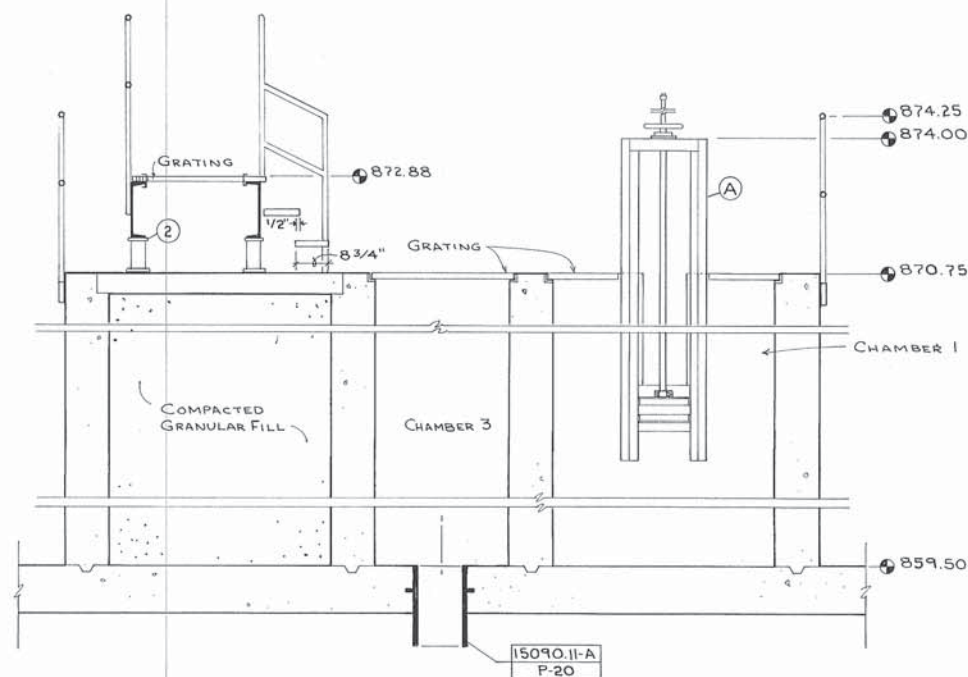
Job No. 29251  
Sheet No. P-8 of 53





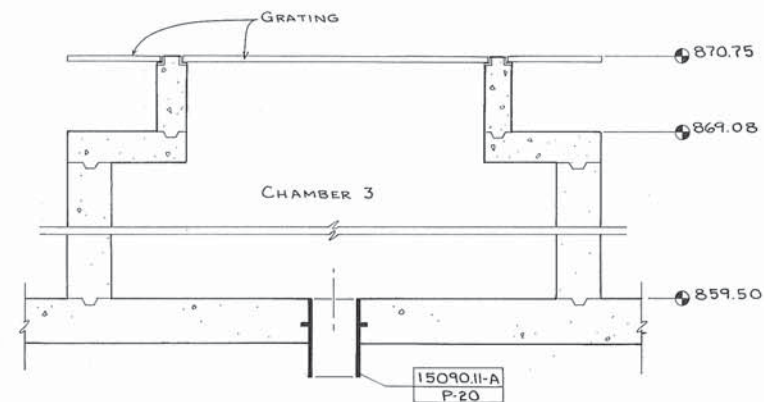
SCALE: 1/2" = 1'-0"

SLIDE GATE SCHEDULE					
MARK	OPENING WIDTH	TYPE	TOP OF GATE ELEV. MAX.	MIN.	MFG./MODEL
(A)	1'-6"	DOWNWARD	869.00	867.00	WATERMAN/AR OR EQUAL



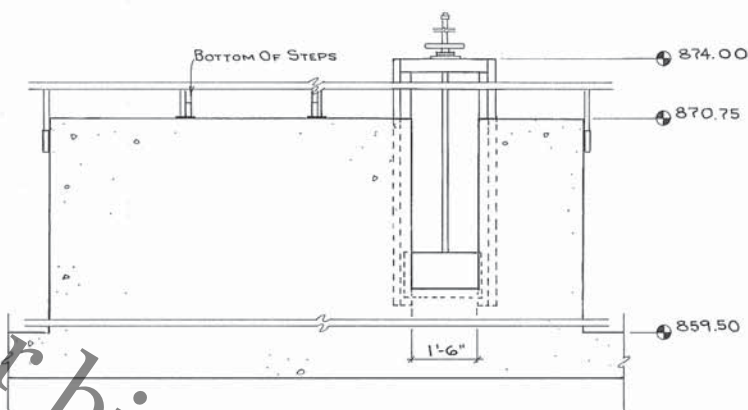
SECTION D-D

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



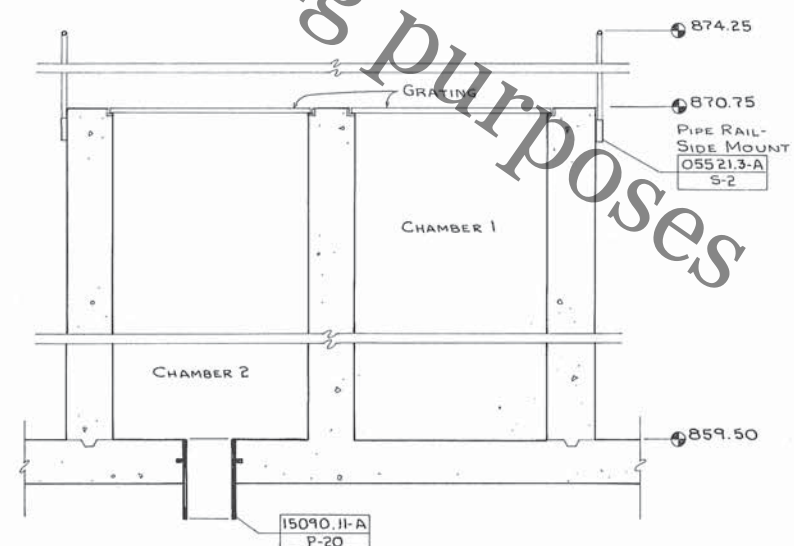
SECTION A-A

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



SECTION B-B

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



SECTION C-C

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

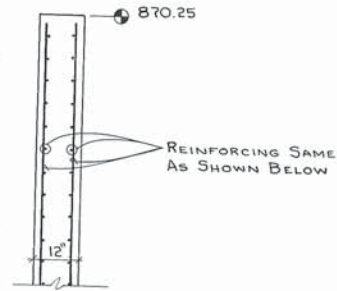
- KEY NOTES
- 1 NOTCH GRATING FOR SLIDE GATES AS REQUIRED (TYP.)
  - 2 PROVIDE STRUCTURAL COLUMN SUPPORTS AND FASTENERS SIMILAR TO STAIR LANDINGS AS SHOWN ON ACCESS STAIR AND LANDING DETAIL 5535.3-A/S-2 ON PAGE S-2.

Revisions: 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
Oxidation Ditch Center Island Details		Job No. 29251	
Drawn: G.B.	Chd. Q.H.D.	<b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5098	
Date: 11/15/89			

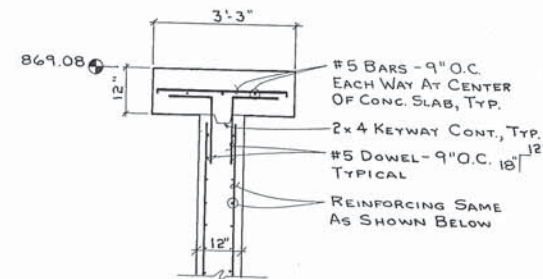




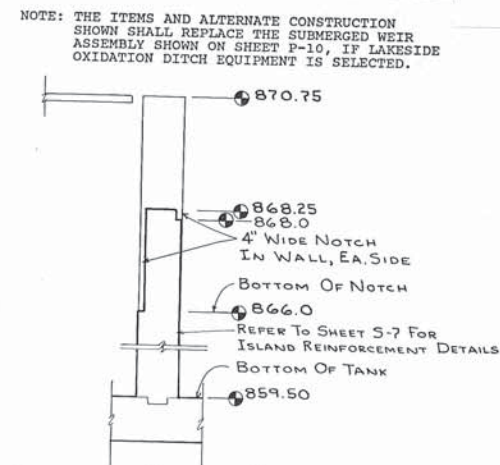
PARTIAL SECTION B-B  
SCALE: 1/2" = 1'-0"



PARTIAL SECTION C-C  
SCALE: 1/2" = 1'-0"

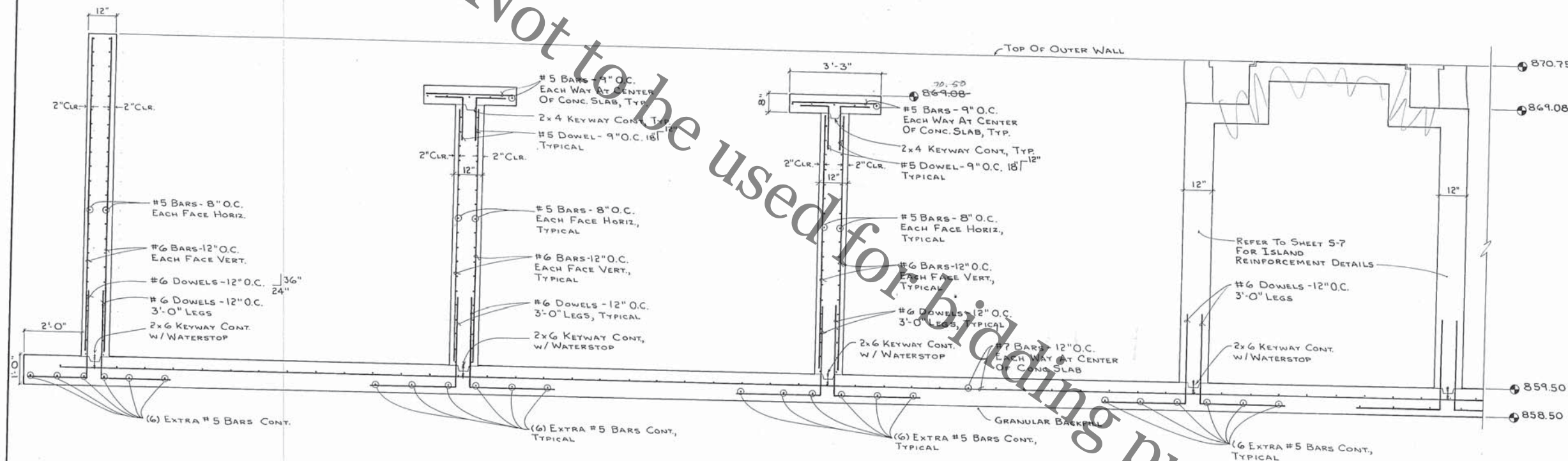


ALTERNATE CENTER ISLAND EFFLUENT  
WEIR CONTROL STRUCTURE  
SCALE: 1/2" = 1'-0"



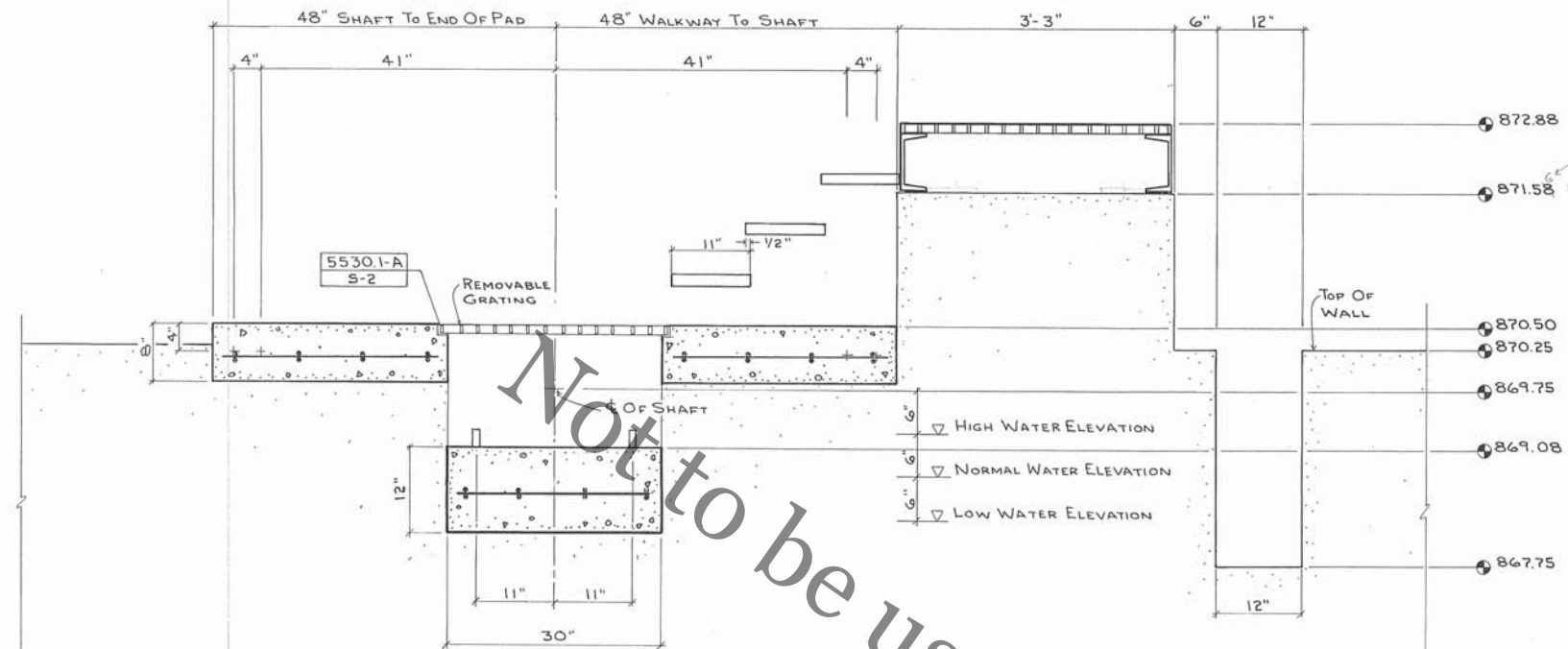
NOTE: THE ITEMS AND ALTERNATE CONSTRUCTION SHOWN SHALL REPLACE THE SUBMERGED WEIR ASSEMBLY SHOWN ON SHEET P-10, IF LAKESIDE OXIDATION DITCH EQUIPMENT IS SELECTED.

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



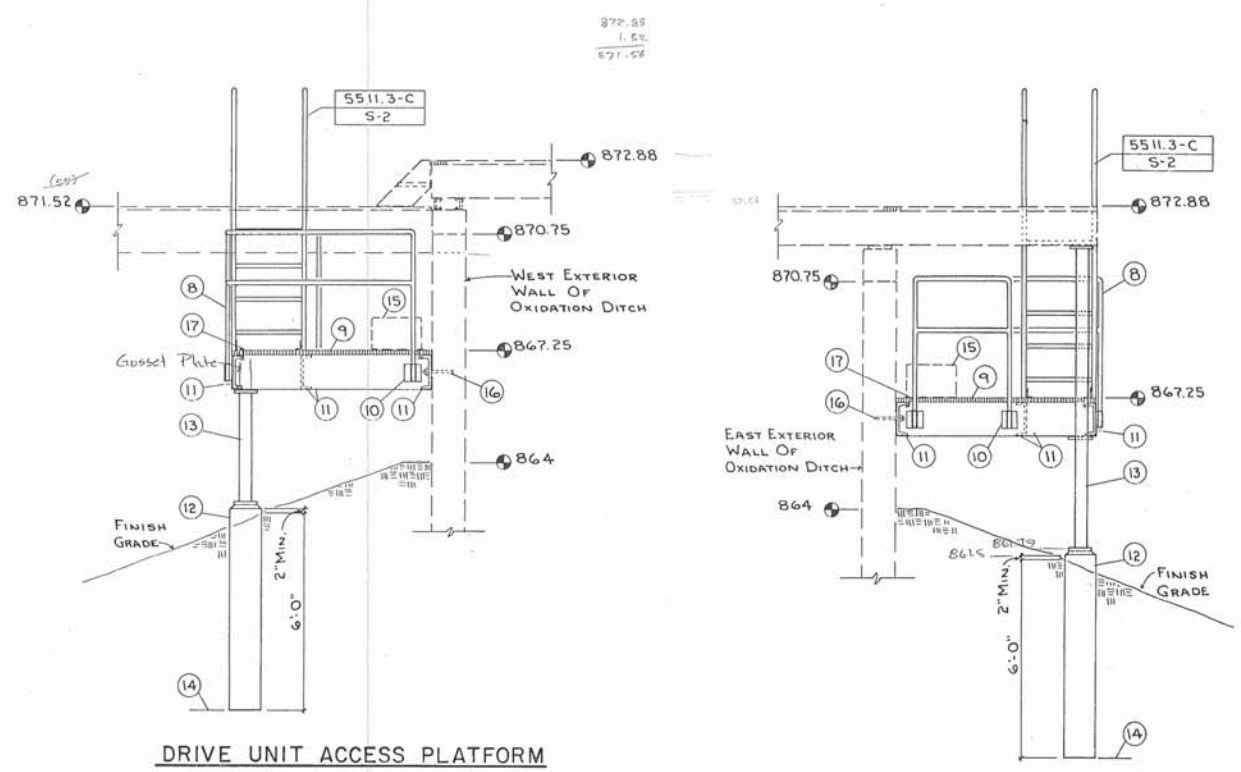
Not to be used for bidding purposes

Revisions: 2/12/90 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
		OXIDATION DITCH AT-1 SECTION A-A	
Drawn: G.B.	Chd. Q.H.D.	FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No. 29251 Sheet No. 5-5 of 53
Date: 11/15/89			



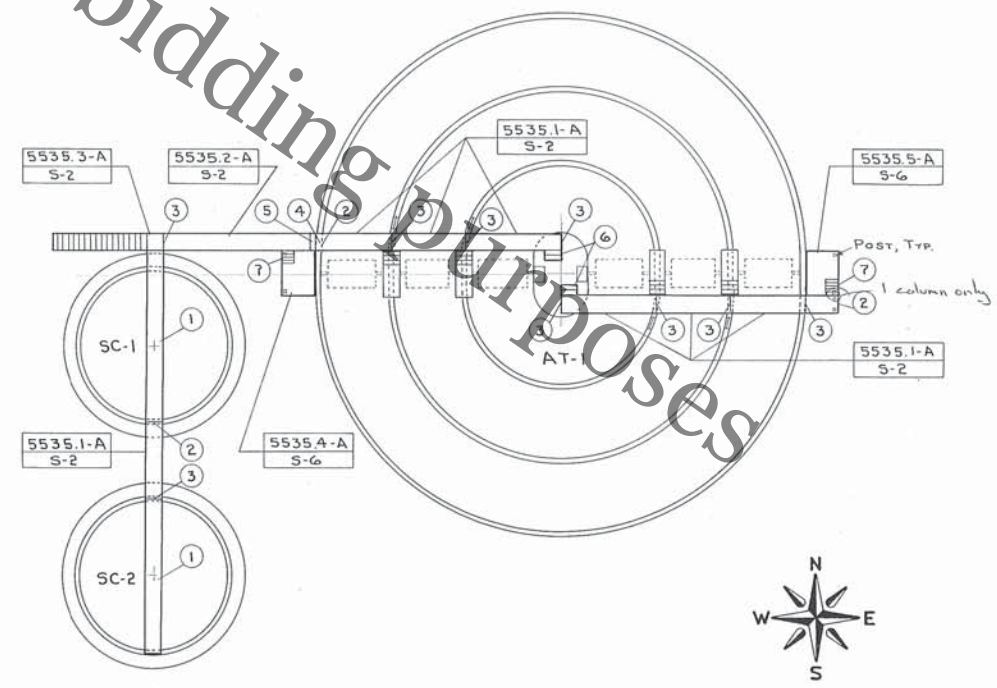
SECTION D-D  
SCALE: 1" = 1'-0"

- KEY NOTES
- CLARIFIER BRIDGE, SUPPLIED THROUGH EQUIPMENT MANUFACTURER, INSTALLED BY CONTRACTOR.
  - FIXED END
  - EXPANSION END
  - NOTCH OUTER WALL TO MOUNT WALKWAY SUPPORT CHANNELS, TOP ELEVATION = 869.81 (VERIFY WITH STRUCTURAL METALS SHOP DRAWINGS).
  - PROVIDE STEPS TO TRANSITION FROM CLARIFIER WALKWAY TO OXIDATION DITCH WALKWAY.
  - PROVIDE STEPS TO TRANSITION FROM OXIDATION DITCH WALKWAY TO TOP ELEVATION OF CENTER ISLAND.
  - SHIP'S LADDER
  - 1-1/2" NOMINAL O.D. PIPE RAIL ASSEMBLY (SCHED. 40 ALUMINUM)
  - 1-1/2" x 3/16" ALUMINUM GRATING
  - 6" x 6" x 1/4" PLATE WITH PIPE SLEEVE TO SUPPORT RAILING POSTS, TYP.
  - MC 12 x 10.6
  - 12" DIA. SONOTUBE FILLED WITH CONCRETE (2 REQUIRED WEST SIDE, 4 REQUIRED EAST SIDE).
  - 4" x 4" x 3/16" TUBE SUPPORT COLUMN (2 REQUIRED WEST SIDE, 4 REQUIRED EAST SIDE).
  - FOUNDATION SHALL BEAR ON FIRM UNDISTURBED SOIL OR PROPERLY COMPACTED GRANULAR FILL.
  - PROVIDE SUPPORT FOR DRIVE UNIT PER MANUFACTURER'S RECOMMENDATIONS.
  - 3/4" DIA. DRILL-IN CONCRETE ANCHORS, 2'-0" O.C.
  - PROVIDE CLIPS TO FASTEN GRATING TO CHANNEL SECTION, TYP.



DRIVE UNIT ACCESS PLATFORM  
(WEST SIDE, SOUTH VIEW)  
SCALE: 3/8" = 1'-0"

DRIVE UNIT ACCESS PLATFORM  
(EAST SIDE, SOUTH VIEW)  
SCALE: 3/8" = 1'-0"



ACCESS STAIRS - WALKWAY PLAN  
SCALE: 1/16" = 1'-0"

GENERAL NOTES

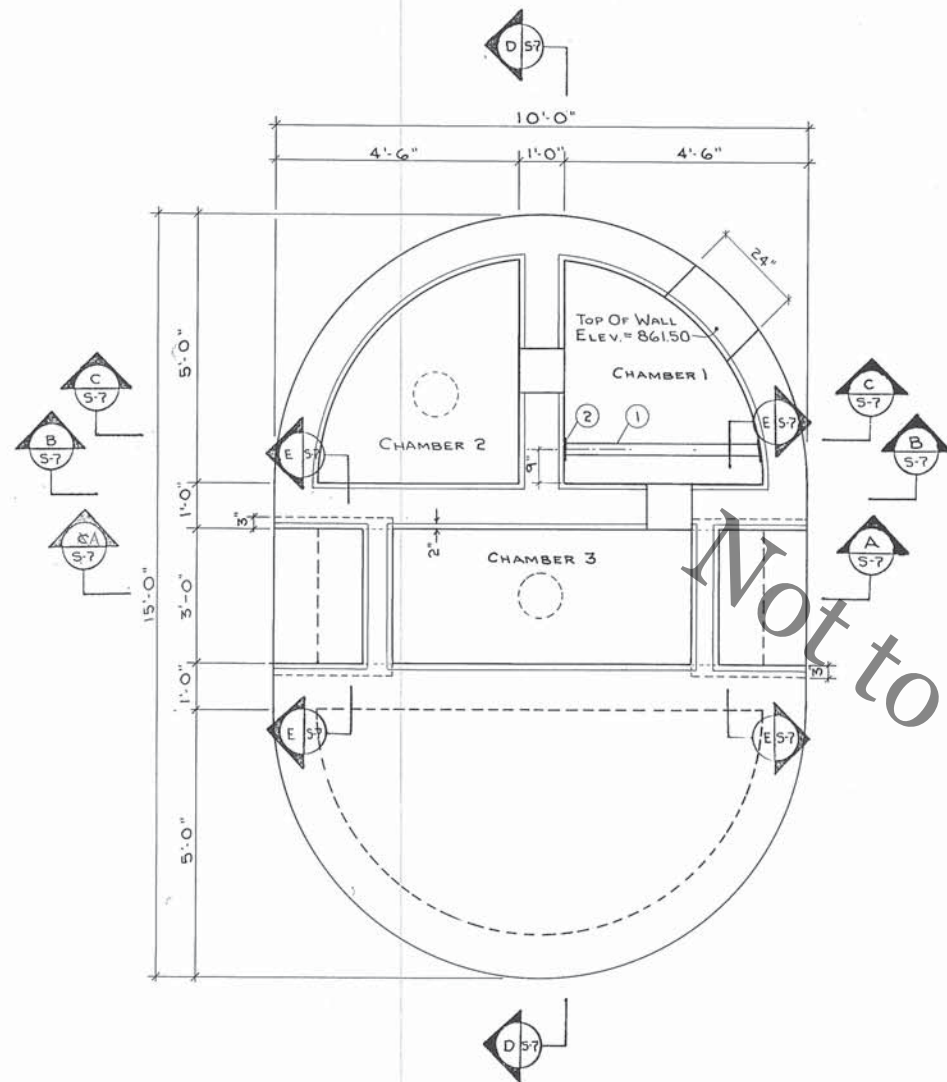
NORTH-SOUTH DRIVE UNIT ACCESS PLATFORM  
DIMENSION = 8'-0" (SEE SHEET P-8 FOR PLAN VIEW AND GENERAL ARRANGEMENT FOR EQUIPMENT INSTALLATION.)

SEE ALSO SHEET P-8 FOR PLAN VIEW AND GENERAL ARRANGEMENT FOR EQUIPMENT INSTALLATION.

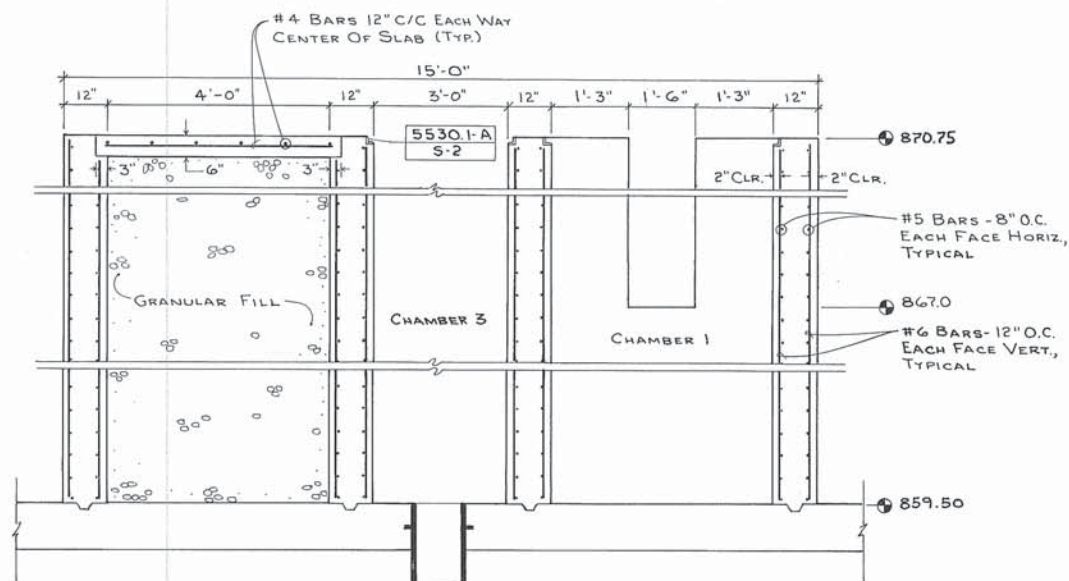
CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY FASTENERS AND ANCHORS TO PROPERLY INSTALL AND FASTEN ALL WALKWAYS, PLATFORMS, AND STAIRS AS REQUIRED AND DETAILED BY STRUCTURAL STEEL AND MISCELLANEOUS METALS SHOP DRAWINGS.

Revisions: 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>	
<b>OXIDATION DITCH AT-1 SECTION D-D</b>			
Drawn: G.B.	Check: Q.H.D.	Date: 11/15/89	Job No. 29251
FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 615/235-7643		Sheet No. 5-6 of 53	



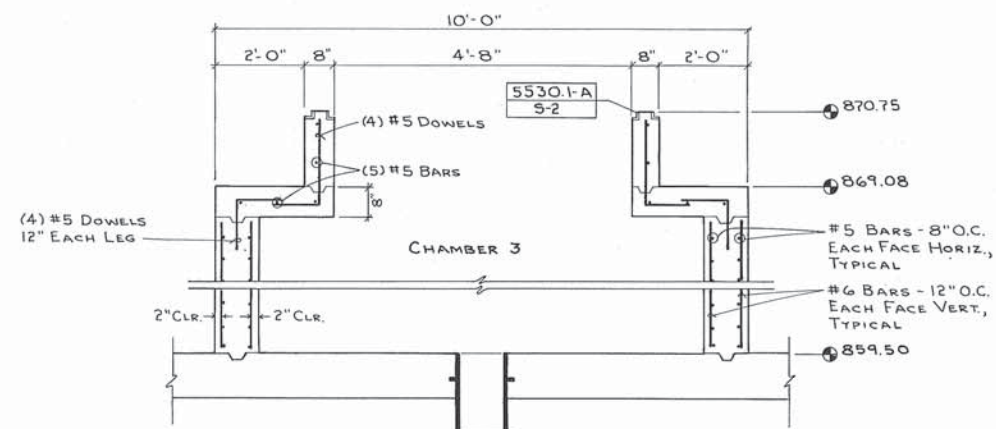


SCALE: N.T.S.



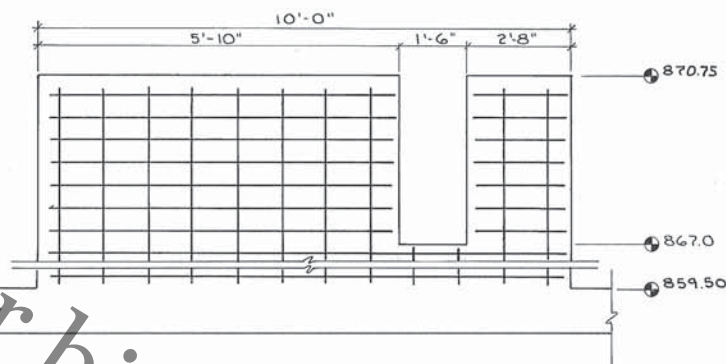
SECTION D-D

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



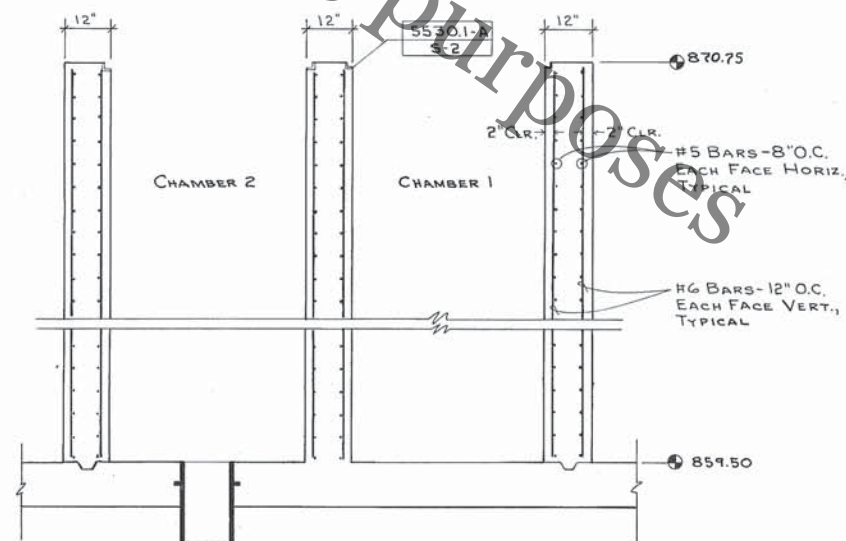
SECTION A-A

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



SECTION B-B

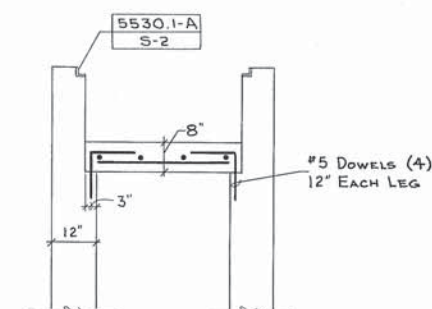
SCALE: 1/2"=1'-0"



SECTION C-C

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

- KEY NOTES
- 1 3" x 3" x 1/4" ALUMINUM ANGLE FOR GRATING SUPPORT.
  - 2 6" x 6" x 1/4" ALUMINUM PLATE WITH 2 - 1/2" DIA. x 4" DRILL-IN ANCHORS.



SECTION E-E

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

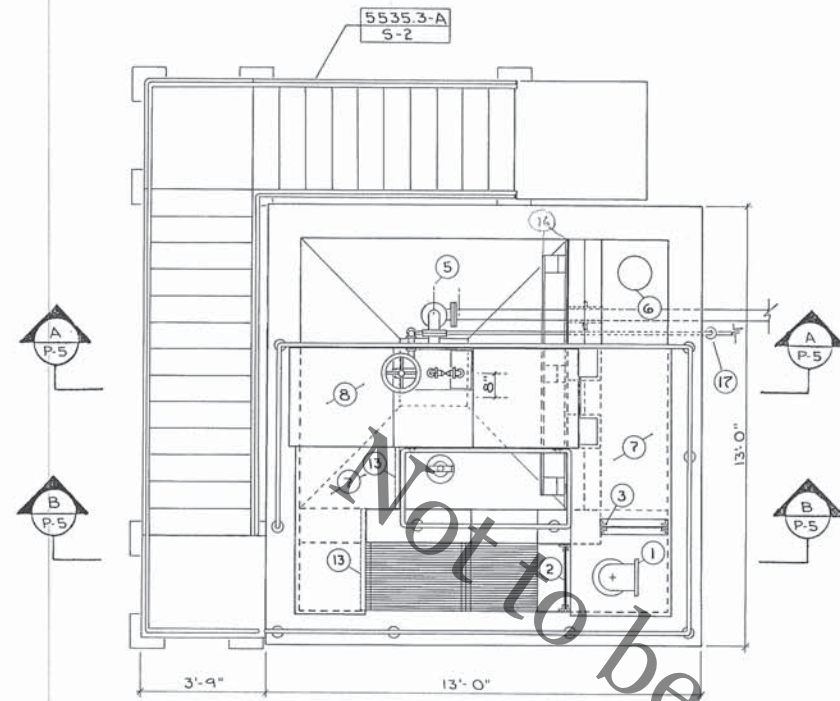
Revisions: 3/7/90 Drawn: L.B. Checked: Q.H.D. Date: 11/15/89	PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO OXIDATION DITCH CENTER ISLAND STRUCTURAL DETAILS FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5098 Job No. 29251 Sheet No. 5-7 of 53
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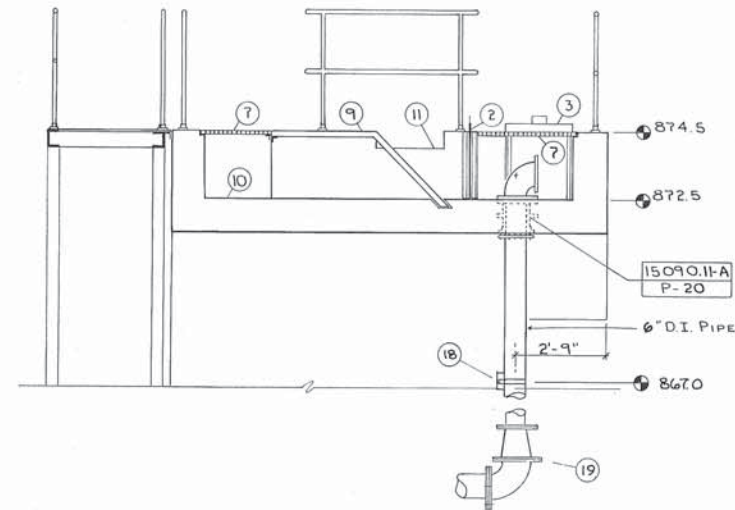
# DEMOLITION ITEM #2

## INFLUENT/GRIT STRUCTURE



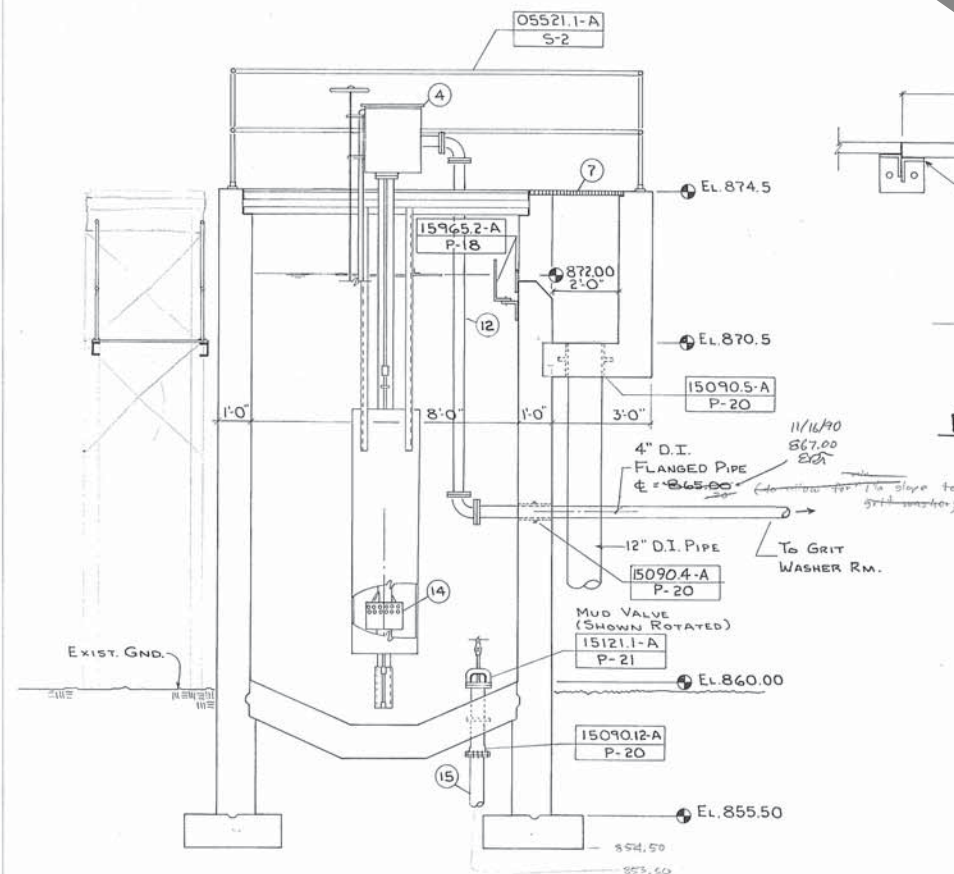


PLAN  
SCALE: 3/8" = 1'-0"

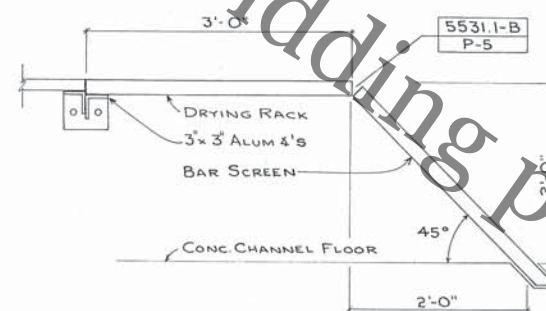


PARTIAL SECTION B-B  
SCALE: 3/8" = 1'-0"

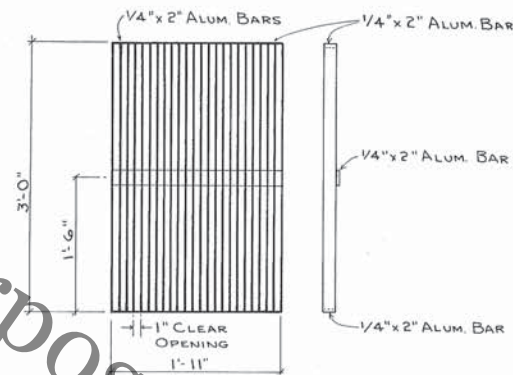
- KEY NOTES
- 6" DIA. FORCE MAIN INFLUENT
  - ALUMINUM INLET GATE AND FRAME, SURFACE MOUNTED
  - BYPASS ALUMINUM GATE AND FRAME, SURFACE MOUNTED
  - GRIT AIR LIFT PIPING ASSEMBLY
  - DISCHARGE LINE TO BUILDING
  - 12" DIA. EFFLUENT LINE
  - 1 1/2" NOMINAL THICKNESS ALUMINUM GRATING, DETAIL 5530.1-A
  - BRIDGE SET INTO WALL, SUPPLIED BY AIR LIFT MANUFACTURER
  - BAR SCREEN, SEE DETAIL THIS PAGE
  - INLET FLOW CHANNEL
  - 6" DEEP BY 2'-0" WIDE OVERFLOW NOTCH
  - GRIT SLURRY AIR LIFT DISCHARGE TO BUILDING (SHOWN ROTATED FOR CLARITY), 4" D.I. FLANGED
  - GRATING SUPPORT - 2" x 2" x 1/4" ALUMINUM ANGLE. WELD TO APPROPRIATELY SIZED 1/4" ALUMINUM PLATE TO BOLT ANGLE ENDS TO CONCRETE WALL OR STEEL BRIDGE AS REQUIRED.
  - AIR DIFFUSER ASSEMBLY
  - 4" D.I. M.J. DRAIN LINE ROTATED FOR CLARITY. RUN DRAIN LINE NORTH FROM CHAMBER. TERMINATE DRAFFLE - FROM WALL. CONSTRUCT WEIR FULL LENGTH OF WALL.
  - TERMINATE DRAFFLE 6" FROM WALL. CONSTRUCT WEIR FULL LENGTH OF WALL.
  - AIR LINE FROM BLOWERS IN GRIT WASHER ROOM, 2" SCHEDULE 40 GALV. STEEL.
  - MOUNTING LOCATION FOR FLOW METER TRANSDUCER.
  - TRANSITION FROM 8" TO 6" D.I. FORCE MAIN AT BURIED ELBOW.



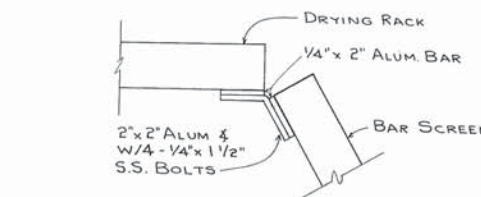
SECTION A-A  
SCALE: 3/8" = 1'-0"



BAR SCREEN AND DRYING RACK SECTION  
SCALE: 1" = 1'-0"



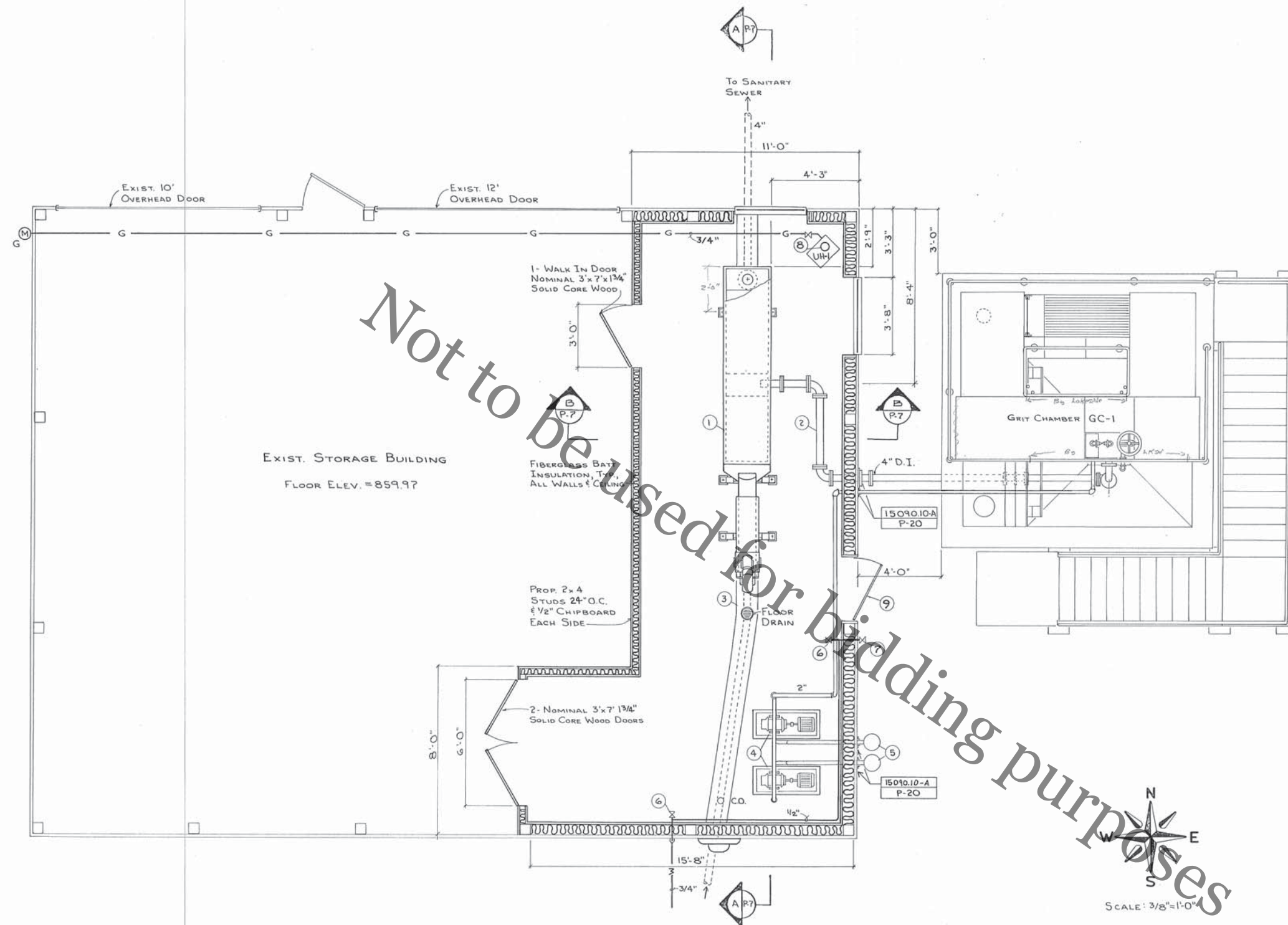
BAR SCREEN DETAIL  
SCALE: 1" = 1'-0"



DRYING RACK TO BAR SCREEN CONNECTION DETAIL  
N.T.S.

Revisions: 2/2/90 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
JOB NO. 29251			
BAR SCREEN / GRIT COLLECTOR			
Drawn: G.B.	Checked: E.D.T.	FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5098	
Date: 11/15/89		Sheet No. P-5 of 53	





- KEY NOTES
- 1 GRIT WASHER UNIT
  - 2 GRIT WASHER INFLUENT LINE, SLOPE MIN. 1% FROM WEST WALL OF GRIT CHAMBER TO CONNECTION ON EAST SIDE OF GRIT WASHER
  - 3 SAW CUT AND REMOVE EXISTING CONCRETE FLOOR FOR INSTALLATION OF DRAIN LINE. BACKFILL WITH COMPACTED GRANULAR MATERIAL. REPLACE WITH 4" OF CONCRETE.
  - 4 GRIT CHAMBER BLOWERS; MOUNT ON 4" CONCRETE PAD. SEE BLOWER PIPING SCHEMATIC FOR INTERCONNECTING PIPING DETAILS.
  - 5 LOCATE INLET FILTER-SILENCERS FOR BLOWERS ON EXTERIOR WALL AT 7'-0" AFF
  - 6 HOSE BIBB, 1'-0" AFF
  - 7 HOSE BIBB, 1'-0" ABOVE FINISHED SIDEWALK (FROST FREE)
  - 8 5" TYPE B VENT THROUGH ROOF WITH FLASHING.
  - 9 NOMINAL 3' X 7' X 1 3/4" SOLID CORE WOOD DOOR. CUT IN TO EXISTING WALL. INSTALL COMPLETE WITH FRAMING AND STEEL TRIM TO MATCH EXISTING EXTERIOR DOORS.

GENERAL NOTES

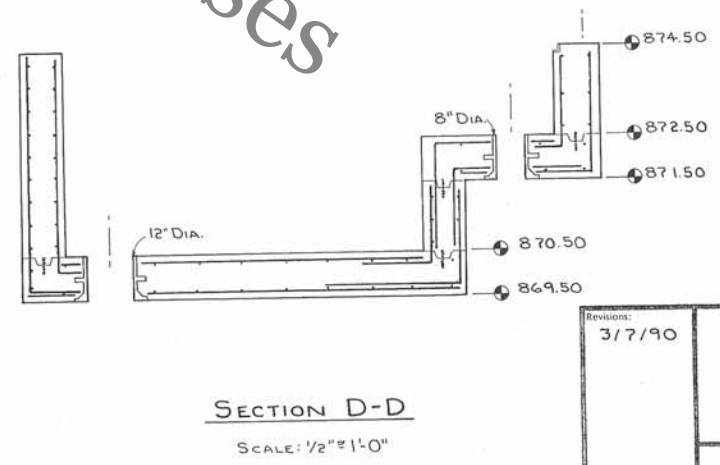
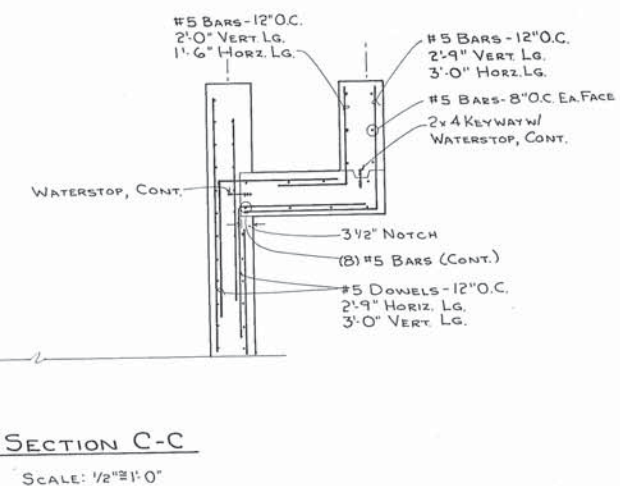
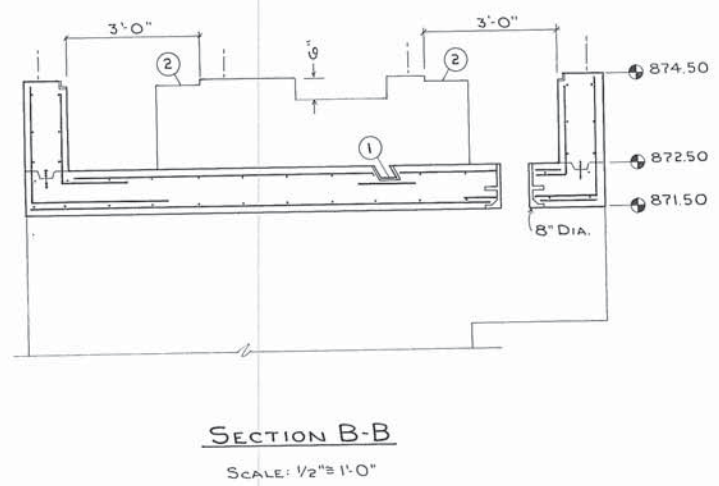
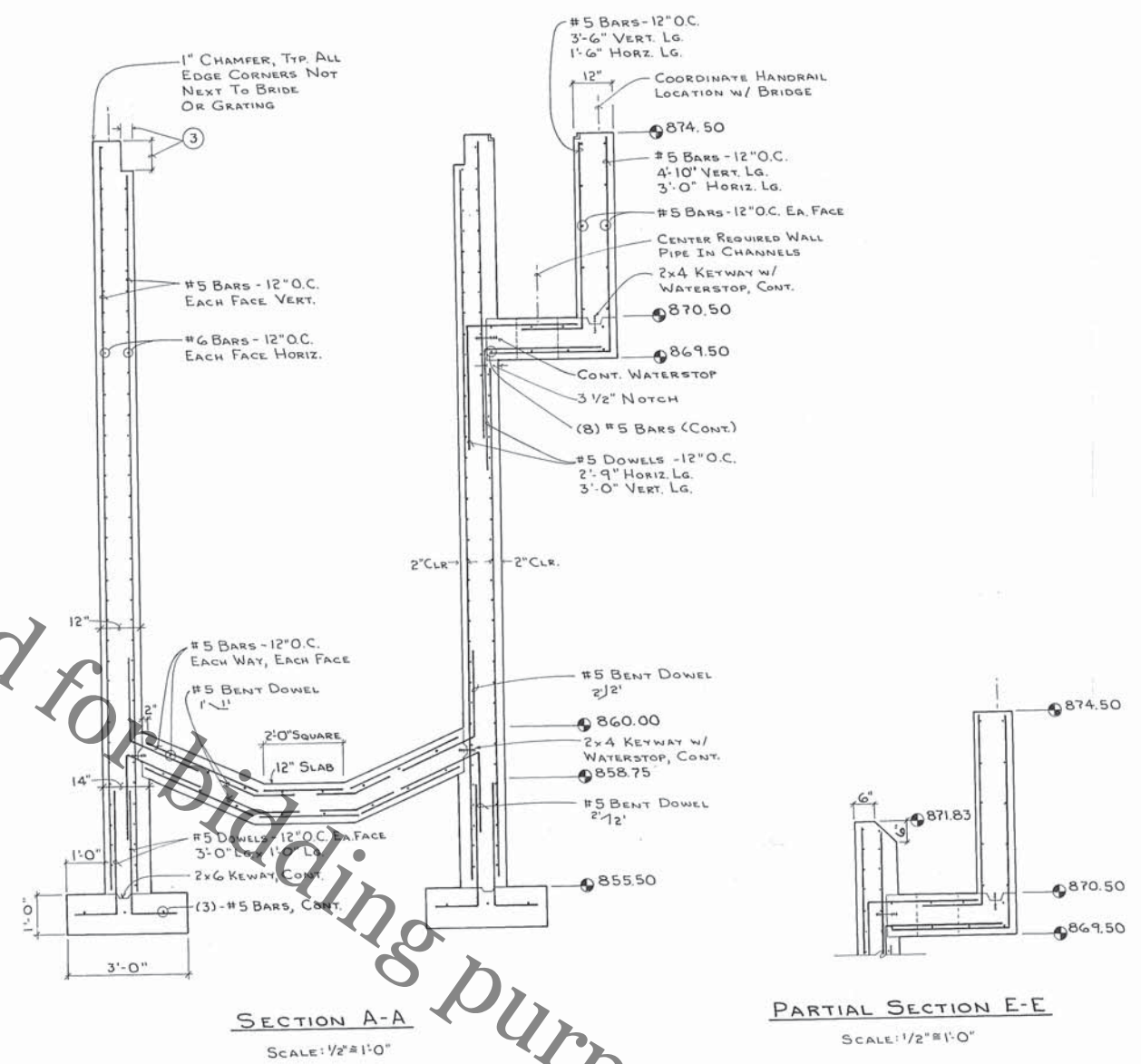
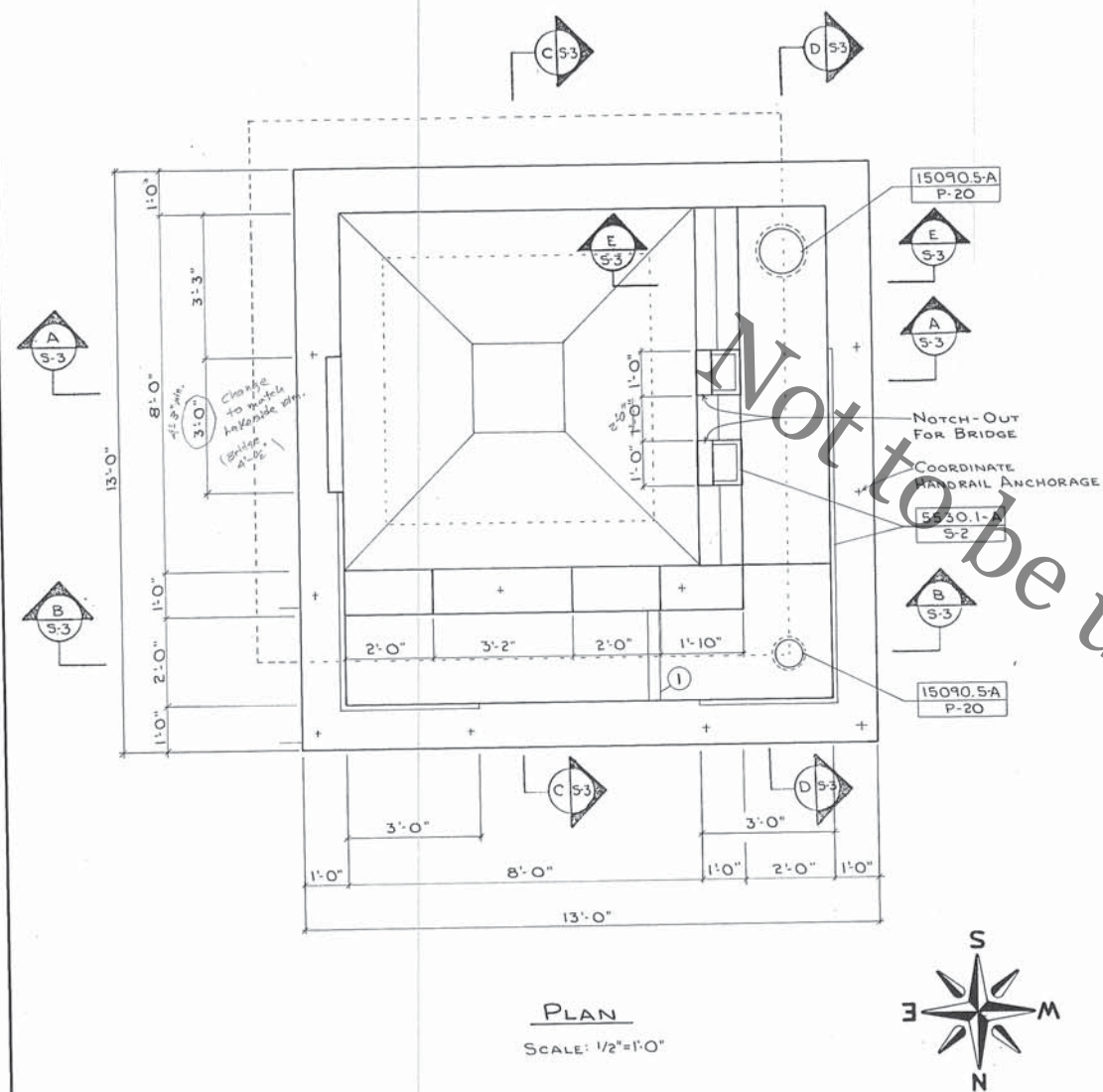
VENT PIPING AND TRAPS FOR FLOOR DRAINS SHALL BE PROVIDED PER CODE.

LEGEND

G(M) NATURAL GAS METER

Revisions: 2/2/90 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
Drawn: G.B. E.D.T. Date: 11/15/89		IMPROVEMENTS TO EXIST. STORAGE BLDG. GRIT WASHER ROOM	
FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643		Job No. 29251 Sheet No. P-6 of 53	

- KEY NOTES
- 1 EMBED ALUM. CHANNEL IN CONCRETE TO SUPPORT BOTTOM OF BAR SCREEN
  - 2 NOTCH WALL FOR GRATING
  - 3 NOTCH OUT DIMENSIONS TO BE CO-ORDINATED WITH BRIDGE MANUFACTURER



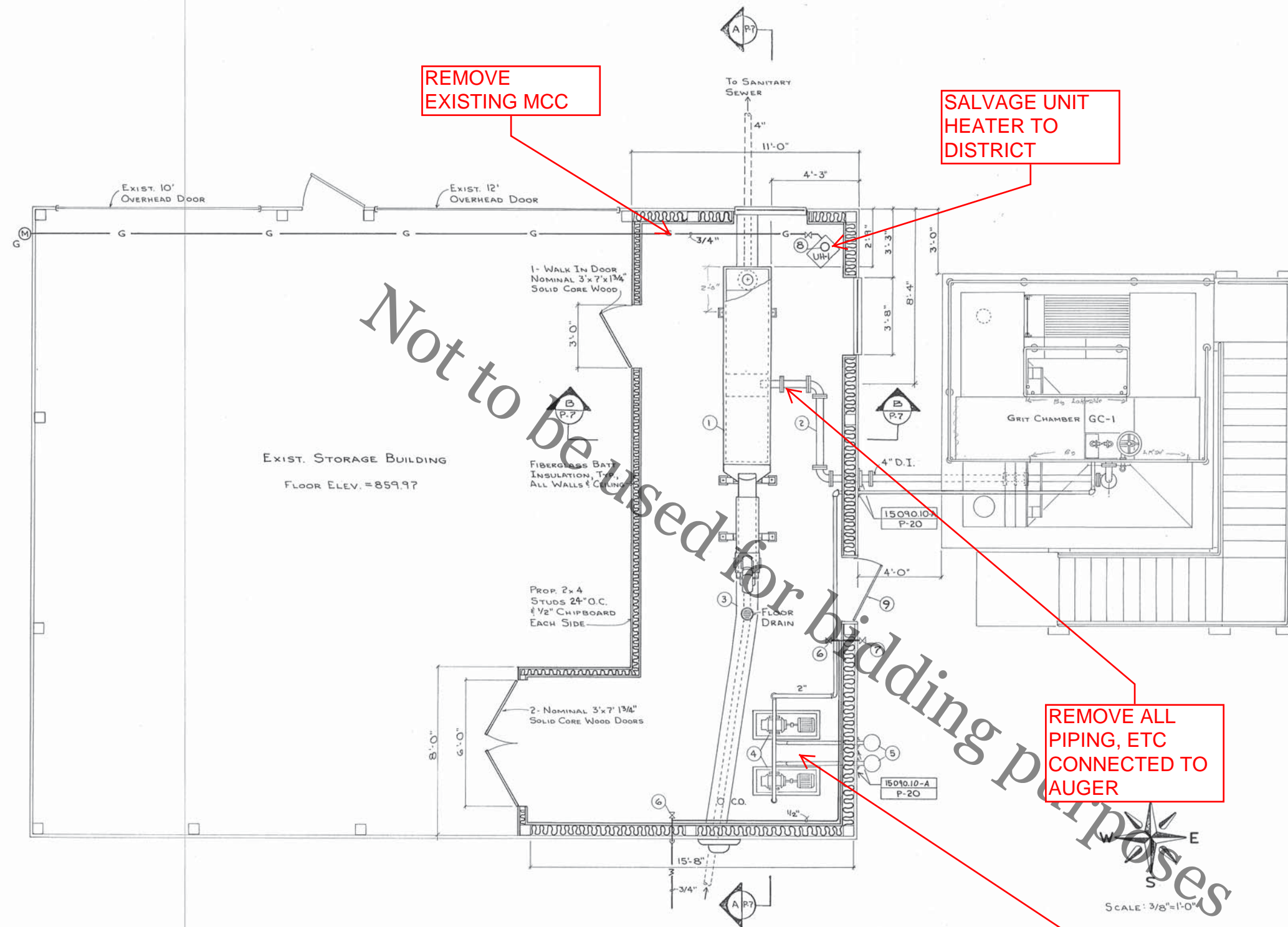
Revisions:	3/7/90		
<p>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</p>			
<p>BAR SCREEN / GRIT COLLECTOR STRUCTURAL PLAN</p>			
Drawn: G.B.	Check: E.D.T.		
Date: 11/15/89		FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	
		Job No. 29251	Sheet No. S- 3 of 53



# DEMOLITION ITEM #2A

## GRIT WASHER & COMPONENTS





- KEY NOTES
- 1 GRIT WASHER UNIT
  - 2 GRIT WASHER INFLUENT LINE, SLOPE MIN. 1/8" FROM WEST WALL OF GRIT CHAMBER TO CONNECTION ON EAST SIDE OF GRIT WASHER
  - 3 SAW CUT AND REMOVE EXISTING CONCRETE FLOOR FOR INSTALLATION OF DRAIN LINE. BACKFILL WITH COMPACTED GRANULAR MATERIAL. REPLACE WITH 4" OF CONCRETE.
  - 4 GRIT CHAMBER BLOWERS; MOUNT ON 4" CONCRETE PAD. SEE BLOWER PIPING SCHEMATIC FOR INTERCONNECTING PIPING DETAILS.
  - 5 LOCATE INLET FILTER-SILENCERS FOR BLOWERS ON EXTERIOR WALL AT 7'-0" AFF
  - 6 HOSE BIBB, 1'-0" AFF
  - 7 HOSE BIBB, 1'-0" ABOVE FINISHED SIDEWALK (FROST FREE)
  - 8 5" TYPE B VENT THROUGH ROOF WITH FLASHING.
  - 9 NOMINAL 3'x7'x1 3/4" SOLID CORE WOOD DOOR. CUT IN TO EXISTING WALL. INSTALL COMPLETE WITH FRAMING AND STEEL TRIM TO MATCH EXISTING EXTERIOR DOORS.

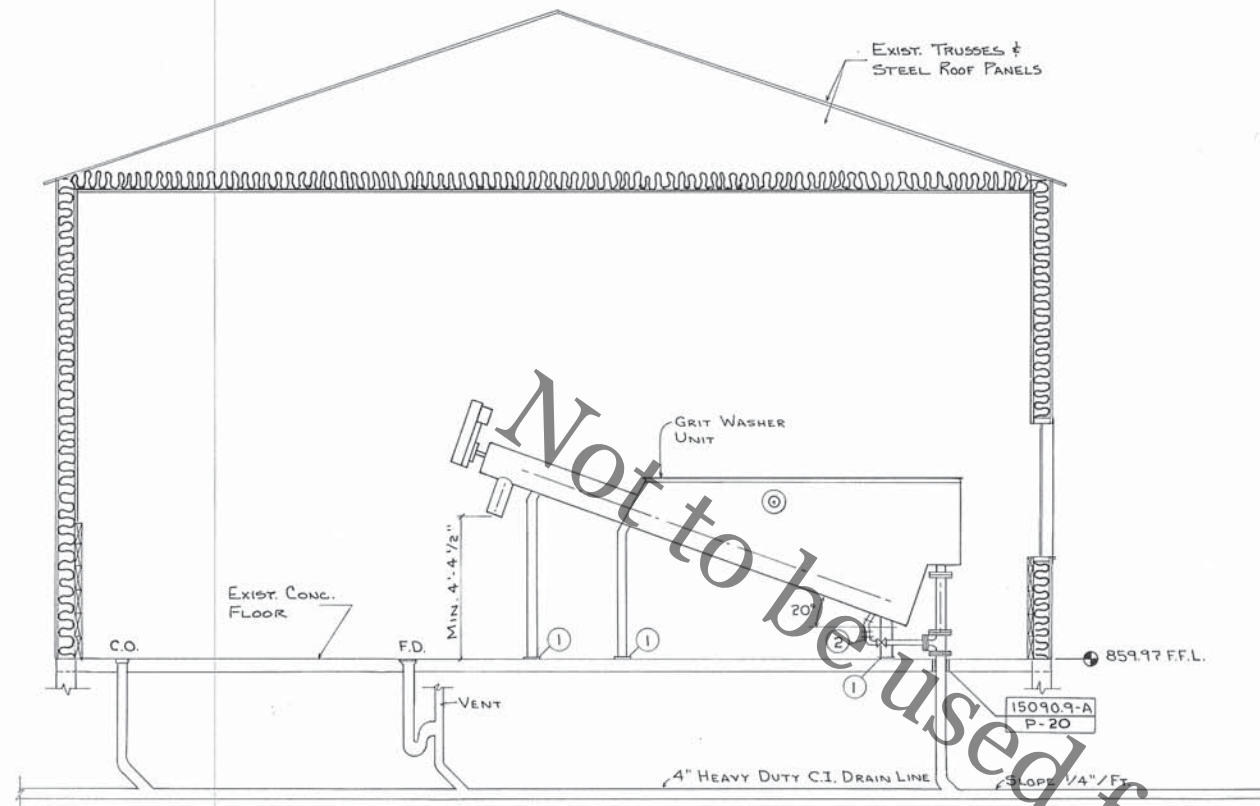
GENERAL NOTES

VENT PIPING AND TRAPS FOR FLOOR DRAINS SHALL BE PROVIDED PER CODE.

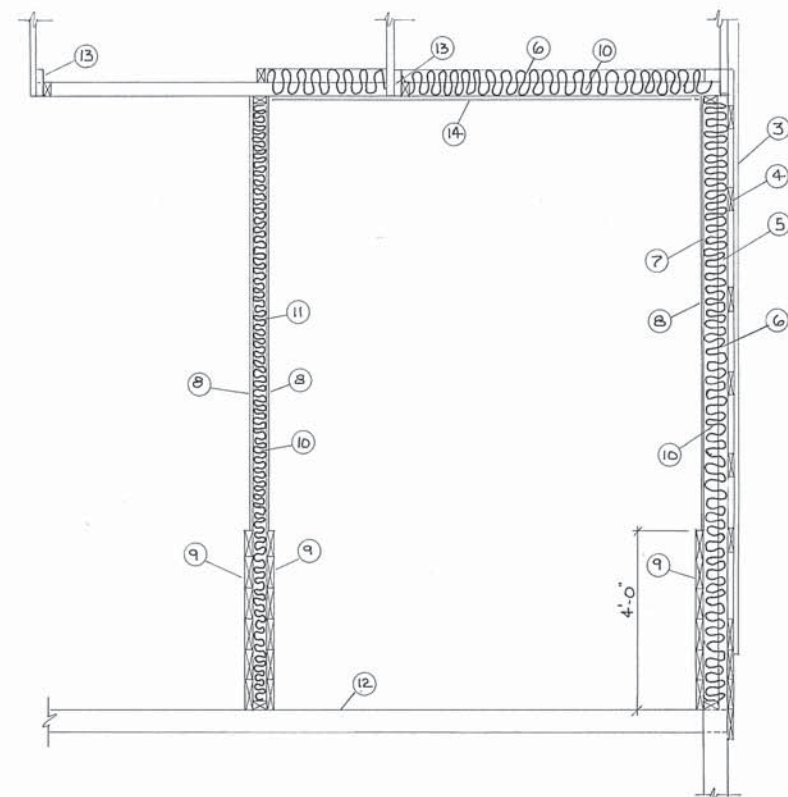
LEGEND

G M NATURAL GAS METER

Revisions: 2/2/90 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
Drawn: G.B.		IMPROVEMENTS TO EXIST. STORAGE BLDG. GRIT WASHER ROOM	
Date: 11/15/89		FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	
Job No. 29251		Sheet No. P-6 of 53	



SECTION A-A  
SCALE: 3/8" = 1'-0"



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

KEY NOTES

- 1 MOUNT GRIT WASHER SUPPORT LEGS WITH DRILL-IN ANCHOR BOLTS PER MANUFACTURER'S RECOMMENDATION, SET LEVEL, PROVIDE 2" OF NON-SHRINK GROUT UNDER EACH SUPPORT LEG PAD.
- 2 GRIT WASHER DRAIN LINE, 2" GALV. SCHED. 40 STEEL WITH 2" GATE VALVE.
- 3 EXISTING STEEL SIDING.
- 4 EXISTING GIRTS.
- 5 EXISTING 6"X 6" POST.
- 6 6" FIBERGLASS BATT INSULATION.
- 7 PLASTIC VAPOR BARRIER, MIN. 5 MIL THICKNESS. DOUBLE LAP AND STAPLE JOINTS. TAPE AND SEAL ALL VAPOR PENETRATIONS.
- 8 1/2" CHIPBOARD.
- 9 INFILL AS DIMENSIONED WITH 2"X 8" DRESSED AND MATCHED OR CENTER-MATCHED TREATED WOOD (CCA 0.4).
- 10 2"X 4" STUDS ON 24" C-C.
- 11 4" FIBERGLASS BATT INSULATION.
- 12 EXISTING CONCRETE FLOOR.
- 13 BOTTOM CORD OF EXISTING TRUSS, TYP.
- 14 STEEL CEILING PANELS (BAKE-ON ENAMEL COATED).

Revised:  
2/2/90  
3/7/90

PROPOSED IMPROVEMENTS TO  
WASTE TREATMENT FACILITY  
FOR  
VILLAGE OF WINNEBAGO

GRIT WASHER ROOM  
SECTIONS & DETAILS

Drawn:  
G.B.  
Date:  
11/15/89

Chd.  
E.D.T.



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815/235-7643 61032-5098

Job No.  
29251

Sheet No.  
P-7 of 53



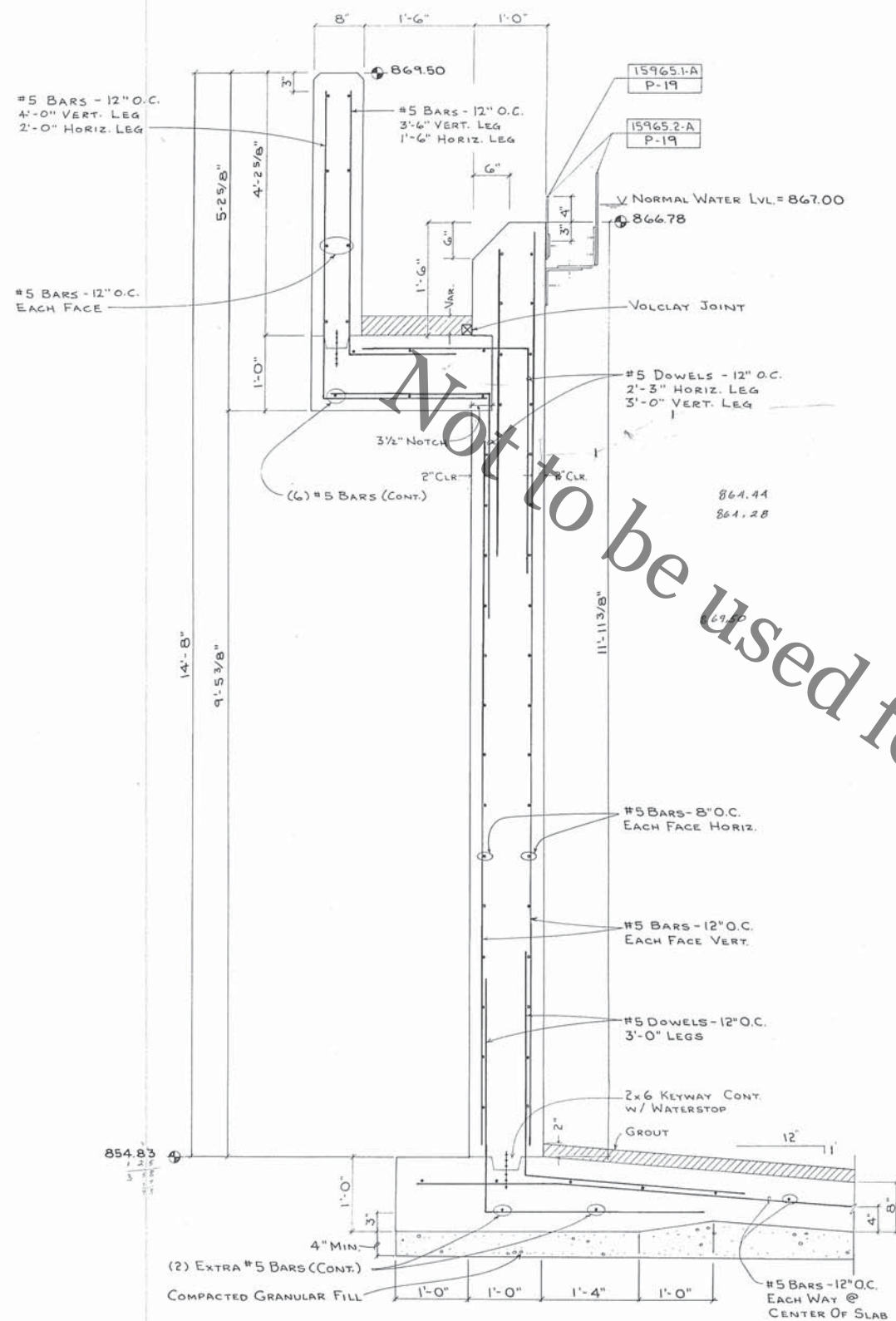
# DEMOLITION ITEMS #3 & #4

## CLARIFIERS



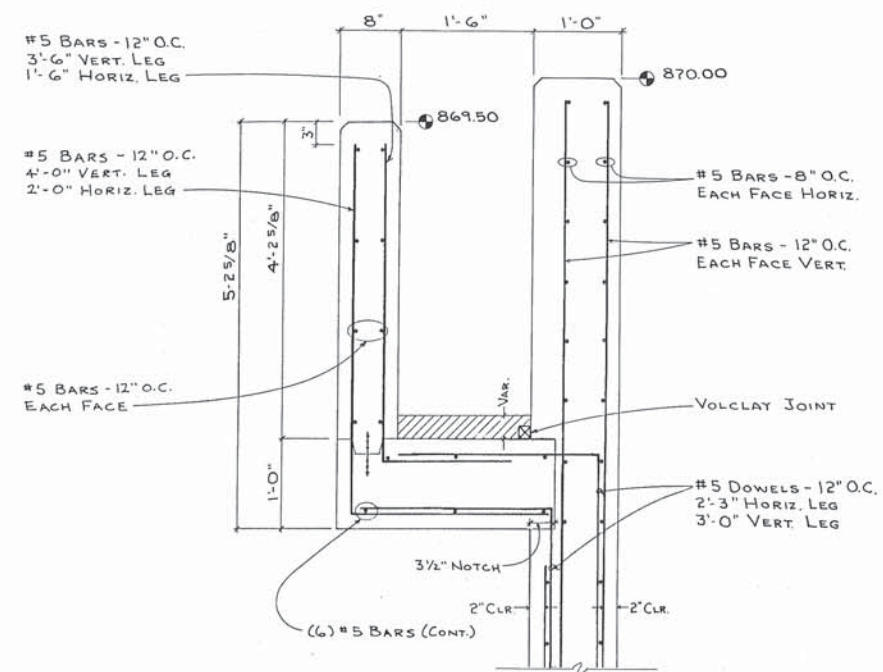






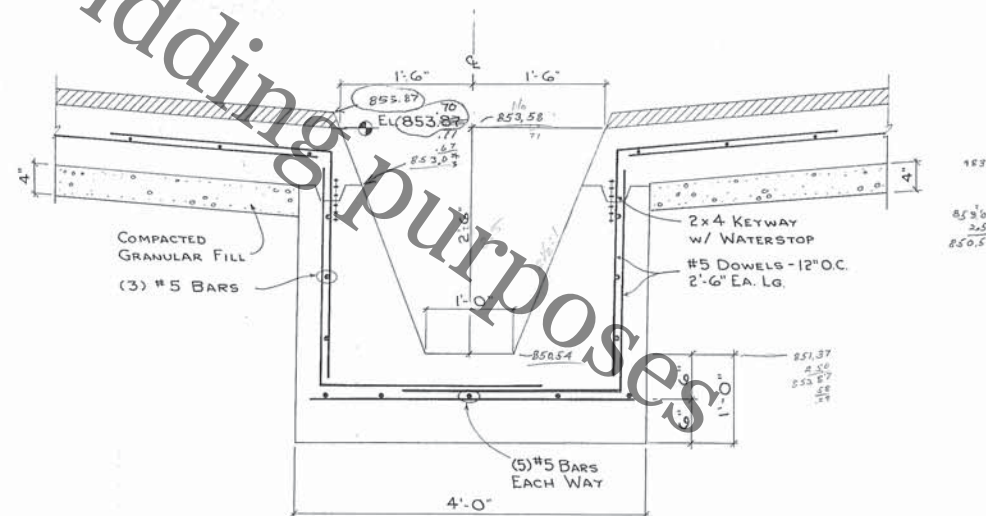
TYPICAL WALL SECTION

SCALE: 1" = 1'-0"




BRIDGE PIER DETAIL

SCALE: 1" = 1'-0"

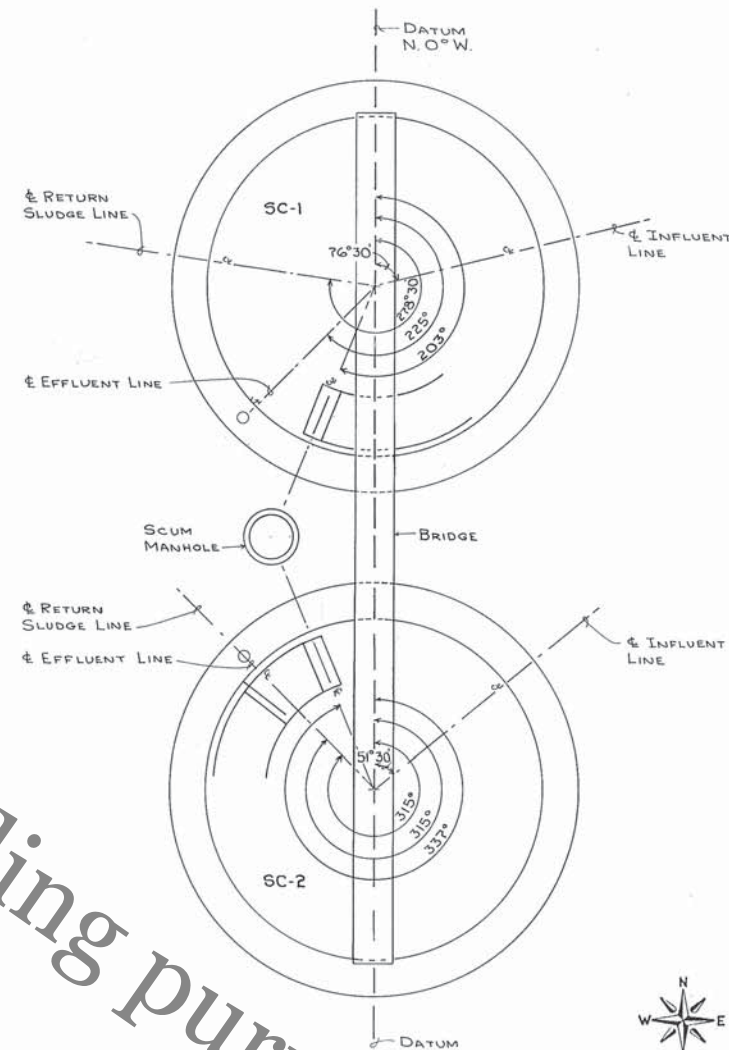
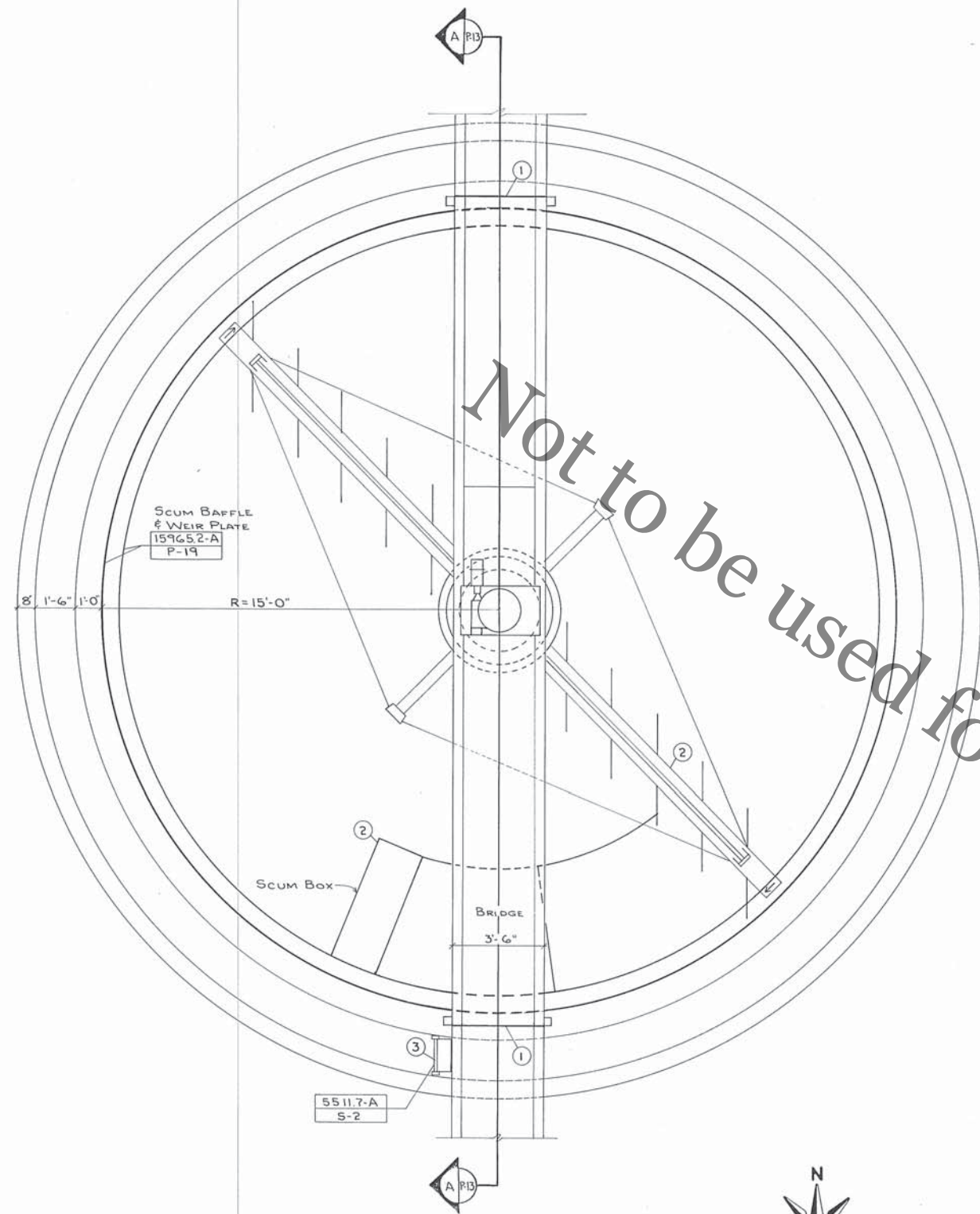


PIT DETAIL

SCALE: 1" = 1'-0"

Revisions: 12/12/89 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>	
<b>SECONDARY CLARIFIERS SC-1 &amp; SC-2 TYP. WALL SECTION &amp; DETAILS</b>			
Drawn: G.B.	Chd: Q.H.D.	 <b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No. <b>29251</b>
Date: 11/15/89			Sheet No. <b>5-9</b> of <b>53</b>



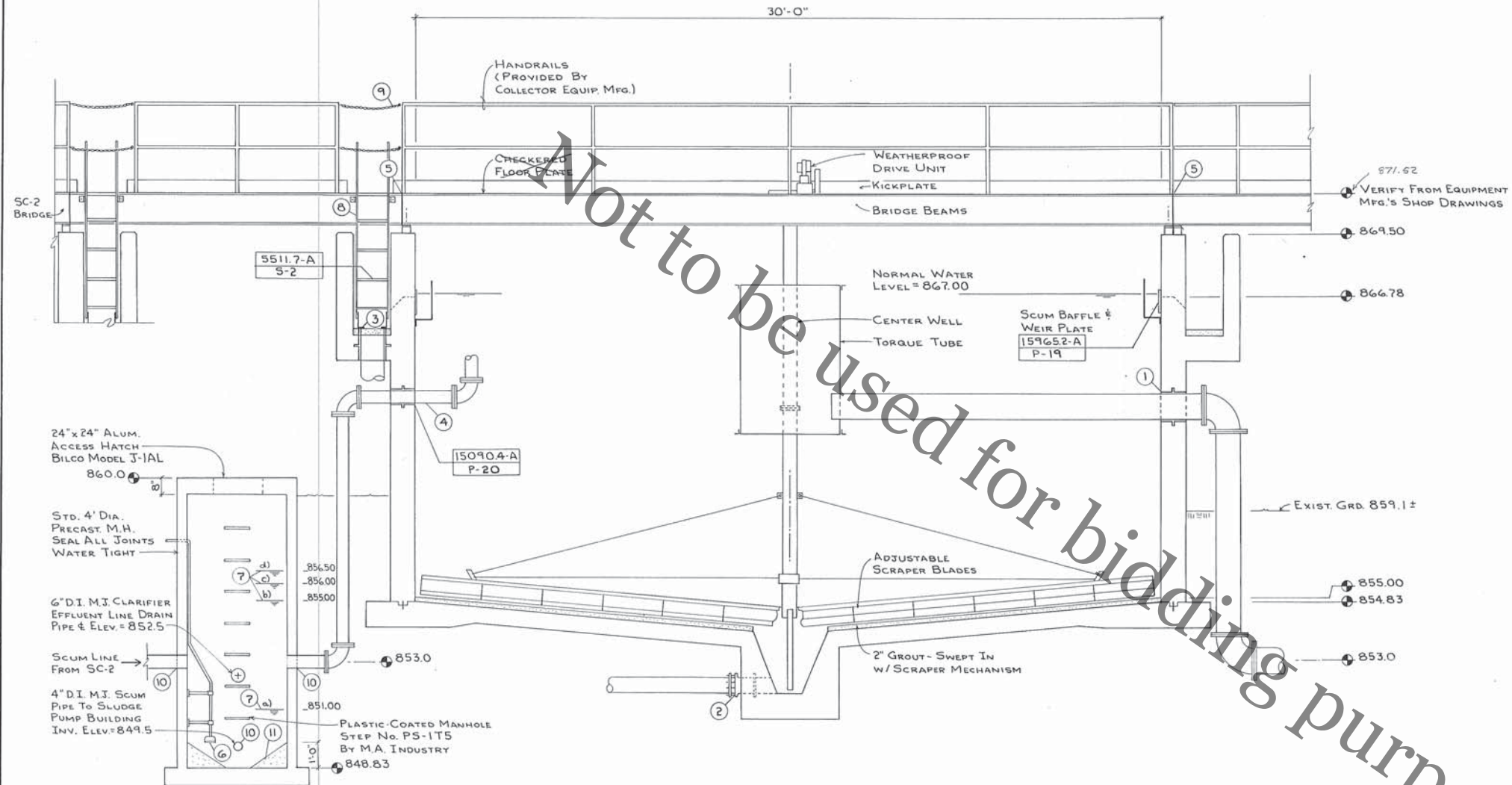


- KEY NOTES
- 1 WALKWAY BRIDGES AND STAIRS BEYOND TANK BRIDGE BEAMS NOT BY CLARIFIER EQUIPMENT MANUFACTURER. SEE STRUCTURAL DRAWINGS.
  - 2 SEE SPECIFICATIONS FOR CLARIFIER EQUIPMENT REQUIREMENTS
  - 3 ALUMINUM LADDER FOR ACCESS INTO WEIR TROUGH, ON SIDE OF BRIDGE NEAREST SCUM TROUGH (ONE REQUIRED PER CLARIFIER). SUPPORT AND FASTEN PER LADDER MANUFACTURER'S RECOMMENDATIONS.

Revisions: 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>	
<b>SECONDARY CLARIFIERS SC-1 &amp; SC-2 PLAN VIEW</b>			
Drwn. G.B.	Chd. Q.H.D.	 <b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643 61032-5098	Job No. 29251
Date 11/15/89			Sheet No. P-12 of 53

KEY NOTES

- 1 SC-1 AND SC-2 INFLUENT LINE, CENTER LINE ELEV. AT TANK WALL APPROX. = 863.0. VERIFY FROM EQUIPMENT SUPPLIER'S SHOP DRAWINGS. (SHOWN ROTATED FOR CLARITY)
- 2 SC-1 AND SC-2 RETURN SLUDGE LINE, SET INVERT FLUSH WITH BOTTOM OF HOPPER. ELEV. = 862.25. (SHOWN ROTATED FOR CLARITY)
- 3 SC-1 AND SC-2 EFFLUENT LINE, CHANNEL ELEV. AT EFFLUENT PIPE = 865.45. (SHOWN ROTATED FOR CLARITY)
- 4 SC-1 AND SC-2 SCUM EFFLUENT LINE, ELEV. = 862.25. (SHOWN ROTATED FOR CLARITY)
- 5 WALKWAY BRIDGES AND STAIRS BEYOND TANK BRIDGE BEAMS NOT BY CLARIFIER EQUIPMENT MANUFACTURER. SEE STRUCTURAL DRAWINGS.
- 6 SUBMERSIBLE LEVEL TRANSDUCER ATTACHED TO 1" RIGID GALVANIZED STEEL CONDUIT SUPPORTED FROM MANHOLE WALL BY BRACKETS PROVIDED WITH TRANSDUCER.
- 7 INITIAL SETTINGS FOR SCUM PUMP CONTROLLER  
a) LWL - PUMPS OFF  
b) LEAD PUMP ON  
c) LAG PUMP ON  
d) HWL - ALARM
- 8 ALUMINUM LADDER (2 REQUIRED) SUPPORT AND FASTEN PER LADDER MANUFACTURER'S RECOMMENDATIONS
- 9 REMOVABLE CHAIN LINK SECTION WITH ONE FIXED END AND ONE SNAP HOOK AND EYE
- 10 GROUT IN PIPE WATERTIGHT
- 11 GROUT IN FILLET



SC-1 SECTION A-A

SCALE: 3/8" = 1'-0"

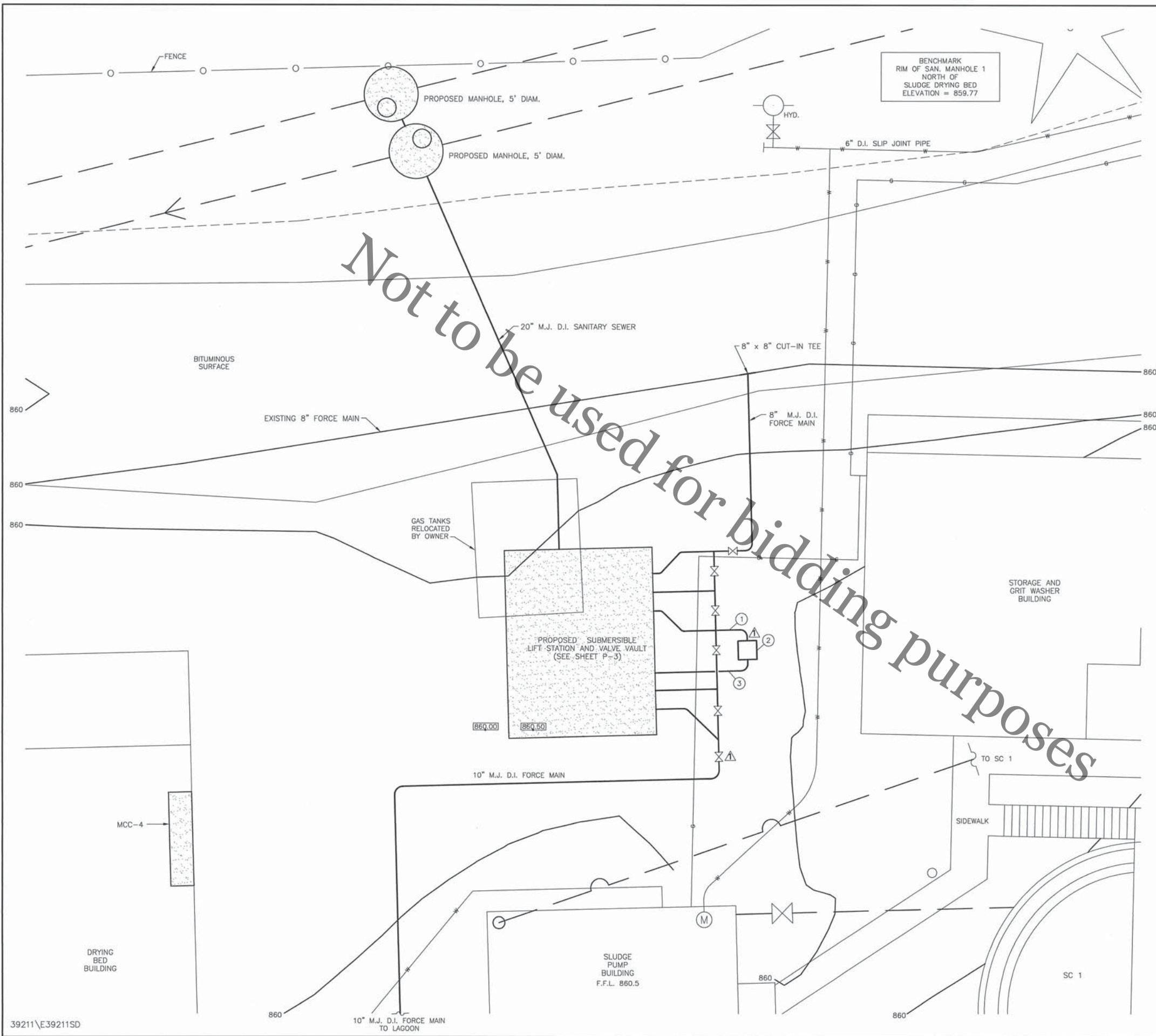
Revisions: 3/7/90		PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO	
		SECONDARY CLARIFIER SC-1 SECTION	
Drawn: G.B.	Check: Q.H.D.	FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No. 29251 Sheet No. P-13 of 53
Date: 11/15/89			



# DEMOLITION ITEM #5

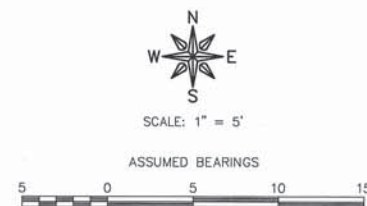
## HIGH FLOW PUMP STATION





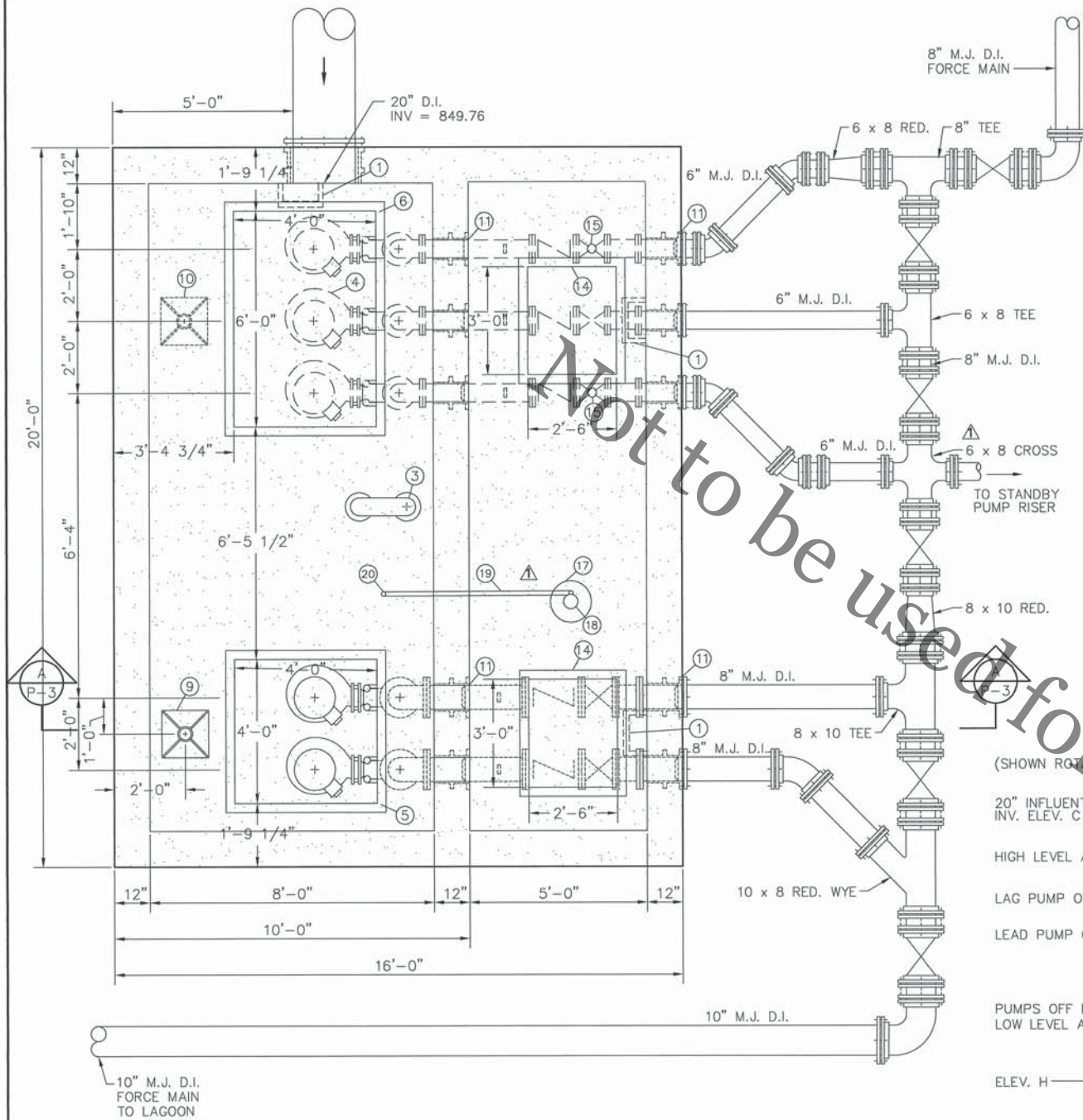
- KEY NOTES
- 1 6" DI MJ PIPE TO STANDBY PUMP RISER VAULT.
  - 2 RISER VAULT (SEE SHT. P-4).
  - 3 6" DI MJ DRAIN PIPE, SLOPE @ MIN 1% GRADE BACK TO WET WELL.

- LEGEND
- SUBSURFACE UTILITIES:
- G — NATURAL GAS —SERVICE LINE
  - E — ELECTRIC LINE
  - T — TELEPHONE LINE
  - W — WATER SERVICE
  - - - - - EXISTING SANITARY SEWER
  - — — — — PROPOSED PIPING
  - 860.00 PROPOSED ELEVATION



Revisions: A 09/28/99		WINNEBAGO LIFT STATION VILLAGE OF WINNEBAGO, ILLINOIS	
		DETAIL SITE PLAN	
Dwn. G.B.	Chd. E.D.T.	<b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST. FREEPORT, IL 61032-5098 815/235-7643	Job No. 39211
Date 7/23/99			Sheet No. P-2 of 12





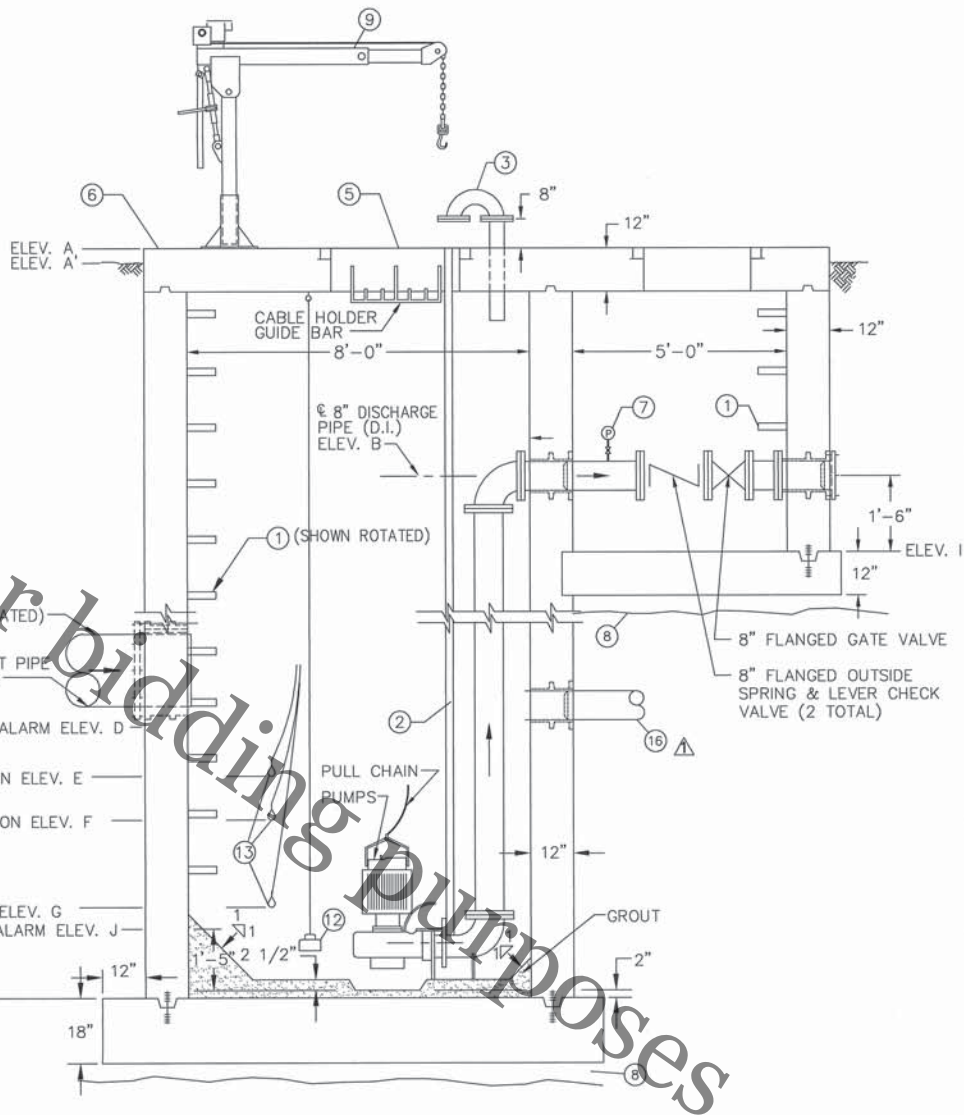
LIFT STATION AND VALVE VAULT PLAN  
SCALE: 1/2" = 1'-0"

PUMP DATA

PUMP	G.P.M.	T.D.H. (FEET)	
		INITIAL	FUTURE
#1	1200	43	-
#2	1200	43	-
#3	700	-	54
#4	700	-	54
#5	700	-	54

LIFT STATION ELEVATIONS

MARK	ELEVATION
A	860.50
A'	860.00
B	854.17
C	849.85
D	849.50
E	849.00
F	848.00
G	846.00
H	844.00
I	852.67
J	845.50



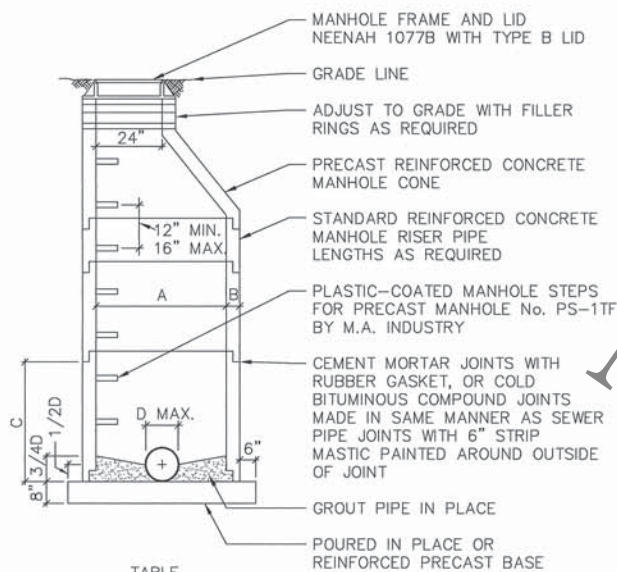
SECTION A-A: LIFT STATION AND VALVE VAULT SECTION  
SCALE: N.T.S.

- KEY NOTES
- 1 PLASTIC COATED MANHOLE STEPS No. PS-ITF BY M.A. INDUSTRY OR EQUAL.
  - 2 GUIDE RAILS PER PUMP MANUFACTURER'S RECOMMENDATIONS. ALTERNATE No. 1 USES STAINLESS STEEL CABLES. REFER TO PUMP SPECIFICATIONS.
  - 3 6-INCH VENT PIPE (D.I.) WITH #24 MESH NON-CORROSIVE SCREEN.
  - 4 SPACE TO BE PROVIDED FOR FUTURE PUMP 3, 4 AND 5. GUIDE RAILS, CONNECTION MECHANISM, AND ALL PIPING AND VALVES TO CONNECT TO HEADER IN VALVE VAULT SHALL BE PROVIDED AND INSTALLED AS A PART OF THIS PROJECT.
  - 5 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE DOUBLE LEAF BILCO MODEL JD-2AL 4'-0" x 4'-0" (HINGED TO OPEN TO THE NORTH AND SOUTH) OR APPROVED EQUAL.
  - 6 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE DOUBLE LEAF BILCO MODEL JD-3AL 4'-0" x 6'-0" (HINGED TO OPEN NORTH AND SOUTH) OR APPROVED EQUAL.
  - 7 PRESSURE GAUGE, 0 TO 60 PSI. ASHCROFT TYPE 1000, 3 1/2" DIAMETER DIAL, OR APPROVED EQUAL. 5 TOTAL, ONE ON EACH PUMP DISCHARGE LINE, LOCATED AS SHOWN.
  - 8 UNLESS SITTING ON ROCK, LIFT STATION AND VALVE VAULT SHALL HAVE A MINIMUM OF 6 INCHES OF COMPACTED GRANULAR BACKFILL BELOW THE SLAB. ALL OVER-EXCAVATION BENEATH LIFT STATION OR VALVE VAULT SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.
  - 9 PUMP HOIST, THERN MODEL 5124 M2 OR EQUAL. CONTRACTOR TO COORDINATE PRECISE LOCATION WITH SHOP DRAWINGS TO INSURE HOIST CAN SWING TO POSITION OVER LIFTING CENTER LINE OF PUMPS.
  - 10 FUTURE PUMP HOIST.
  - 11 WALL SLEEVE, CLOW F-1429 OR EQUAL, TYPICAL.
  - 12 PRESSURE TRANSDUCER SUSPENDED BY STAINLESS STEEL CABLE AT ELEVATION 845.00.
  - 13 FLOATS SUSPENDED FROM CABLE HOLDER
  - 14 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE SINGLE LEAF BILCO MODEL J-3AL 2'-6" x 3'-0" (HINGED ON WEST SIDE) OR APPROVED EQUAL.
  - 15 PROVIDE 3" DIAM. PIPE SLEEVE WITH REMOVABLE CAP FOR ACCESS TO VALVE WITH T WRENCH,
  - 16 6" DI MJ DRAIN LINE FROM STANDBY PUMP RISER, Q ELEV = 850.00
  - 17 PVC SUMP - 1' DEEP, 1'-6" DIAMETER
  - 18 SUBMERSIBLE SUMP PUMP WITH 2" DISCHARGE AND PRESS. SWITCH CONTROLLER, WEIL MODEL 2428 OR EQUAL. 1/2 HP MOTOR 115VAC, 1PH, 60HZ. (PUMP P-6)
  - 19 2" SCHED. 40 PVC DISCHARGE PIPE, Q ELEV = 854.00
  - 20 DOWN-TURNED 90° ELBOW.

GENERAL NOTES  
ALL PIPING & FITTINGS FROM PUMPS TO VALVE VAULT EXIT POINT SHALL BE DUCTILE IRON, CLASS 52.  
EXCAVATIONS SHALL BE KEPT DEWATERED AT ALL TIMES DURING CONSTRUCTION.

Revisions: A/09/28/99		WINNEBAGO LIFT STATION VILLAGE OF WINNEBAGO, ILLINOIS	
LIFT SECTION & VALVE VAULT PLAN & SECTION			
Drawn: G.B.	Checked: E.D.T.	FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 680 W. STEPHENSON ST. PREEPORT, IL 61332-5098 815/235-7643	Job No. 39211
Date 7/23/99			Sheet No. P-3 of 12

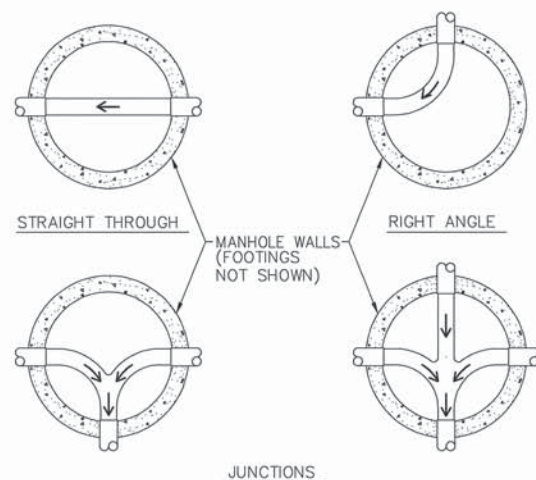




TABLE

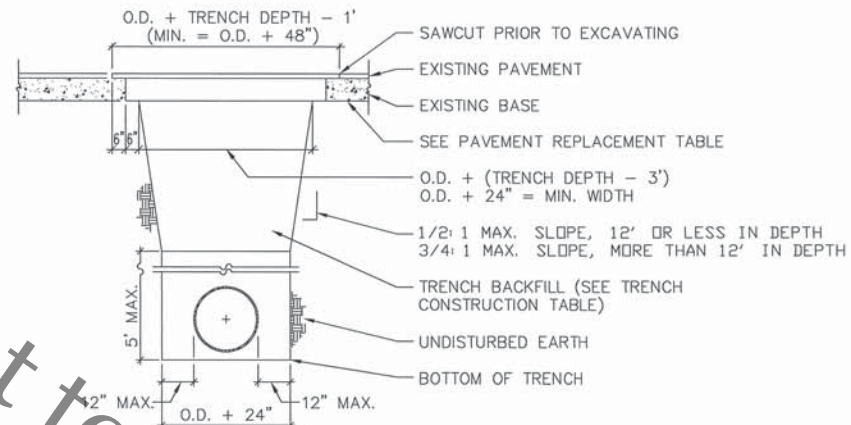
A	B	C	D
48"	5"	4'-0"	24"
60"	6"	5'-4"	36"

2590.1-F  
P-4  
MANHOLE, 4' AND 5' DIA.  
N.T.S.



NOTE: DEPTH OF ALL CHANNELS TO BE 1/2 x DIAMETER OF SMALLEST PIPE ENTERING OR LEAVING MANHOLE.  
INDICATES DIRECTION OF FLOW

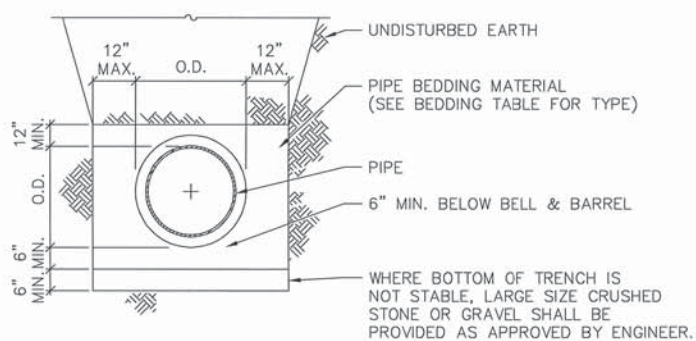
2590.6-A  
P-4  
MANHOLE BOTTOM  
N.T.S.



NOTE: EXCAVATION SHALL BE PER OSHA STANDARDS PUBLICATION 2226.

IF SOIL CONDITIONS AND TRENCH DEPTH REQUIRE TRENCH WIDTH BEYOND LIMITS SHOWN IN THIS DETAIL, QUANTITIES FOR TRENCH BACKFILL AND PAVEMENT REPLACEMENT MAY BE INCREASED.

2221.9-B  
P-4  
TRENCH CONSTRUCTION & PAVEMENT REPLACEMENT  
N.T.S.



2221.11-D  
P-4  
PIPE BEDDING DETAIL  
N.T.S.

PIPE BEDDING TABLE

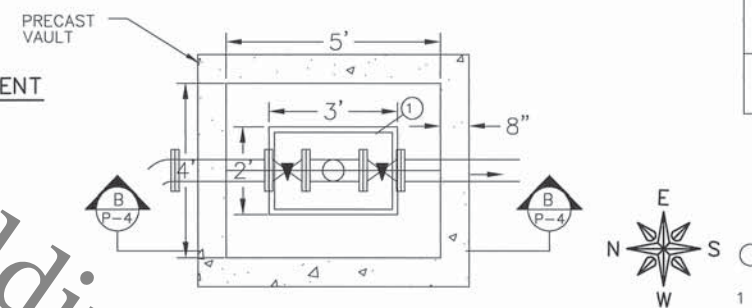
PIPE TYPE	APPLICATION	TRENCH BACKFILL BELOW BELL	PIPE BEDDING TYPE
D.I., V.C.P., CONC.	ALL SOILS TYPES	YES, 6"	EXCAVATED MATERIAL
D.I., V.C.P., CONC.	WITH PAVMT. REPLACEMENT	YES, 6"	GRANULAR ASTM D-2321 CLASS 1
PVC SDR 26/35	ALL SOILS TYPES	YES, 6"	GRANULAR ASTM D-2321 CLASS 1
PVC TRUSS WATER & SEWER	ALL SOILS TYPES	YES, 6"	GRANULAR ASTM D-2321 CLASS 1

PAVEMENT REPLACEMENT TABLE

PAY ITEM	DESCRIPTION OF MATERIAL	THICKNESS
BITUMINOUS PAVEMENT REPLACEMENT	AGGREGATE BASE COURSE, TYPE B, COMPACTED TO 95% DENSITY (INCLUDED IN UNIT COST OF PAVEMENT REPLACEMENT)	10"
	PAVEMENT REMOVAL & REPLACEMENT CLASS B BIT. PAVEMENT WITH PRIME COAT (0.40 GAL/S.Y.)	2" MIN.
GRAVEL PAVEMENT REPLACEMENT	AGGREGATE BASE COURSE, TYPE B COMPACTED TO 95% DENSITY	10"
CONCRETE	AGGREGATE BASE COURSE, TYPE B, COMPACTED TO 95% DENSITY (INCLUDED IN UNIT COST OF PAVEMENT REPLACEMENT)	8"
	CLASS X CONCRETE WITH 6 x 6 WWF REINFORCING	4" MIN.
A-2 (SEAL COAT)	AGGREGATE BASE COURSE, TYPE B, COMPACTED TO 95% DENSITY (INCLUDED IN UNIT COST OF PAVEMENT REPLACEMENT)	10"
	PAVEMENT REMOVAL & REPLACE: 2 COATS SEAL COAT AGGREGATE 2 COATS SEAL COAT MATERIAL 1 COAT PRIME COAT	25 LB/S.Y. 0.4 GAL/S.Y. 0.4 GAL/S.Y.

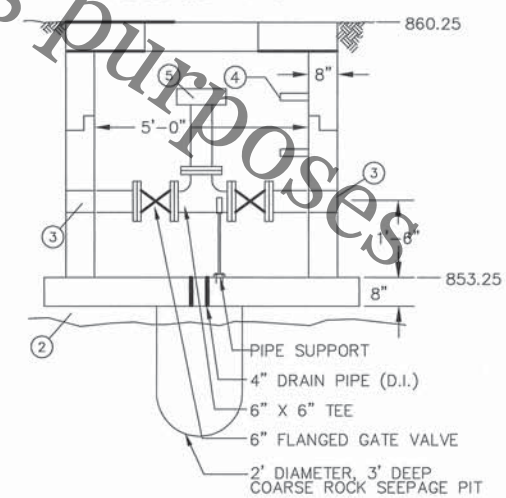
TRENCH CONSTRUCTION TABLE

SURFACE TYPE	TRENCH BACKFILL TYPE
NO PAVEMENT	JOB EXCAVATED MATERIAL, WATER JETTED NO LARGE ROCKS OR ANY ORGANIC DEBRIS
PAVEMENT (INCLUDING GRAVEL)	APPROVED TRENCH BACKFILL COMPACTED IN 12" LIFTS TO 95% OPTIMUM DENSITY



STANDBY PUMP RISER VAULT PLAN

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



SECTION B-B: STANDBY PUMP RISER VAULT SECTION

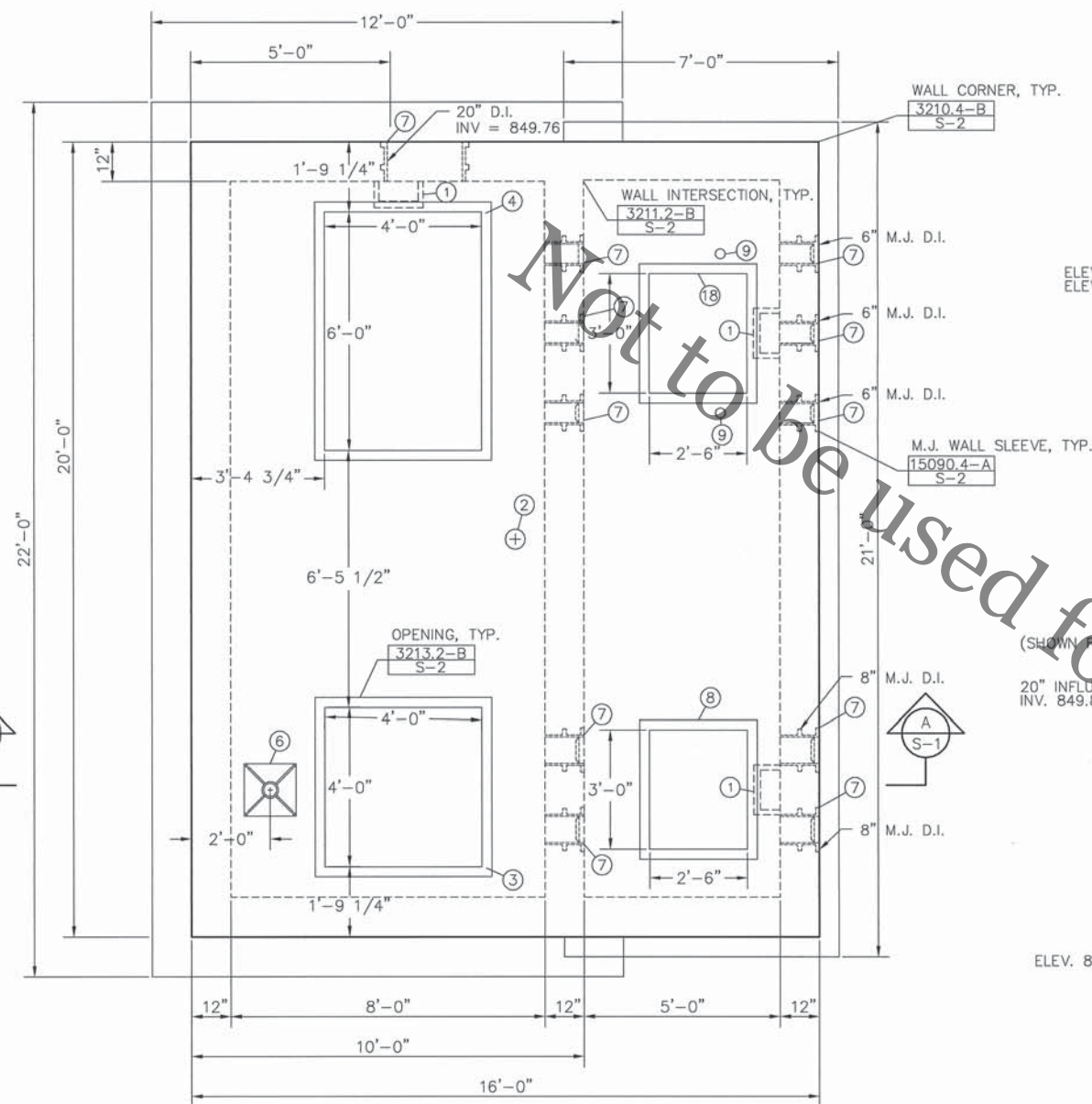
SCALE: 1/2" = 1'-0"

KEY NOTES

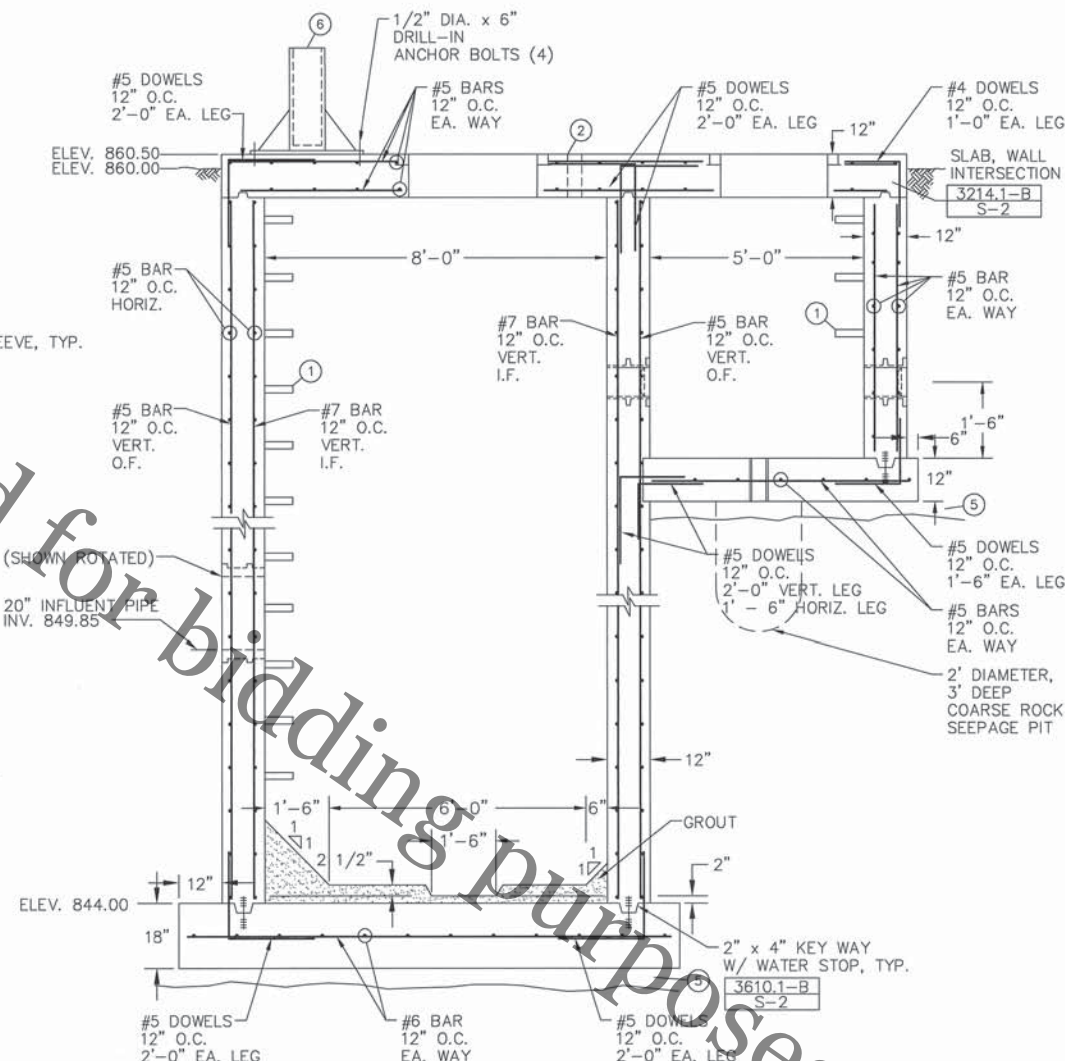
- 1 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE SINGLE LEAF BILCO MODEL JAL 2.5' X 3' (HINGED ALONG 3' EDGE) OR APPROVED EQUAL.
- 2 VALVE VAULT SHALL HAVE A MINIMUM OF 6 INCHES OF COMPACTED GRANULAR BACKFILL BELOW THE SLAB. ALL OVER-EXCAVATION BENEATH LIFT STATION OR VALVE VAULT SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.
- 3 BLOCKOUT & "BOOT" TO PROVIDE WATER-TIGHT WALL PENETRATION.
- 4 PLASTIC COATED MANHOLE STEPS FOR PRECAST CHAMBER NO. PS-1TF BY M.A. INDUSTRY OR EQUAL.
- 5 KAM-LOCK MALE QUICK COUPLING W/ CAP (MATCH VILLAGE OF WINNEBAGO STANDARD PUMP DISCHARGE HOSE CONNECTION).

Revisions: 09/28/99		WINNEBAGO LIFT STATION VILLAGE OF WINNEBAGO, ILLINOIS	
		SANITARY SEWER DETAILS	
Drawn: G.B.	Chd. E.D.T.	<b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 860 W. STEPHENSON ST. FREEPORT, IL 61032-5098 815/235-7643	Job No. 39211
Date 7/23/99			Sheet No. P-4 of 12





LIFT STATION AND VALVE VAULT PLAN  
SCALE: 1/2" = 1'-0"



SECTION A-A: LIFT STATION AND VALVE VAULT SECTION  
SCALE: 1/2" = 1'-0"

- KEY NOTES
- 1 PLASTIC COATED MANHOLE STEPS No. PS-ITF BY M.A. INDUSTRY OR EQUAL.
  - 2 OPENING FOR 6-INCH VENT PIPE (D.I.).
  - 3 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE DOUBLE LEAF BILCO MODEL JD-2AL 4'-0" x 4'-0" (HINGED TO OPEN TO THE NORTH AND SOUTH) OR APPROVED EQUAL.
  - 4 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE DOUBLE LEAF BILCO MODEL JD-3AL 4'-0" x 6'-0" (HINGED TO OPEN NORTH AND SOUTH) OR APPROVED EQUAL.
  - 5 UNLESS SITTING ON ROCK, LIFT STATION AND VALVE VAULT SHALL HAVE A MINIMUM OF 6 INCHES OF COMPACTED GRANULAR BACKFILL BELOW THE SLAB. ALL OVER-EXCAVATION BENEATH LIFT STATION OR VALVE VAULT SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.
  - 6 PUMP HOIST BASE, TERN MODEL 5124 M2 OR EQUAL. CONTRACTOR TO COORDINATE PRECISE LOCATION WITH SHOP DRAWINGS TO INSURE HOIST CAN SWING TO POSITION OVER LIFTING CENTER LINE OF PUMPS.
  - 7 WALL SLEEVE, CLOW F-1429 OT EQUAL, TYPICAL.
  - 8 HEAVY-DUTY ALUMINUM PIT DOOR COMPLETE WITH ACCESSORIES, PISTON LIFTING MECHANISM, AND POSITION LOCK AT 90-DEGREES OPENING. DOOR SHALL BE SINGLE LEAF BILCO MODEL J-3AL 2'-6" x 3'-0" (HINGED ON WEST SIDE) OR APPROVED EQUAL.
  - 9 PROVIDE 3' DIAMETER PIPE SLEEVE WITH REMOVABLE CAP FOR ACCESS TO VALVE WITH T WRENCH, REFER TO P-3 FOR LOCATION.



Revisions:		WINNEBAGO LIFT STATION VILLAGE OF WINNEBAGO, ILLINOIS	
LIFT SECTION & VALVE VAULT PLAN & SECTION			
Drawn: G.B.	Checked: E.D.T.	<b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST. FREEPORT, IL 61032-5098 815/235-7643	Job No. 39211
Date 7/23/99			Sheet No. S-1 of 12

GENERAL NOTES

CONCRETE

MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318.

CONCRETE WORK SHALL CONFORM TO THE CURRENTLY ADOPTED ACI 318, "STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"; ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 302, "RECOMMENDED PRACTICE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION". ALL TANK CONSTRUCTION SHALL CONFORM TO "THE SPECIAL REQUIREMENTS FOR SANITARY ENGINEERING STRUCTURES"; ACI 350 AND ACI 350R-83.

UNLESS OTHERWISE NOTED, PRINCIPAL REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE PROTECTION:

- SURFACES NOT FORMED.....3 INCH
- FORMED SURFACES IN CONTACT WITH SOIL OR WATER, OR EXPOSED TO WEATHER...2 INCH

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS AND MINIMUM CEMENT CONTENT OF 5 1/2 BAGS/ CY, 5 BAGS/ CY WITH PLASTICIZING ADMIXTURE.

WASTEWATER STRUCTURES AND STRUCTURAL SLABS THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 4000 PSI AT 28 DAYS AND MINIMUM CEMENT CONTENT OF 6 BAGS/ CY OR 5 1/2 BAGS/ CY WITH PLASTICIZING ADMIXTURE.

THE MAXIMUM WATER/ CEMENT RATIO SHALL BE .45. CONCRETE MIX TO BE IN ACCORDANCE WITH ACI 350R-83.

AIR-ENTRAINING ADMIXTURE SHALL BE USED FOR ALL CONCRETE EXPOSED TO THE WEATHER.

SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, CURBS, FLOOR FINISHES, INSERTS AND OTHER EMBEDDED ITEMS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS IN CONCRETE PRIOR TO FORMING.

REINFORCING STEEL

BAR BENDING AND PLACEMENT DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED

CONCRETE STRUCTURES", ACI 315, UNLESS OTHERWISE SHOWN OR NOTED. ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE.

ALL REINFORCING STEEL SHALL BE "DEFORMED NEW BILLET STEEL BARS", ASTM A615, GRADE 60.

ADDITIONAL BARS SHALL BE PROVIDED, TWO #5 WHEN NOT NOTED ON DRAWINGS, AROUND ALL OPENINGS IN WALLS; CORNER BARS MATCHING TO HORIZONTAL BARS SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS.

ALL LAPS WHEN NOT DIMENSIONED ON DRAWINGS SHALL BE 36 DIAMETERS OF BARS, AND NO LESS THAN 24". THE LOCATION OF THE SPLICES SHALL BE STAGGERED.

REINFORCING BARS ARE TO BE PLACED ON CHAIRS OR OTHER

ACCESSORIES TO INSURE PROPER PLACEMENT. REINFORCING SHALL NOT BE PULLED OR MUDDIED IN PLACE.

REINFORCING SHOP DRAWINGS SHALL SHOW CLEARANCES TO ALL BARS.

DO NOT OIL FORMS WHEN REBAR IS IN PLACE.

FOUNDATIONS

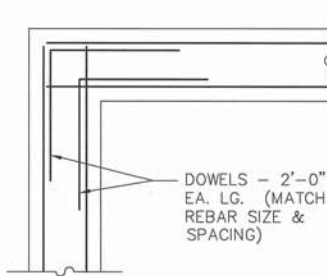
ALL FOOTINGS SHALL BEAR ON SOLID UNDISTURBED SOIL OF 1,000 POUNDS PER SQUARE FOOT BEARING CAPACITY AT A MINIMUM DEPTH OF 4'-0" BELOW EXISTING GRADE (SEE SOIL BORING REPORT).

ELEVATION OF FOOTINGS ARE SHOWN ON THE PLANS.

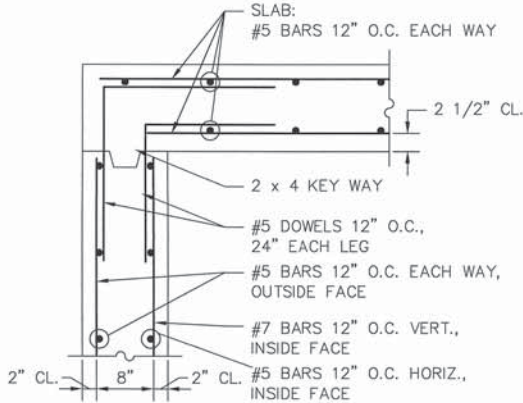
NO CONCRETE SHALL BE POURED IN EXCAVATIONS CONTAINING WATER.

ALL FILL AND BACKFILL FOR INTERIOR SLABS ON GRADE AND FOOTINGS SHALL BE COMPACTED TO 95% OF ASTM 1557.

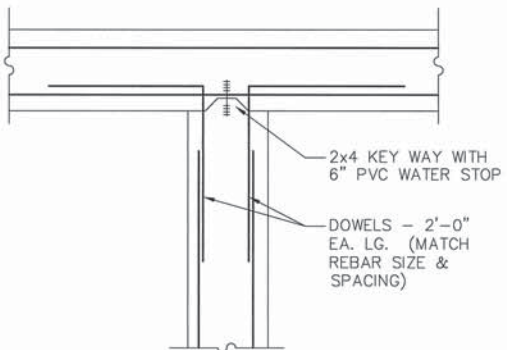
CONTRACTOR TO PROTECT THE SOIL AT THE BASE OF THE FOOTING FROM BEING HARMFULLY DISTURBED AND FROM FREEZING. A MINIMUM OF 3 FEET OF STRAW WITH A 6 MIL POLYETHYLENE COVER OVER STRAW IS REQUIRED.



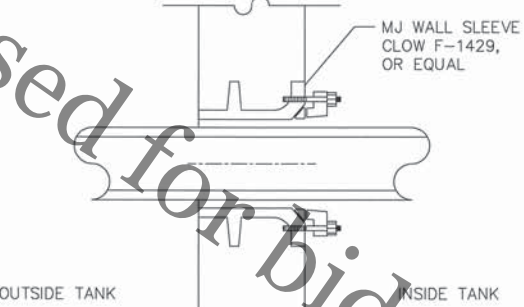
WALL CORNER DETAIL  
SCALE: 1" = 1'-0"



SLAB, WALL INTERSECTION DETAIL  
SCALE: 1" = 1'-0"

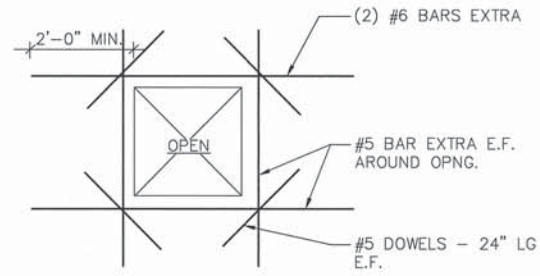


WALL INTERSECTION DETAIL  
SCALE: 1" = 1'-0"

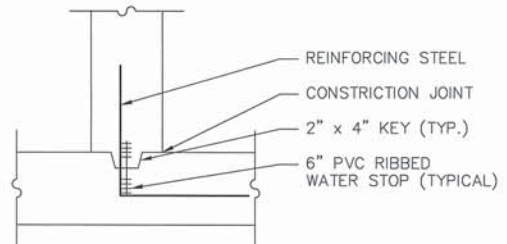


NOTE:  
USE SAME DETAIL FOR EXISTING CONSTRUCTION, EXCEPT FIRST JACKHAMMER OR CORE DRILL THROUGH CONCRETE, THEN INSTALL WALL SLEEVE WITH NON-SHRINK EPOXY GROUT.

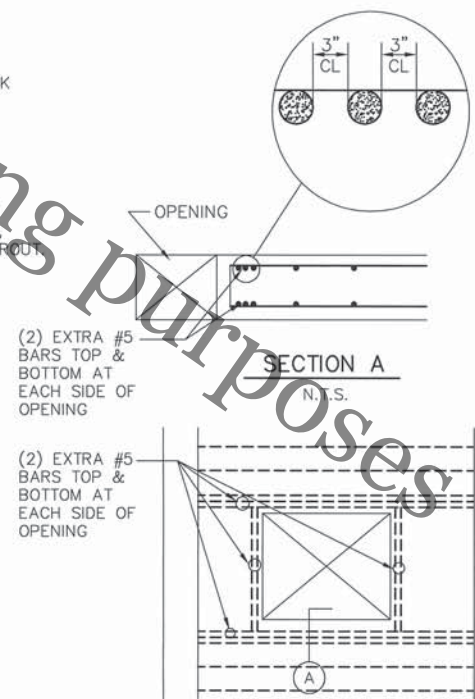
PIPE THROUGH WALL/  
FLOOR OF TANK  
PIPING PENETRATION DETAIL  
N.T.S.



TYPICAL DETAIL AT ALL  
OPENINGS IN WALL  
SCALE: 2" = 1'-0"



TYPICAL WATER STOP DETAIL  
SCALE: 1" = 1'-0"



TYPICAL OPENING IN SLAB  
N.T.S.

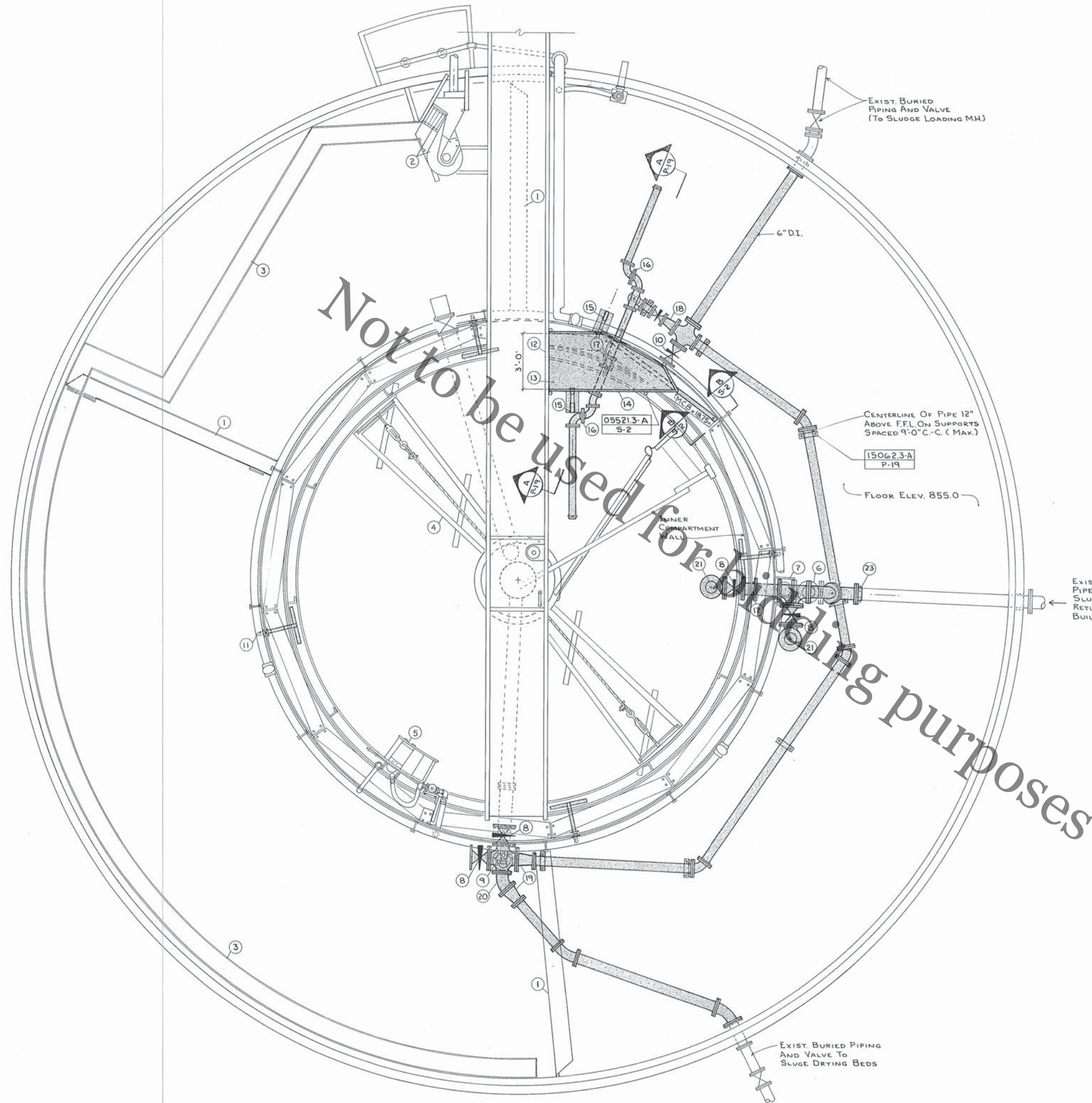
Revisions:		WINNEBAGO LIFT STATION VILLAGE OF WINNEBAGO, ILLINOIS	
		STRUCTURAL DETAILS	
Drawn: G.B.	Checked: E.D.T.	FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST. FREDPORT, IL 61032-5098 815/235-7643	Job No. 39211
Date 7/23/99		1920 DAMLER RD. ROCKFORD, IL 61112-1008 815/394-4700	Sheet No. S-2 of 12



DEMOLITION ITEM #6  
SLUDGE STORAGE TANK







- KEY NOTES
- 1 REMOVE EXISTING STEEL PARTITION WALL
  - 2 REMOVE EXISTING FABRICATED STEEL INLET ASSEMBLY, BAR SCREEN, COMMUTER AND APPURTENANCES. (TO BE RETAINED BY OWNER)
  - 3 REMOVE EXISTING FABRICATED STEEL INFLUENT TROUGH AND SUPPORT BRACKETS.
  - 4 REMOVE EXISTING SLUDGE CLARIFIER MECHANISM INCLUDING DRIVE UNIT, TORQUE TUBE, CENTER WELL, SKIMMER ARM, SCRAPER ASSEMBLIES AND APPURTENANCES.
  - 5 REMOVE EXISTING SCUM BEACH, TROUGH, AND APPURTENANCES.
  - 6 REMOVE EXISTING 8" C.I. 90 DEGREE ELBOW AND RISER. INSTALL TEE AND VALVE INTO OUTER COMPARTMENT. EXTEND PIPE THROUGH INNER COMPARTMENT WALL AND INSTALL VALVE.
  - 7 REMOVE EXISTING FABRICATED STEEL OVERFLOW BOX.
  - 8 8" ECCENTRIC PLUG VALVE. INSTALL WITH VALVE OPERATOR ASSEMBLY ACCESSIBLE FROM PLATFORM WALKWAY.
  - 9 REMOVE EXISTING 8" TEE AND RISER WITH AIRLIFT ASSEMBLY. INSTALL NEW 8" CROSS AND VALVES.
  - 10 6" ECCENTRIC PLUG VALVE. INSTALL WITH VALVE OPERATOR ASSEMBLY ACCESSIBLE FROM PLATFORM WALKWAY.
  - 11 REMOVE EXISTING DROP PIPE AND DIFFUSER ASSEMBLY FROM OUTER CHANNEL. REINSTALL IN INNER COMPARTMENT WITH NECESSARY FITTINGS AND SUPPORTS (4 REQUIRED).
  - 12 CUT AND REMOVE EXISTING RAILING. PROVIDE NEW VERTICAL POST AND SUPPORT STIFFENERS AS REQUIRED.
  - 13 PROVIDE AND INSTALL (1/4" CHECKERED FLOOR PLATE) PLATFORM WALKWAY EXTENSION FROM EXISTING BRIDGE AT SAME ELEVATION. SEE STRUCTURAL SUPPORT DETAILS.
  - 14 FABRICATE PLATFORM PERIMETER SUPPORT FRAMING FROM MC 7 x 14.75. SUPPORT ON PROPOSED MC 8 x 18.75 SUPPORT BEAM AND FASTEN TO EXISTING BRIDGE. PROVIDE NECESSARY FIELD MEASUREMENTS FOR SHOP DRAWINGS.
  - 15 WINCH ASSEMBLY
  - 16 4" D.I. BALL BEARING SWIVEL JOINT, OPW STYLE 40 WITH NEOPRENE SEALS, OR EQUAL.
  - 17 SCHEDULE 40 DOUBLE FLANGED TANK NOZZLE WELDED INTO EXISTING TANK SHELL.
  - 18 6" x 4" REDUCER
  - 19 8" x 6" D.I. REDUCER
  - 20 8" D.I. 45° ELBOW
  - 21 PROVIDE RISER TO ELEVATION 865.00. INSTALL PIPE SUPPORT BENEATH 90° ELBOW IN RISER.
  - 22 PROVIDE 2 - 45° ELBOWS TO RAISE INVERT TO 858.41 BEFORE ENTERING INNER TANK.
  - 23 CUT OFF EXISTING 8" PIPE AND INSTALL UNIFLANGE AS NECESSARY.



GENERAL NOTES

FULLY SANDBLAST ALL STEEL SURFACES TO MEET THE SURFACE PREPARATION SPECIFIED FOR SUBMERGED AND NON SUBMERGED SURFACES, AND PAINT PER PAINTING SCHEDULE. (SEE PAGES 9-4 AND 9-5 OF SPECIFICATIONS.)

THE OWNER WILL PROVIDE FOR GROSS SLUDGE REMOVAL AND DRAINING THE TANKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CLEANING IN PREPARATION FOR SANDBLASTING, PAINTING, AND EQUIPMENT INSTALLATION.

Revisions: 2/2/90 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>	
Job No. 29251			
MODIFICATIONS TO EXIST. PACKAGE PLANT FOR AEROBIC DIGESTION & SLUDGE STORAGE		SHEET NO. P-18 OF 53	
Dwn. G.B. Date 11/15/89	Chd. Q.H.D. FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	61032-5098	



DEMOLITION ITEM #7

SAND FILTER BUILDING

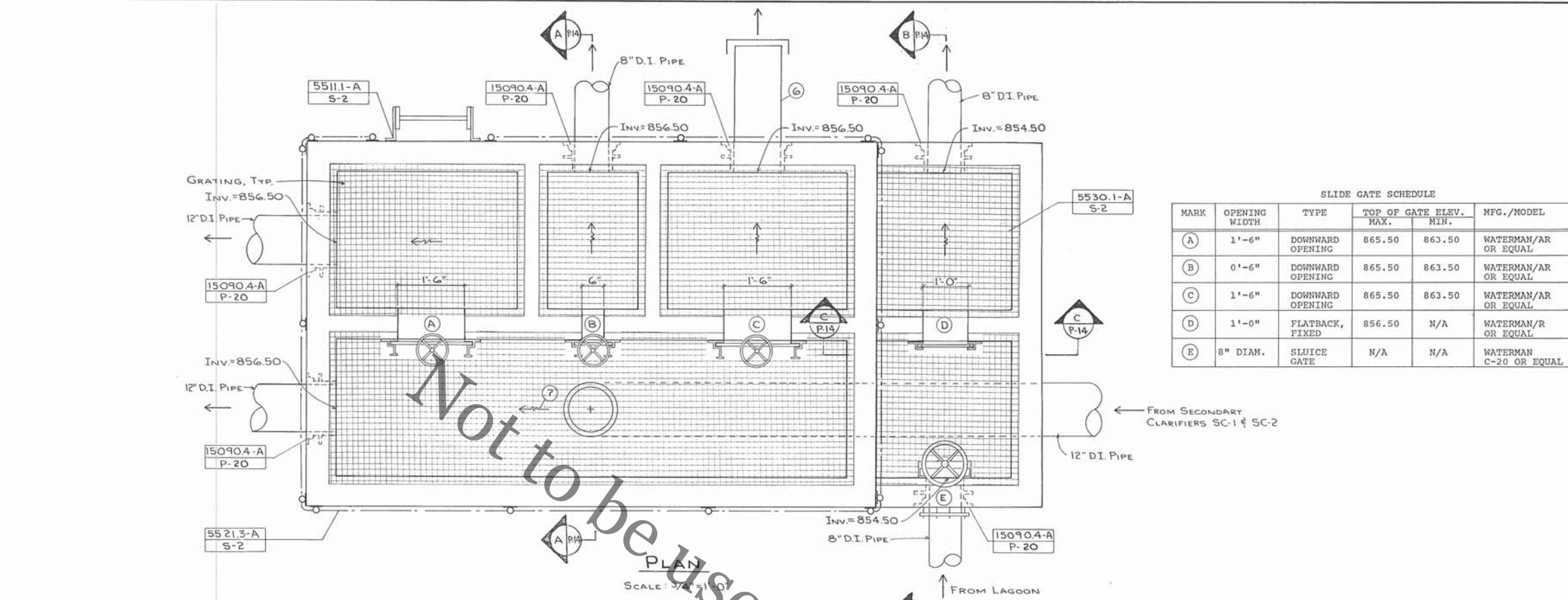
(NO RECORD DRAWINGS AVAILABLE)



DEMOLITION ITEM #8  
FLOW SPLITTING CHAMBER



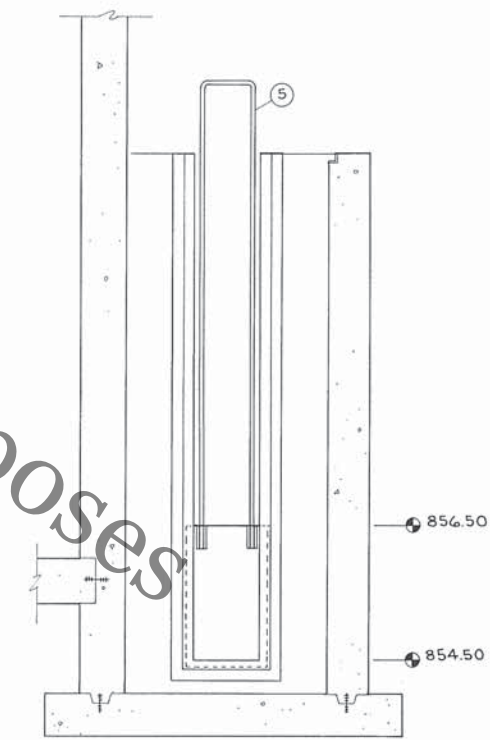
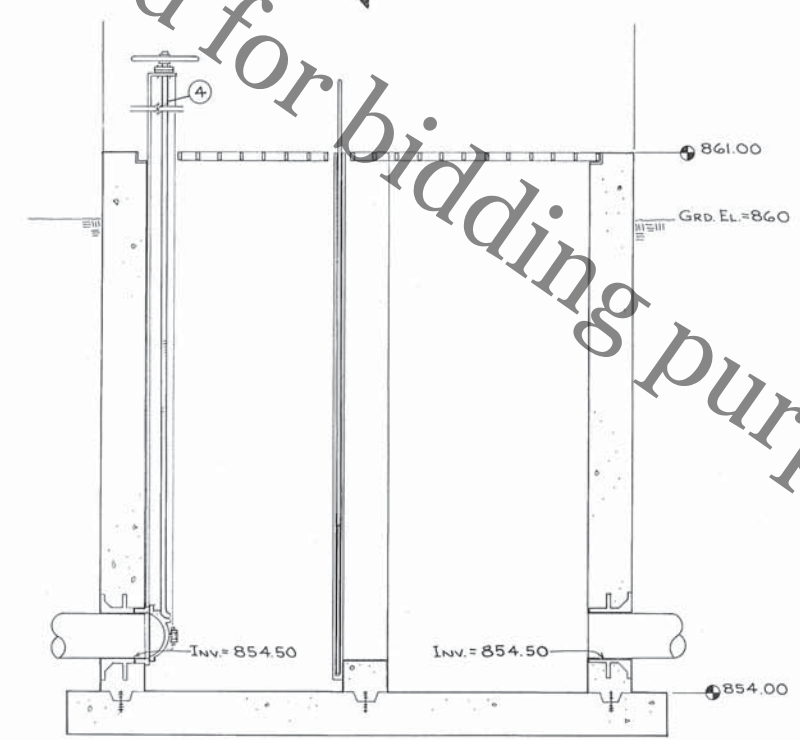
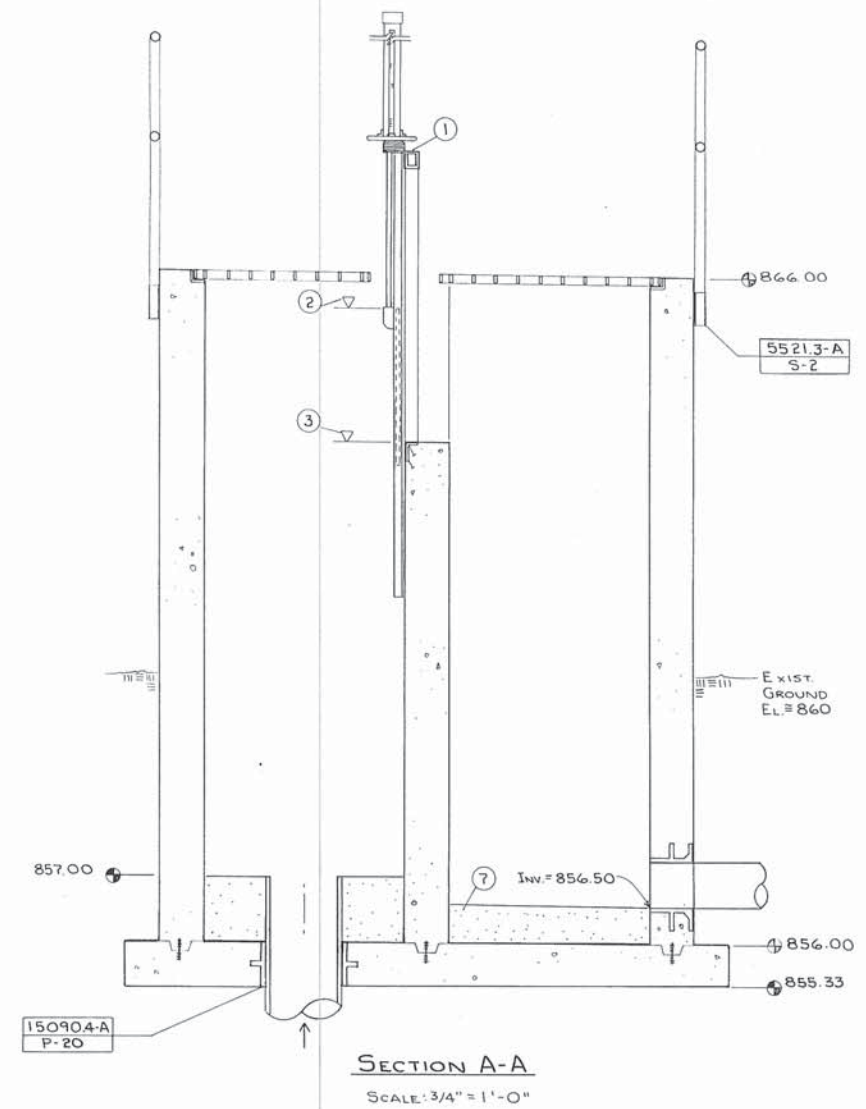




SLIDE GATE SCHEDULE

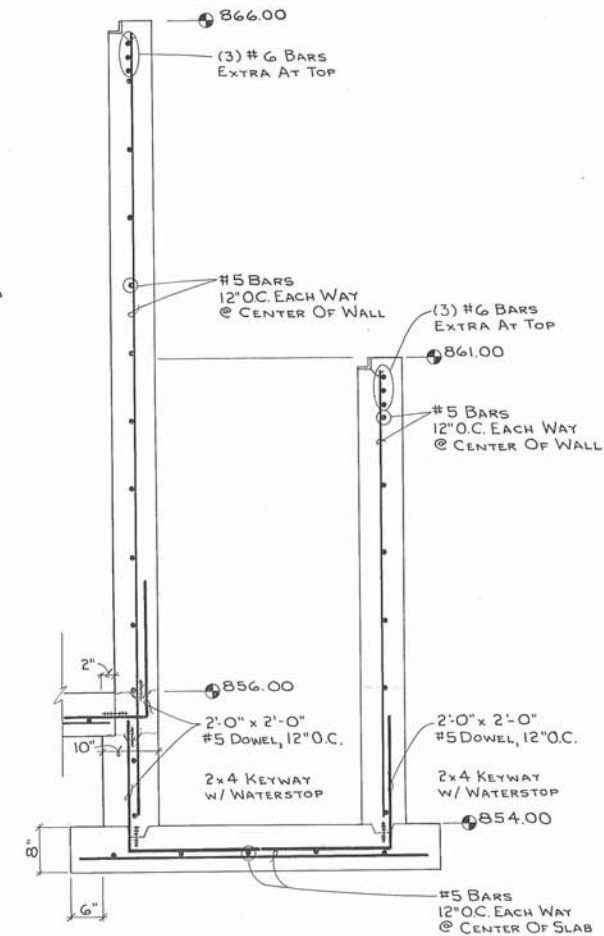
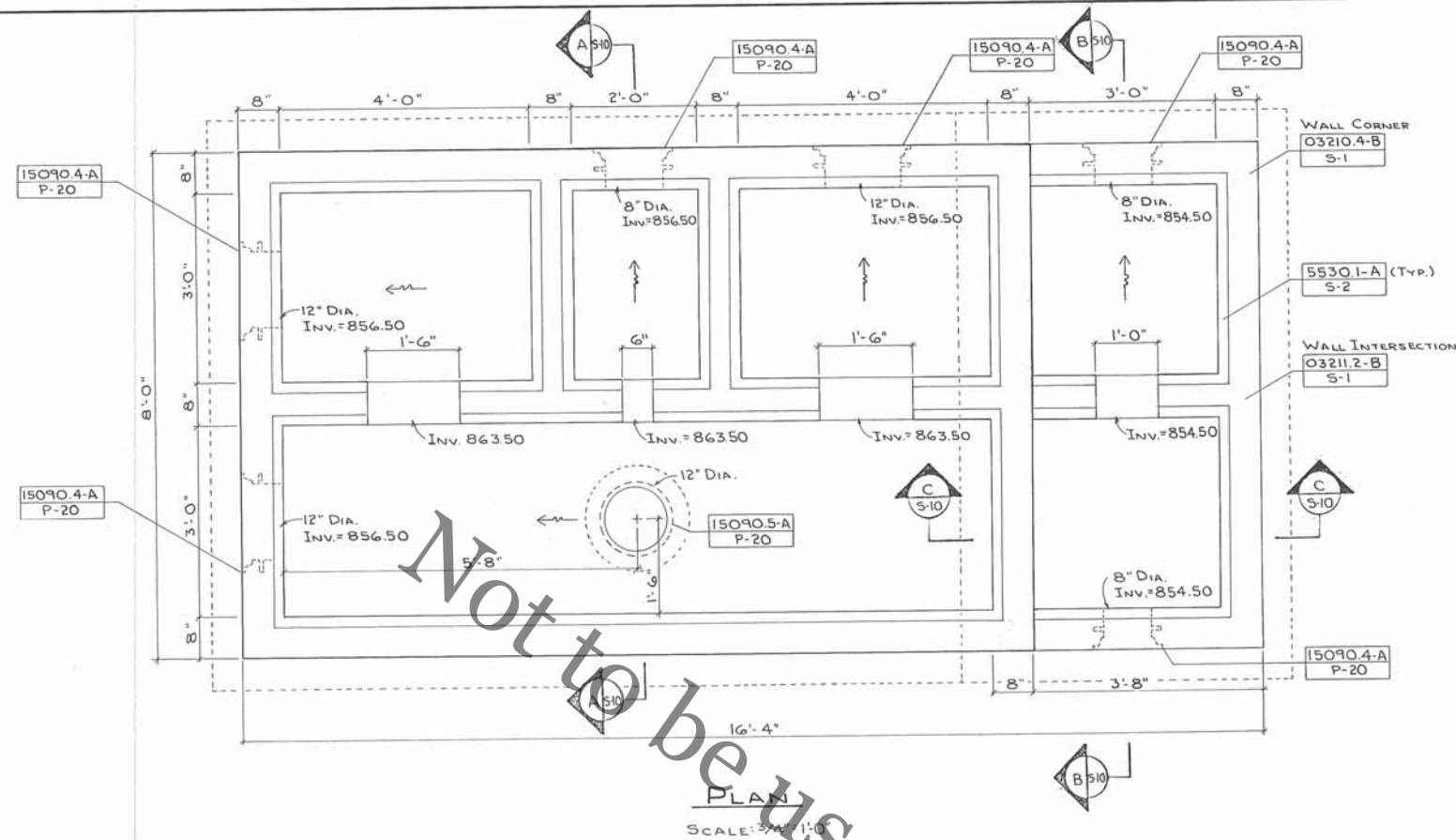
MARK	OPENING WIDTH	TYPE	TOP OF GATE ELEV.		MFG./MODEL
			MAX.	MIN.	
(A)	1'-6"	DOWNWARD OPENING	865.50	863.50	WATERMAN/AR OR EQUAL
(B)	0'-6"	DOWNWARD OPENING	865.50	863.50	WATERMAN/AR OR EQUAL
(C)	1'-6"	DOWNWARD OPENING	865.50	863.50	WATERMAN/AR OR EQUAL
(D)	1'-0"	FLATBACK, FIXED	856.50	N/A	WATERMAN/R OR EQUAL
(E)	8" DIAM.	SLUICE GATE	N/A	N/A	WATERMAN C-20 OR EQUAL

- KEY NOTES
- 1 DOWNWARD ADJUSTABLE WEIR GATE, REFER TO PLAN VIEW FOR REQUIRED WIDTH FOR EACH GATE, WATERMAN MODEL AR, OR EQUAL
  - 2 MAX. WATER LEVEL = 865.50
  - 3 MIN. WATER LEVEL = 863.50
  - 4 SELF-CONTAINED SLUICE GATE, 8" WATERMAN MODEL C-20 OR EQUAL
  - 5 PROVIDE LIFTING HANDLE FOR SLIDE GATE REMOVAL
  - 6 STUB OUT 12" DI PIPE AND PROVIDE MJ PLUG
  - 7 GROUT FILLET IN BOTTOM OF CHAMBER. SLOPE MIN 2% TO INV. OF OUTLET PIPE. TYPICAL FOR EACH CHAMBER.

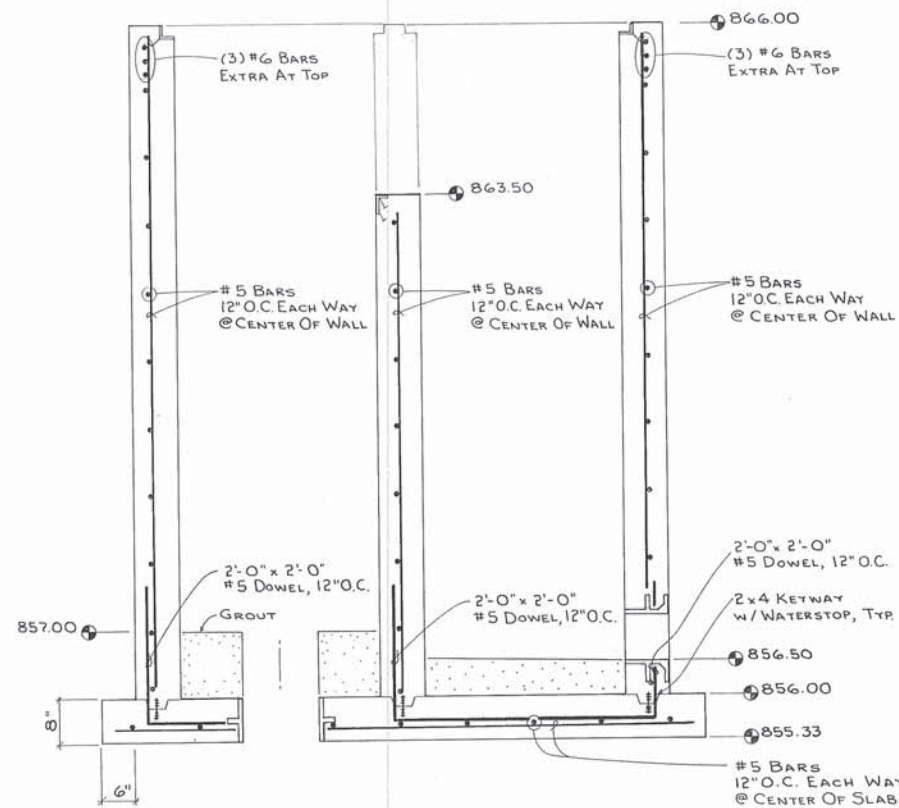


Revisions: 2/2/90 3/7/90		<b>PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO</b>	
Job No. 29251			
<b>FLOW SPLITTING CHAMBER</b>		Date: 11/15/89	
Drwn. G.B. Date: 11/15/89	Chd. E.D.T. Date: 11/15/89	<b>FEHR-GRAHAM &amp; ASSOCIATES</b> ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 61032-5098 815/235-7643	

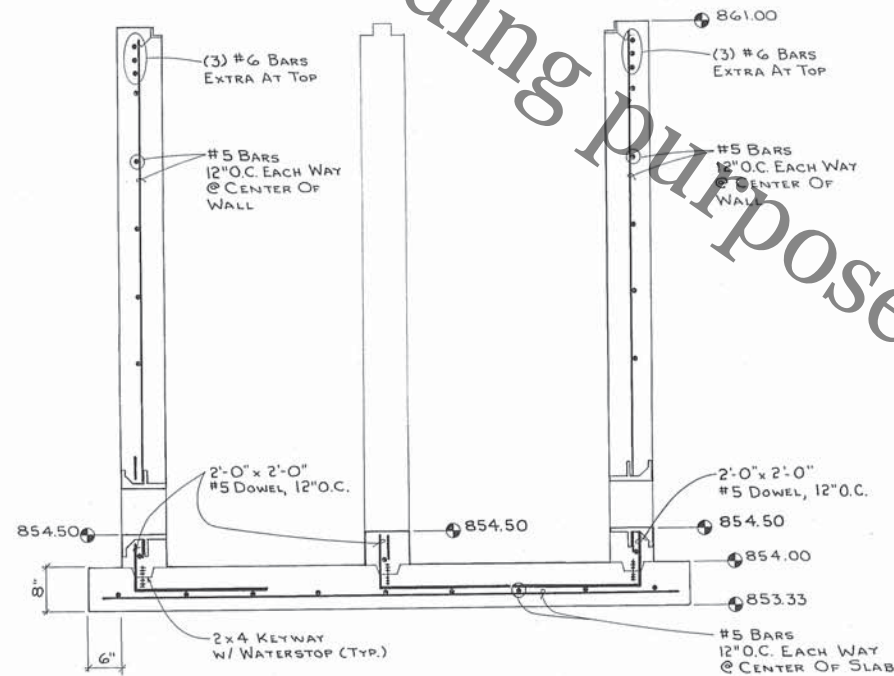




PARTIAL SECTION C-C  
SCALE: 3/4" = 1'-0"



SECTION A-A  
SCALE: 3/4" = 1'-0"



SECTION B-B  
SCALE: 3/4" = 1'-0"

Revisions: 12/12/89 3/7/90  Drawn: G.B. Date: 11/15/89	<table border="1"> <tr> <td colspan="2" data-bbox="2529 1685 3058 1953">           PROPOSED IMPROVEMENTS TO            WASTE TREATMENT FACILITY            FOR            VILLAGE OF WINNEBAGO            FLOW SPLITTING CHAMBER            STRUCTURE         </td></tr> <tr> <td data-bbox="2529 1882 2623 1953">           FEHR-GRAHAM &amp; ASSOCIATES            ENGINEERING AND SCIENCE CONSULTANTS            660 W. STEPHENSON ST., FREEPORT, ILLINOIS            815/235-7643         </td><td data-bbox="2623 1882 3058 1953">           Job No.            29251            Sheet No.            5-10 of 53         </td></tr> </table>	PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO FLOW SPLITTING CHAMBER STRUCTURE		FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No. 29251 Sheet No. 5-10 of 53
PROPOSED IMPROVEMENTS TO WASTE TREATMENT FACILITY FOR VILLAGE OF WINNEBAGO FLOW SPLITTING CHAMBER STRUCTURE					
FEHR-GRAHAM & ASSOCIATES ENGINEERING AND SCIENCE CONSULTANTS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No. 29251 Sheet No. 5-10 of 53				

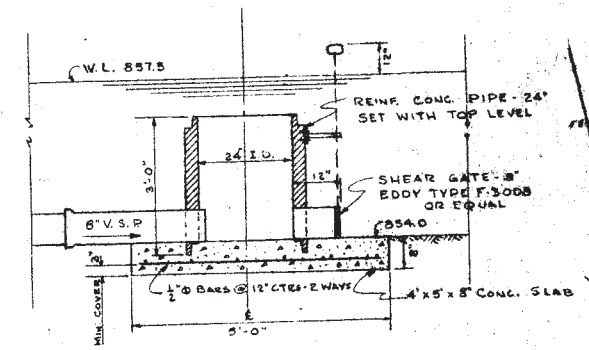


# DEMOLITION ITEM #9

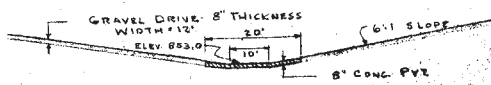
## EFFLUENT WEIR STRUCTURE



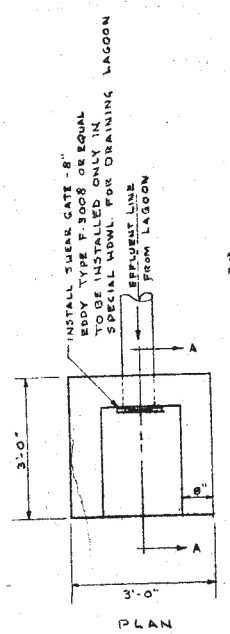




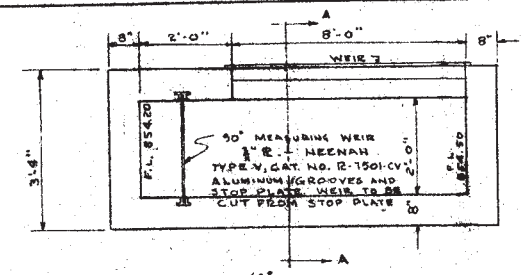
DETAIL "A"  
SCALE: 1" = 1'-0"



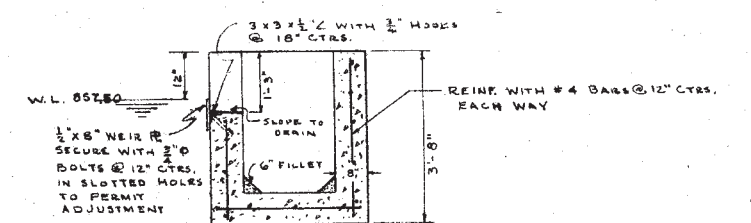
DETAIL "B"  
SCALE: 1" = 2'-0"



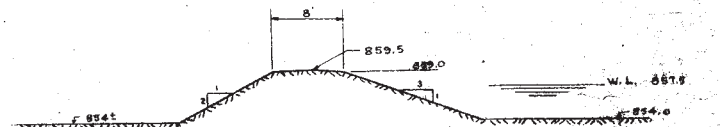
DETAIL OF OUTLET HEADWALL  
SCALE: 1" = 1'-0"



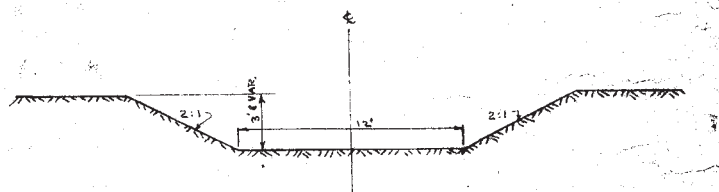
DETAIL OF LAGOON EFFLUENT CHANNEL  
SCALE: 1" = 1'-0"



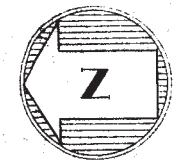
SECTION A-A  
SCALE: 1" = 10'



SECTION B-B  
SCALE: 1" = 10'

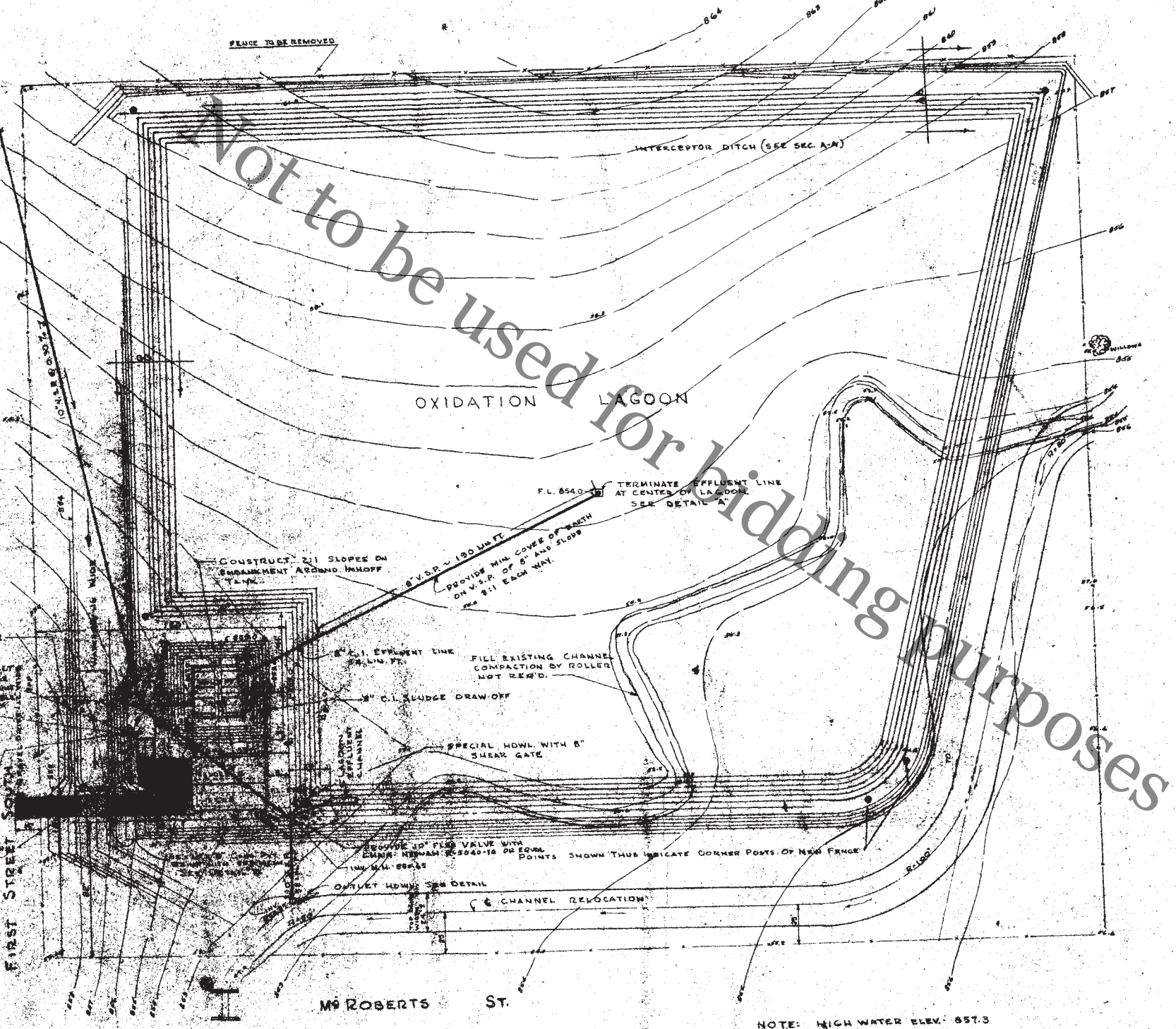


DETAIL OF CHANNEL RELOCATION  
SCALE: 1" = 5'



SCALE: 1" = 40'  
CONTOUR INTERVAL: 1'

INDICATES EXISTING GROUND ELEV.



M. ROBERTS ST.

NOTE: HIGH WATER ELEV. 857.3

5 M. N.E. COR. HDWL. ON BRIDGE  
ELEV. 855.71

REVISED  
JUNE 18, 1958

WINNEBAGO, ILLINOIS SEWAGE TREATMENT PLANT	PLANT SITE & OXIDATION LAGOON DE JONG, MIDDAGH & ASSOCIATES 509 EMPIRE BLDG. ROCKFORD, ILLINOIS APRIL 1956
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## DEMOLITION ITEM #10

TEMP. SHED / HIGH FLOW PS DRIVES &  
CONTROL EQUIPMENT.



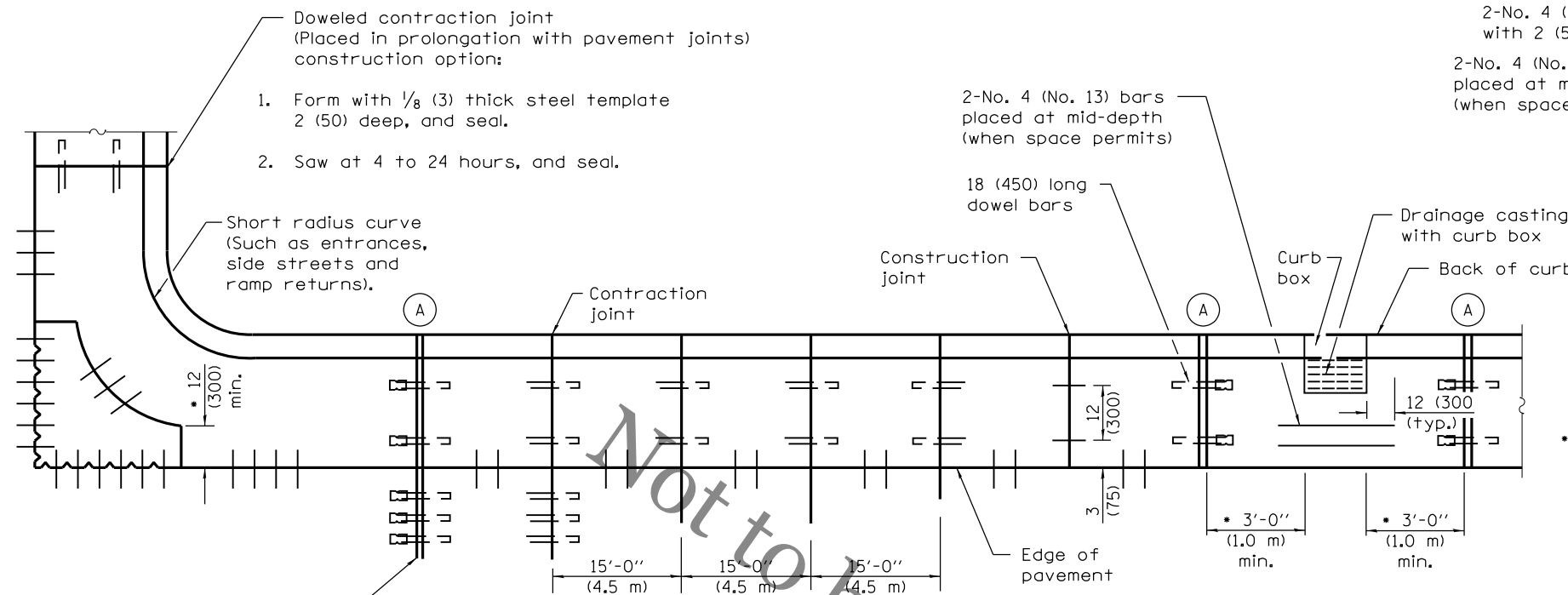


Not to be used for bidding purposes

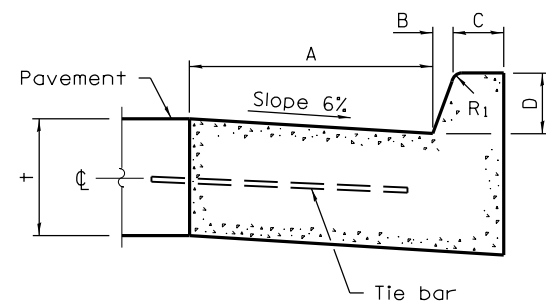
**Section IV**

**IDOT Standard 606001-06**

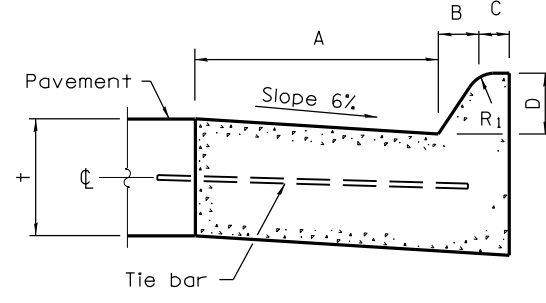
**Combination Curb & Gutter**



**PLAN**  
**ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE**



**BARRIER CURB**

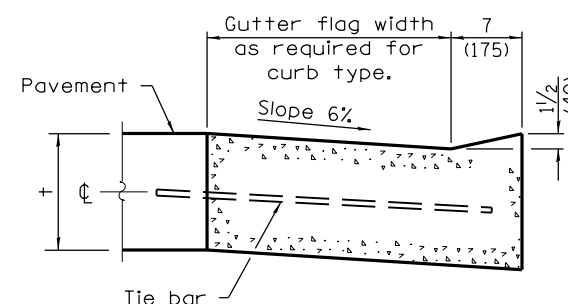


**MOUNTABLE CURB**

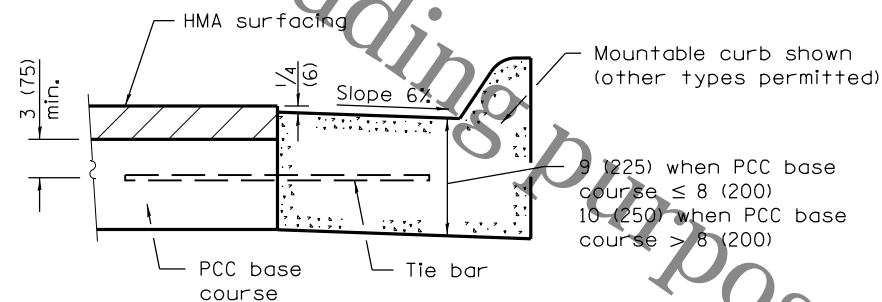
TYPE	A	B	C	D	R <sub>1</sub>
B-6.06 *	6	1	6	6	1
(B-15.15)	(150)	(25)	(150)	(150)	(25)
B-6.12	12	1	6	6	1
(B-15.3)	(300)	(25)	(150)	(150)	(25)
B-6.18	18	1	6	6	1
(B-15.45)	(450)	(25)	(150)	(150)	(25)
B-6.24	24	1	6	6	1
(B-15.60)	(600)	(25)	(150)	(150)	(25)
B-9.12	12	2	5	9	1
(B-22.30)	(300)	(50)	(125)	(225)	(25)
B-9.18	18	2	5	9	1
(B-22.45)	(450)	(50)	(125)	(225)	(25)
B-9.24	24	2	5	9	1
(B-22.60)	(600)	(50)	(125)	(225)	(25)

\* For corner islands only.

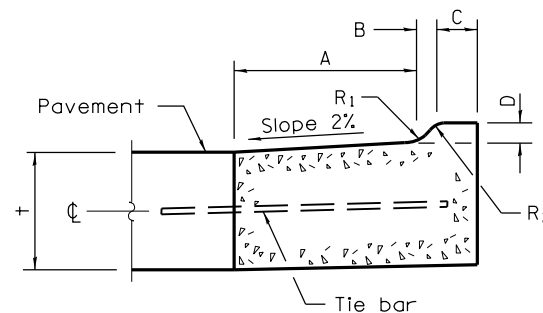
TYPE	A	B	C	D	R <sub>1</sub>	R <sub>2</sub>
M-2.06	6	2	4	2	3	2
(M-5.15)	(150)	(50)	(100)	(50)	(75)	(50)
M-2.12	12	2	4	2	3	2
(M-5.30)	(300)	(50)	(100)	(50)	(75)	(50)
M-4.06	6	4	3	4	3	NA
(M-10.15)	(150)	(100)	(75)	(100)	(75)	NA
M-4.12	12	4	3	4	3	NA
(M-10.30)	(300)	(100)	(75)	(100)	(75)	NA
M-4.18	18	4	3	4	3	NA
(M-10.45)	(450)	(100)	(75)	(100)	(75)	NA
M-4.24	24	4	3	4	3	NA
(M-10.60)	(600)	(100)	(75)	(100)	(75)	NA
M-6.06	6	6	2	6	2	NA
(M-15.15)	(150)	(150)	(50)	(150)	(50)	NA
M-6.12	12	6	2	6	2	NA
(M-15.30)	(300)	(150)	(50)	(150)	(50)	NA
M-6.18	18	6	2	6	2	NA
(M-15.45)	(450)	(150)	(50)	(150)	(50)	NA
M-6.24	24	6	2	6	2	NA
(M-15.60)	(600)	(150)	(50)	(150)	(50)	NA



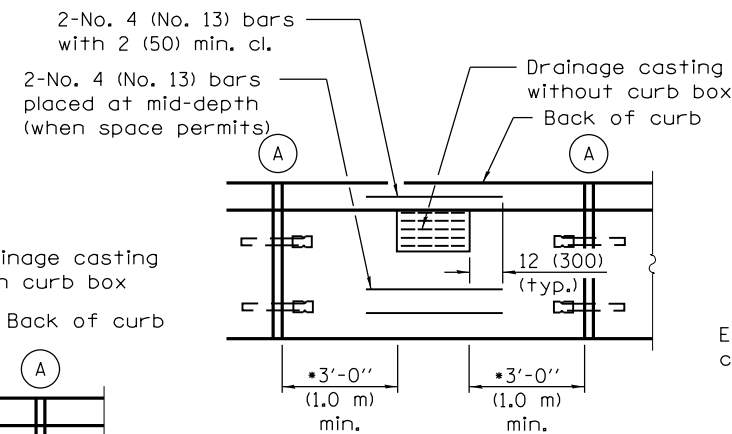
**DEPRESSED CURB (TYPICAL)**



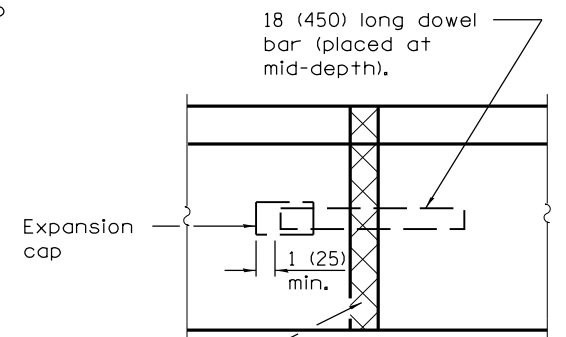
**ADJACENT TO PCC BASE COURSE  
WITH HMA SURFACING**



**M-2.06 (M-5.15) and M-2.12 (M-5.30)**

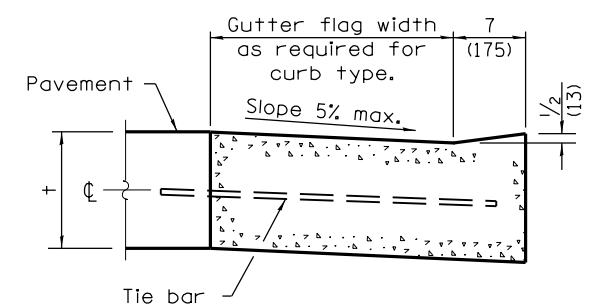


\* This dimension shall be adjusted to align with joint on the adjacent pavement



**DETAIL A**  
**EXPANSION JOINT**

Full depth & width 1 (25) - thick (min.) preformed expansion joint filler.



**DEPRESSED CURB ADJACENT  
TO CURB RAMP ACCESSIBLE  
TO THE DISABLED**

### GENERAL NOTES

The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or 6% when subbase is omitted.

t = Thickness of pavement.

Longitudinal joint tie bars shall be No. 6 (No. 19) at 24 (600) centers in accordance with details for longitudinal construction joint shown on Standard 420001.

A minimum clearance of 2 (50) between the end of the tie bar and the back of the curb shall be maintained.

The dowel bars shown in contraction joints will only be required for monolithic construction.

See Standard 606301 for details of corner islands.

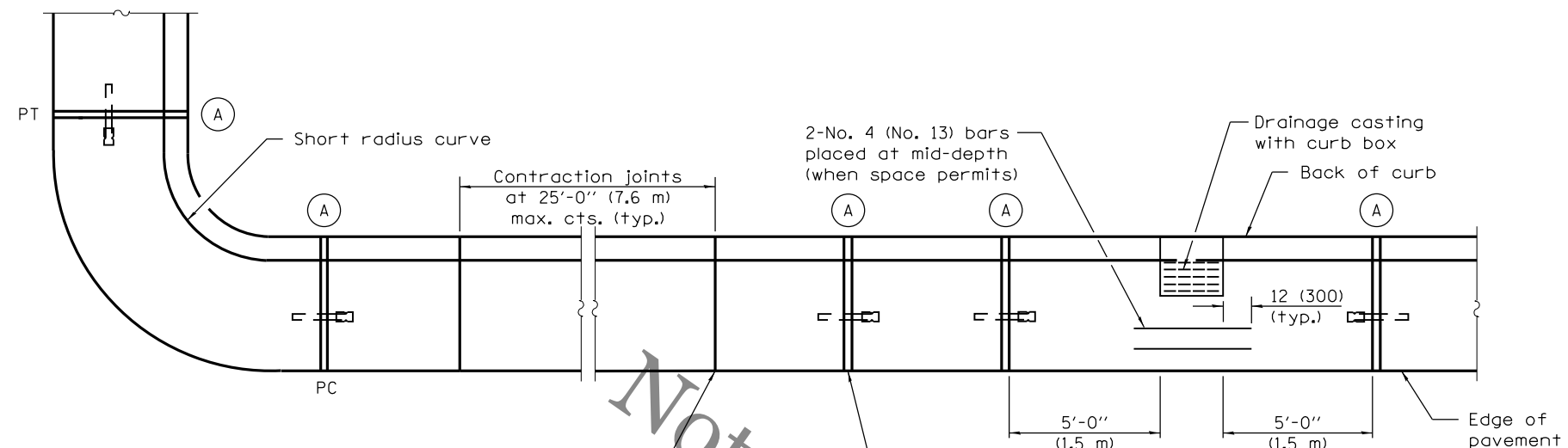
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-15	Added B-6.06 (B-15.15) barrier curb and gutter to table (corner islands only).
1-1-13	Added general note regarding requirement for dowel bars.

## CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 1 of 2)

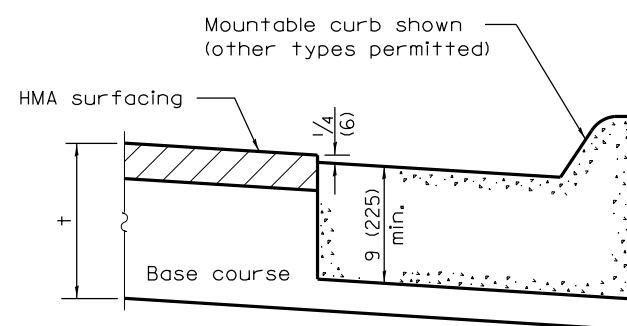
**STANDARD 606001-06**



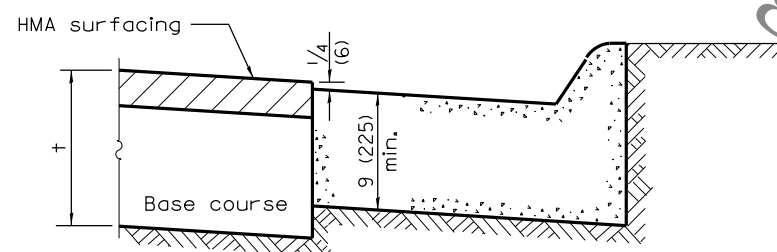
Undoweled contraction joint (typ.) construction options:

1. Form with  $\frac{1}{8}$  (3) thick steel template 2 (50) deep, and seal.
2. Saw 2 (50) deep at 4 to 24 hours, and seal.
3. Insert  $\frac{3}{4}$  (20) thick preformed joint filler full depth and width.

### PLAN

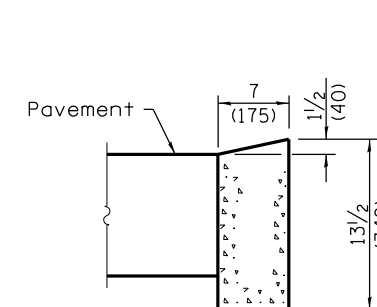


### ON DISTURBED SUBGRADE

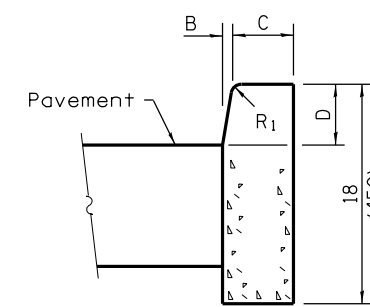


### ON UNDISTURBED SUBGRADE

### ADJACENT TO FLEXIBLE PAVEMENT

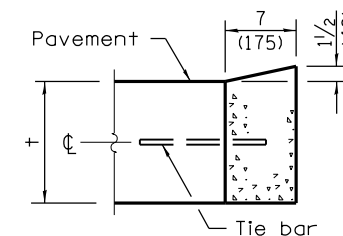


### DEPRESSED CURB

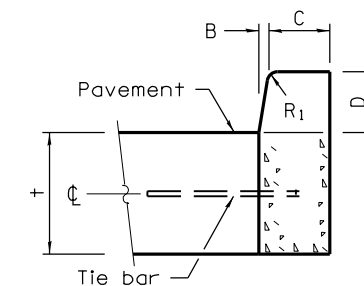


### BARRIER CURB

### ADJACENT TO FLEXIBLE PAVEMENT



### DEPRESSED CURB



### BARRIER CURB

### ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

### CONCRETE CURB TYPE B

## CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 2 of 2)

STANDARD 606001-06

## **Section V**

# **General Provisions & Technical Specifications for Sanitary Sewer Construction**

(Separate document incorporated by reference)