RFQ 27-D-00003 43rd St. Pump Station Force Main Replacement Design

Public Announcement in Compliance With Requirements of Section 287.055 Florida Statutes (Consultants' Competitive Negotiation Act) Applicable Law, Executive Orders, Rules, Regulations, and The City's Standard Procedures. Notice of Intent to Award Shall be posted, if at all, on the City's Website accessible by utilizing the website link: www.tampagov.net/contract-administration/programs/architectural-engineering-construction-and-related-rfqs .

The City of Tampa Wastewater Department desires to obtain Design Services to complete the replacement of the 43rd St. Pump Station Force Main.

Services will include, but not limited to, alternate route evaluation, survey, geotechnical services, final design, specifications, cost estimating, identifying subcontractor opportunities, Subsurface Utility Engineering (SUE), utility notification and coordination, easement acquisition as needed, permitting, public outreach, limited bid assistance, project management, limited construction engineering and inspection (CEI) services, as-built preparation and all related work required for a complete project.

Background: The 43rd St. Pump Station Force Main was placed into service in 1983. The force main conveys wastewater from the 43rd St Pump Station located at 6524 N 43rd St to the Sulphur Springs PS 42" force main interconnection at Emma St and 25th St. The original pipeline consists of 16,423 LF of 24" Prestressed Cylinder Concrete (PCCP) pipe.

The scope of the design will include, but not limited to:

1. Alternative route evaluation for the selection of the preferred location of the new force main
2. Complete design of selected alternative route
3. Complete permitting through all local, state, and federal agencies
4. Assistance with easement acquisition including survey (if needed)
5. Assistance with construction services including shop drawing reviews, responding to RFI's, inspections
6. Preparation of As-builts and permit close-outs

Design Cost Estimate is $3,000,000 - $4,000,000

Reference Files are attached. These as-built drawing files come from uncontrolled sources and do not conform to WCAG 2.1 at level AA. Individuals with disabilities seeking assistance with the individual project plans or specifications should e-mail ContractAdministration@tampagov.net.

Questions may be directed to Jim Greiner, P.E., Contract Administration, City of Tampa, (813) 274-8598, or E-Mail jim.greiner@tampagov.net.

A pre-submission conference will be conducted at 3 PM November 16, 2026 in the City Council Chambers, third floor Old City Hall, 315 E. Kennedy Blvd. Tampa, FL 33602

Attendance is not required.

In accordance with the Americans with Disabilities Act ("ADA") and Section 286.26, Florida Statutes, persons with disabilities needing a reasonable accommodation to participate in this public hearing or meeting should contact the City of Tampa's ADA Coordinator at least 48 hours prior to the proceeding. The ADA Coordinator may be contacted via phone at 813-274-3964, email at TampaADA@tampagov.net, or by submitting an ADA - Accommodations Request form available online at tampagov.net/ADARequest.

An individual or entity ("Firm") responding to this RFQ must provide evidence of any required licenses, certificates, or registrations with its submission or within 10 days thereof in order to be considered. The City shall own all ideas, documents, plans, and materials developed as a result of this solicitation and Firm is informed same shall be subject to reuse in accordance with Section 287.055(10), Florida Statutes. Firm (i) confirms it has read and is familiar with Section 119.071(3), Florida Statutes regarding certain building plans, blueprints, schematic drawings, which depict the internal layout and structural elements of a building, facility, or other structure owned or operated by the City or other agency that are per said section exempt from Section 119.07(1), Florida Statutes and Section 24(a), Art. I of the Florida Constitution ("Exempt Plans") and (ii) agrees Firm shall remain in compliance with same, including maintaining the exempt status of such Exempt Plans for so long as they are held by Firm or otherwise in its possession. Pursuant to Section 2-282, City of Tampa Code, during the solicitation period, including any protest or appeal,

NO CONTACT with City officers or employees is permitted from any proposer, other than as specifically stated in this solicitation. The City may cancel, withdraw, or modify this RFQ at any time and reserves the right to reject any or all responses and to waive irregularities, formalities, and informalities as it determines in the City's best interest. The City of Tampa will not request documentation of or consider a bidder's (proposer's) social, political, or ideological interests when determining if the bidder (proposer) is a responsible vendor and will not give preference to a proposer based on the proposer's social, political, or ideological interests.

Firms should consider applicable concepts in the City's Climate Action And Equity Plan as posted at https://www.tampa.gov/document/climate-action-and-equity-plan-122846 .

In order to apply for 5 “Ban-The-Box” bonus points, a firm must provide the documentation required pursuant to the “Ban-The-Box” ordinance listed at City of Tampa Municode,

Firms desiring to provide these services to the City must submit a single electronic file in searchable PDF format, Smaller than 10MB, that includes the attached RFQ Transmittal Memorandum completed as appropriate, a Letter of Interest addressed to Brad L, Baird, P.E., Chairman, and referring to this RFQ by number, together with a Statement of Qualifications and any supplemental material allowing evaluation for further consideration (short-listing) based upon the following criteria/point system: Successful Comparable Project Experience, (35); Urban Wastewater Pipeline Route Experience, (35); Workload and Availability, (5 pts); Past Performance/Low amount of City Work, (5 pts); Standard Form SF330, (5 pts); “Ban-The-Box”, (5pts); Planned SLBE Solicitation & Utilization, Form DMI 10, 20, & 50, (15 pts).

The PDF file must be **E-Mailed to ContractAdministration@tampagov.net BEFORE 2 P.M., December 3, 2026.**

As a courtesy, the City will endeavor to provide an email acknowledgement usually sent within a few days after submission receipt (submissions received on the day of the deadline may not be acknowledged before the deadline or at all). It is Firm’s responsibility to confirm its submission (PDF file) has been received.

RFQ TRANSMITTAL MEMORANDUM FOR A SUBMITTAL TO THE CITY OF TAMPA

TRANSMITTAL DATE: _____

RFQ NO. & TITLE: 27-D-00003 43rd St. Pump Station Force Main Replacement Design

TO: Brad L. Baird, P. E., Chairman Selection & Certification Committee (CCNA) c/o Contract Administration Department via ContractAdministration@tampagov.net 306 East Jackson Street, 4th Floor North, Tampa, Florida 33602

SUBMITTER ("Firm") NAME:

FEDERAL TAX ID#: _____

FIRM TYPE: (_)Corporation (_)Limited Liability Company (_)Individual/Sole Proprietor (_)Joint Venture (JV) (_)Partnership (PN) (_)Other:

FIRM CONTACT NAME:

EMAIL:

PHONE:

CERTIFICATIONS:

Firm is licensed, permitted, and certified as required to do business in Florida: [_]Yes [_] No

License/registration/certification number(s):

Per §287.133, Fla. Stat., individuals or entities (including those meeting the §287.133, Fla. Stat. definition of "affiliate") placed on the convicted vendor list ("List") following a conviction for public entity crimes may not submit a bid, proposal, or reply ("Response") on a contract to provide any goods or services to a public entity, may not submit a Response on a contract with a public entity for the repair or construction of a public building or public work, may not submit a Response for leases of real property to a public entity, and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in

§287.017, Fla. Stat. for CATEGORY TWO for a period of 36 months from the date of placement on the List. Neither Firm nor its affiliates have been placed on the List: [_] Yes [_] No

Pursuant to Tampa Code Section 2-284; Bidder's Criminal History Screening Practices("Ban-The-Box"), the Firm hereby;

[_] declines incentive points and attaches no documentation [_] applies for incentive points and attaches all the required documentation.

Firm shall comply with all applicable governmental rules & regulations, including the City's Ethics Code (Sec. 2- 522, Tampa Code). The City's Charter & Ethics Code prohibit any City employee from receiving any substantial benefit or profit out of any award or obligation entered into with the City, or from having any direct or indirect financial interest in effecting any such award or obligation. If Firm is successful, it shall ensure no City employee receives any such benefit or interest as a result of such award (See Sec.2-514(d), Tampa Code): [_] Yes [_] No

Firm is not in arrears and is not in default upon any obligation to the City of Tampa: [_]Yes [_]No

Firm does not use coercion for labor or services as defined in Section 787.06, F.S.

Firm agrees that if the City of Tampa determines Firm has participated in any collusive, deceptive, or fraudulent practices with regard to this submittal, in addition to any other remedy it may exercise, the City will have the right to debar Firm and deem invalid any contract let under such circumstances: [_] Yes [_] No

Data or material Firm asserts to be exempted from public disclosure under Chapter 119, Fla. Stat., is submitted in a separate, single electronic searchable PDF file labeled with the above RFQ number and the phrase “Confidential Material”, which identifies the data/material to be protected, states the reasons the date/material is exempt from public disclosure, and the specific Florida statute allowing such exemption (if “No” or otherwise, then Firm waives any possible or claimed exemption upon submission, effective at opening): [_] Yes [_] No

FAILURE TO COMPLETE THE ABOVE MAY RESULT IN FIRM’S SUBMITTAL BEING DECLARED NON-RESPONSIVE

Authorized Signature :

Printed Name:

Title:

(attach proof of authority)

Points Pursuant to Designated Industry Category:_____ ***DMI-71 FORM*** **(Refer to DMI 50 Form - Good Faith Efforts (GFE) Outreach)**		
	Evaluation Criteria	**Point Values**
A.	SLBE participating as the Prime Contractor (City of Tampa Certified Only) with meaningful subcontractor/subconsultant participation of City Certified SLBE firms.	5-15
*B.	Prime Contractor with meaningful subcontractor/subconsultant of City Certified SLBE firms.	0 - 10
Note: The maximum points available for SLBE participation will not exceed fifteen (15) points. In addition, evaluation points will be awarded for To-Be-Determined (TBD) participation.		

Points are determined as follows (Requires DMI 50 Form - GFE):

A. Five to Fifteen (5-15) rating points **may** be awarded when the Proposer is a City of Tampa Certified SLBE firm and utilizes SLBE certified firm(s) as sub-contractors/ sub-consultants and assigned to perform meaningful segments of the contractual services detailed herein and documented on the enclosed DMI 10 & 20 Forms.

B. Zero to Ten (0-10) rating points **may** be awarded when the proposer is not a City of Tampa certified SLBE prime contractor but utilizes SLBE certified firm(s) as sub-contractors/ sub-consultants and is assigned to perform meaningful segments of the contractual services detailed herein and documented on the enclosed DMI 10 & 20 Forms.

*A maximum of three (3) "discretionary" rating points **may** be awarded when the Proposer provides SLBE participation from an external agency recognized by the City of Tampa. **In addition, evaluation points may be awarded for To-Be-Determined (TBD) participation.**

The maximum number of points available for SLBE participation will not exceed fifteen (15) points.

Equal Business Opportunity Evaluation Weighted Points: CCNA Proposal Guidelines

Under CCNA solicitations, proposers must submit to preconstruction Good Faith Efforts (GFE) requirements covering the inclusion of City of Tampa-certified SLBE firms. Such inclusion shall be clearly addressed and documented utilizing DMI 10, 20, and 50 Forms. Proof of certification shall include copies of current certification certificates. This applies to ALL Phase 1 preconstruction design services.

Points awarded during the shortlist selection process will be more heavily weighed predominantly on the design side (this does not preclude identification of phase 2 projections of construction participation that follow in the future, i.e., GMPs). In order to ensure the maximum points, a proposer must **clearly identify and quantify** its planned participation without ambiguity. Simply marking "To Be Determined" (TBD) will not satisfy this requirement and may result in significantly lower ratings. Finally, additional favorable consideration will be granted to the firm(s) that, beyond all others, provide the highest *relevant* and most binding participation.

Additional Evaluation Information:

The evaluation includes, but is not limited to, the following criteria:

- SLBE subcontractors listed to be utilized (DMI Form 20)
- Percentage of proposal/scope committed to SLBE subcontracting.
- The collective factors in determining the total points awarded will be based on the overall weight of evidence in the proposal that specified the participation.
- Subcontractors are utilized for meaningful tasks, which are viewed as related to the core scope of work.

In all cases, the Proposer and/or subcontractor(s) must be SLBE certified prior to the opening date and time of the RFP to be eligible to earn SLBE rating points. The City of Tampa's Office of Equal Business Opportunity will evaluate the SLBE participation evaluation process. The Successful Proposer will be required to execute the DMI 40 Form (Letter of Intent-LOI) with their subcontractors/sub-consultants prior to award.

Failure to Complete, Sign and Submit Forms 10, 20, & 50 MAY render the Bid or Proposal Non-Responsive

City of Tampa – Schedule of All Solicited Sub-(Contractors/Consultants/Suppliers)

(DMI 10 Form)

Contract No.:_____ Contract Name:_____

Company Name:_____ Address:_____

Federal ID:_____ Phone:_____ Fax:_____ Email:_____

Check applicable box(es). Detailed Instructions for completing this form are on page 2 of 4.

☐ **No Firms were contacted or solicited for this contract.**

☐ **No Firms were contacted because:**_____

☐ **See attached list of additional Firms solicited and all supplemental information (List must comply with this form)**

Note: Form DMI-10 must list ALL subcontractors solicited

NIGP Code Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

S = SLBE O = Neither Federal ID	Company Name Address Phone, Fax, Email	Trade or Services NIGP Code (listed above)	Contact Method L=Letter F=Fax E=Email P=Phone	Quote or Response Received Y/N

Failure to Complete, Sign and Submit this form with your Bid or Proposal Shall render the Bid Non-Responsive (Do Not Modify This Form)

It is hereby certified that the information provided is an accurate and true account of contacts and solicitations for sub–contracting opportunities on this contract.

Signed:_____ Name/Title:_____ Date:_____

Failure to Complete, Sign and Submit Forms 10, 20, & 50 MAY render the Bid or Proposal Non-Responsive

Forms must be included with Bid / Proposal

Instructions for completing The Sub- (Contractor's/Consultants/ Suppliers) Solicited Form
(DMI 10 Form)

This form must be submitted with all bids or proposals. **All** subcontractors (regardless of ownership or size) solicited and subcontractors from whom unsolicited quotations were received must be included in this form. The instructions that follow correspond to the headings on the form required to be completed. Note: Ability or desire to perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

Contract No. This is the number assigned by the City of Tampa for the proposal.

- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba), if applicable.
- **Address.** The physical address of your business.
- **Federal ID.** FIN. A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact the business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Firms were contacted or solicited for this contract.** Checking the box indicates that a pre-determined Subcontract Goal or Participation Plan Requirement was not set by the city, resulting in your business not using subcontractors and will self-perform all work. If, during the performance of the contract, you employ subcontractors, the City must pre-approve subcontractors. Use of the "Sub-(Contractors/Consultants/Suppliers) Payments" form (DMI 30 Form) must be submitted with every pay application and invoice. Note: Certified SLBE firms bidding as Primes are not exempt from outreach and solicitation of subcontractors.
- **No Firms were contacted because.** Provide a brief explanation of why no firms were contacted or solicited.
- **See attached documents.** Check the box if, after you have completed the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the form. All DMI data not submitted on the DMI 10 Form must be in the same format and include all the requested data from the DMI 10 Form.

The following instructions are for the information of all subcontractors solicited.

- **"S" = SLBE.** Enter "**S**" for firms Certified by the City as Small Local Business Enterprises; **"O" = non-certified others**.
- **Federal ID.** FIN. A number assigned to a business for tax reporting purposes. This information is critical in the proper identification and payment of the contractor/subcontractor.
- **Company Name, Address, Phone & Fax**. Provide company information for verification of payments.
- **Trade, Services, or Materials** indicate the trade, service, or materials provided by the subcontractor. NIGP codes, aka "National Institute of Governmental Purchasing," are listed in the top section of the document.
- **Contact Method L=letter, F=fax, E=Email, P=Phone.** Indicate with a letter the method(s) of soliciting for bids.
- Q**uote or Resp. (response) Rec'd (received) Y/N**. Indicate "Y" Yes if you received a quotation or if you received a response to your solicitation. Indicate "N" No if you received no response to your solicitation from the subcontractor. Must keep records: log, ledger, documentation, etc. that can validate/verify.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Office of Equal Business Opportunity at (813) 274-5522

Failure to Complete, Sign, and Submit Forms 10, 20, & 50 MAY render the Bid or Proposal Non-Responsive

City of Tampa – Schedule of All To-Be-Utilized Sub-(Contractors/Consultants/Suppliers) *(DMI 20 Form)*

Contract No.:_____ Contract Name:_____

Company Name:_____Address:_____

Federal ID:_____ Phone:_____ Fax:_____ Email:_____

Check applicable box(es). Detailed Instructions for completing this form are on page 4 of 4.

☐ **See attached list of additional Firms Utilized and all supplemental information (List must comply with this form)**

Note: Form DMI-20 must list ALL subcontractors To-Be-Utilized.

☐ **No Subcontracting/consulting (of any kind) will be performed on this contract**.

☐ **No Firms are listed to be utilized because:**_____

NIGP Code General Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

Enter "S" for firms Certified as Small Local Business Enterprises: "O" for Other Non-Certified

S = SLBE O =Neither Federal ID	Company Name Address Phone, Fax, Email	Trade, Services or Materials NIGP Code Listed above	$ Amount of Quote. Letter of Intent (LOI) if available	Percent of Scope or Contract %

Failure to Complete, Sign and Submit this form with your Bid or Proposal Shall render the Bid Non-Responsive. (Do Not Modify This Form)

Total ALL Subcontract / Supplier Utilization $_____

Total SLBE Utilization $ _____

Percent SLBE Utilization of Total Bid/Proposal Amt. _____%

It is hereby certified that the following information is a true and accurate account of utilization for sub-contracting opportunities on this Contract.

Signed:_____ Name/Title:_____ Date:_____

Failure to Complete, Sign and Submit Forms 10, 20, & 50 MAY render the Bid or Proposal Non-Responsive Forms must be included with Bid / Proposal

Instructions for completing The Sub- (Contractor's/Consultants/ Suppliers) to be Utilized Form (DMI 20 Form)

This form must be submitted with all bids or proposals. All subcontractors (regardless of ownership or size) projected to be utilized must be included in this form.

- **Contract No.** This is the number assigned by the City of Tampa for the proposal.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba) if applicable.
- **Address.** The physical address of your business.
- **Federal ID.** FIN. A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact the business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Subcontracting/consulting (of any kind) will be performed on this contract.** Checking the box indicates your business will not use subcontractors when no Subcontract Goal or Participation Plan Requirement was set by the city but will self-perform all work. When subcontractors are utilized during the performance of the contract, the "Sub-(Contractors/Consultants/Suppliers) Payments" form (DMI 30 Form) must be submitted with every pay application and invoice. Note: Certified SLBE firms bidding as Primes are not exempt from outreach and solicitation of subcontractors, including completion and submission of Form-10 and Form-20.
- **No Firms listed To-Be-Utilized.** Check box: provide a brief explanation why no firms were retained when a goal or participation plan requirement was set on the contract. **Note: Mandatory compliance with Good Faith Effort outreach (GFECP) requirements applies (DMI 50 Form), and supporting documentation must accompany the bid.**
- **See attached documents.** Check the box if, after completing the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the scope/value/percent utilization of subcontractors. Reproduce copies of DMI-20 and attach. All data not submitted on duplicate forms must be in the same format and content as specified in these instructions.

The following instructions are for the information of all subcontractors To Be Utilized.

- **Federal ID.** FIN. A number assigned to a business for tax reporting purposes. This information is critical in the proper identification of the subcontractor.
- **"S" = SLBE,** enter "**S**" for firms Certified by the City as Small Local Business Enterprises; **"O" = non-certified others**.
- **Company Name, Address, Phone & Fax**. Provide company information for verification of payments.
- **Trade, Services, or Materials (NIGP code if known).** Indicate the trade, service, or material provided by the subcontractor. Abbreviated list of NIGP is available at http:/www.tampagov.net/DMI "Information Resources".
- **Amount of Quote, Letters of Intent** (required for SLBEs).
- **Percent of Work/Contract.** Indicate the percentage of the total contract price the subcontract(s) represent. For CCNA only (i.e., Consultant A/E Services), you must indicate subcontracts as a percentage of the total scope/contract.
- **Total Subcontract/Supplier Utilization.** – Provide the total dollar amount of all subcontractors/suppliers projected to be used for the contract. (Dollar amounts may be optional in CCNA depending on solicitation format).
- **Total SLBE Utilization.** Provide the total dollar amount for all projected SLBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Percent SLBE Utilization.** Total amount allocated to SLBEs divided by the total bid/proposal amount.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Office of Equal Business Opportunity at (813) 274-5522.

Failure to Complete, Sign, and Submit all Forms 10,20, & 50 MAY render the Bid or Proposal Non-Responsive

Good Faith Effort Compliance Plan (GFECP) Guidelines

for Small Local Business Enterprise Participation
City of Tampa - Equal Business Opportunity Program
(DMI 50 Form – See detailed instructions on page 3 of 3)

Contract Name_____ **Bid Date** _____

Bidder/Proposer_____

Signature_____ **Date**_____

Name_____ **Title** _____

The Compliance Plan with attachments is a true account of Good Faith Efforts (GFE) made to achieve the participation goals as specified for Small Local Business Enterprises (SLBE) on the referenced contract:

☐ **SLBE participation Goal is Not Specified for this Solicitation however participation is aspirational and GFECP is required.**

☐ **SLBE participation Goal is Met or Exceeded (refer to Goal-Set DMI-90 Form).**

☐ **SLBE participation Goal is Not Fully Achieved (refer to Goal-Set DMI-90 Form).**

For each checkbox above Bidders/Proposers shall submit DMI Forms 10 and 20 which accurately report all subcontractors solicited and all subcontractors to-be-utilized. The following list is an overview of the required baseline GFECP action steps for all bids/proposals. Furthermore, it is understood that these GFECP requirements are weighted in the compliance evaluation based on the veracity and demonstrable degree of documentation provided with the bid/proposal:

(Check applicable boxes below - Must enclose supporting documents accordingly with Qualifying Remarks)

(1) Solicited through reasonable and available means the interest of SLBEs that have the capability to perform the work of the contract. The Bidder or Proposer must solicit this interest within enough time to allow the SLBEs to respond. The Bidder or Proposer must take appropriate steps to follow up initial solicitations with interested SLBEs. □ **See DMI report forms for subcontractors solicited**. □ **See enclosed supplemental data on solicitation efforts**.

□ **Qualifying Remarks**

(2) Provided interested SLBEs with adequate, specific scope information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the requested scope identified by bidder/proposer for the solicitation**.** □ **See enclosed actual solicitations used**.
□ **Qualifying Remarks**

(3) Negotiated in good faith with interested SLBEs that have submitted bids (e.g. adjusted quantities or scale). Documentation of negotiation must include the names, addresses, and telephone numbers of SLBEs that were solicited; the date of each such solicitation; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why agreements could not be reached with SLBEs to perform the work. Additional costs involved in soliciting and using subcontractors is not a sufficient reason for a bidder/proposer's failure to meet goals or achieve participation, as long as such costs are reasonable. Bidders are not required to accept excessive quotes in order to meet the goal.
□ **DMI Utilized Forms for sub-(contractor/consultant) reflect genuine negotiations** □ **This project is an RFQ/RFP in nature and negotiationsare limited to clarifications of scope/percentages, specifications, qualifications and subs fee schedules.**
□ **See enclosed documentation**.
□ **Qualifying Remarks**

(4) Not rejecting SLBEs as being unqualified without justification based on a thorough investigation of their capabilities. The SLBEs standing within its industry, membership in specific groups, organizations / associations and political or social affiliations are not legitimate causes for rejecting or not soliciting bids to meet the goals.
□ **Not applicable**. □ **See attached justification for rejection of a subcontractor's bid or proposal**. □ **Qualifying Remarks**

(5) Made scope(s) of work available to SLBE subcontractors and suppliers; and, segmented portions of the work or material consistent with the available SLBE subcontractors and suppliers, to facilitate meeting the goal. □ **In addition, Sub-Contractors could bid on their own choice of work or trade without restriction to a pre-determined portion**. □ **See enclosed comments.**□ **Qualifying Remarks**

(6) Made good faith efforts, despite the ability or desire of Bidder/Proposer to perform the sub-tasks of a contract with its

own forces/organization. A Bidder/Proposer who desires to self-perform the sub-tasks of a contract must demonstrate good faith efforts if the goal has not been met**.** □ **Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.** □ **Qualifying Remarks w/Documents**

(7) Segmented the portions of the work to be performed by SLBEs in order to increase the likelihood that the goals will be met. This includes, where appropriate, breaking out contract work items into economically feasible units (quantities/scale) to facilitate SLBE participation, even when the Bidder/Proposer might otherwise prefer to perform these work items with its own forces**.** □ **Sub-Contractors could bid on their own choice of work or trade without restriction to a pre- determined portion.**□ **Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.** □ **See enclosed comments.**□ **Qualifying Remarks**

(8) Made efforts to assist interested SLBEs in obtaining bonding, lines of credit, or insurance as required by the City or contractor. □ **See enclosed documentation on initiatives undertaken and methods to accomplish**. □ **Qualifying Remarks**

(9) Made efforts to assist interested SLBEs in obtaining necessary equipment, supplies, materials, or related assistance or services, including participation in an acceptable mentor-protégé program. □ **See enclosed documentation of initiatives and/or agreements.** □ **Qualifying Remarks**

(10) Effectively used the services of the City and other organizations that provide assistance in the recruitment and placement of SLBEs.
□ **See enclosed documentation of services engaged.** □ **Overview (attached) of tactical actions and resources employed toward recruitment**

Note: Any unsolicited information in support of your Bid/RFP Compliance must accompany your submittal. □ **Identify Information Submitted**

Participation Plan: Guidance for Complying with Good Faith Efforts Outreach (page 3 of 3)

(1) All firms on the SLBE Goal Setting List must be solicited and documentation provided for email, fax, letters, phone calls, and other methods of outreach/communication with the listed firms. The DMI Solicited and DMI-Utilized forms must be completed for all firms solicited and all firms utilized. Other opportunities for subcontracting should be explored to attain participation. May consult Tampa EBO Office and/or research the online Data Management Business System Directory for Tampa certified SLBE firms.

(2) Solicitation of SLBEs, via written or electronic notification, should provide specific information on the services needed, where plans can be reviewed and assistance offered in obtaining these, if required. Solicitations should be sent a minimum of a week (i.e. 5 city business days or more) before the bid/proposal date. Actual copies of the bidder's solicitation containing their scope-specific instructions should be provided.

(3) With any quotes received, a follow-up should be made when needed to confirm detail scope of work. For anySLBE low quotes rejected, an explanation shall be provided detailing negotiation efforts.

(4) If a low bid SLBE is rejected or deemed unqualified the contractor must provide an explanation and supporting documentation for this decision.

(5) Prime shall break down portions of work into economical feasible opportunities for subcontracting. The SLBE directory may be useful in identifying additional subcontracting opportunities and certified firms not listed in the "SLBE Goal Setting Firms Contact List."

(6) Contractor shall not preclude SLBEs from bidding on any part of work, even if the Contractor may desire to self-perform aspects of the work.

(7) Contractor shall avoid relying solely on subcontracting those scopes of work where SLBE availabilityis not sufficient to attain pre-determined goals; including RFP/RFQ solicitations, all of which require GFECP compliance to achieve sub-consultant participation.

(8) In its solicitations, the Bidder should offer assistance to SLBEs in obtaining bonding, insurance, et cetera, if required of subcontractors by the City or Prime Contractor.

(9) In its solicitation, the Bidder should offer assistance in obtaining equipment for a specific job to SLBEs, if needed. This includes mobilization where applicable.

(10) Contractor should use the services offered by such agencies as the Small Business Development Center (SBDC) @ University South Fla.; SBDC @ Hillsborough County Entrepreneur Collaborative Center; Hillsborough NAACP Empowerment Center; Hillsborough County Economic Development Department DM/DWBE/SBE Program and Prospera-Hispanic Business Assoc. to name a few for the recruitment and placement of available SLBEs.

CITY OF
TAMPA, FLORIDA

FOURTH WASTEWATER IMPROVEMENT PROGRAM

PLANS

FOR THE CONSTRUCTION OF

SEWAGE DISPOSAL SYSTEM

DIVISION 4F4
43RD STREET FORCE MAIN

EPA PROJECT NO.
C120473200

NOVEMBER 1983

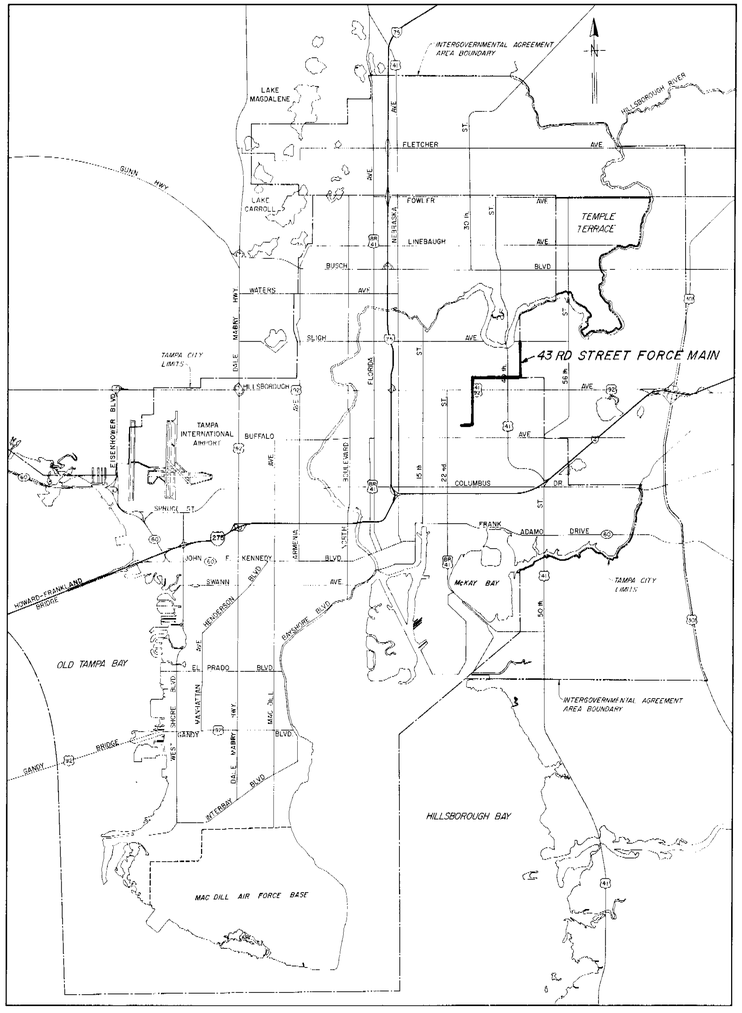
GREELEY AND HANSEN
ENGINEERS
222 SOUTH RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606
1211 NORTH WEST SHORE BLVD.
TAMPA, FLORIDA 33607

AS BUILT
Eco 7/16/91

CITY OF TAMPA FLORIDA · ORGANIZED JULY 15, 1887 · MASCOTTE

27-D-00003

189-0



LOCATION MAP

INDEX

DIVISION 4F4

SHEET	TITLE
1.	LOCATION MAP AND INDEX
2.	INDEX MAP AND LEGEND
3.	PLAN AND PROFILE - STA. 0 + 64.4 TO STA. 12 + 31
4.	PLAN AND PROFILE - STA. 12 + 31 TO STA. 24 + 37
5.	PLAN AND PROFILE - STA. 24 + 37 TO STA. 36 + 88
6.	PLAN AND PROFILE - STA. 36 + 88 TO STA. 49 + 38
7.	PLAN AND PROFILE - STA. 49 + 38 TO STA. 61 + 82
8.	PLAN AND PROFILE - STA. 61 + 82 TO STA. 74 + 05
9.	PLAN AND PROFILE - STA. 74 + 05 TO STA. 86 + 05
10.	PLAN AND PROFILE - STA. 86 + 05 TO STA. 98 + 05
11.	PLAN AND PROFILE - STA. 98 + 05 TO STA. 110 + 05
12.	PLAN AND PROFILE - STA. 110 + 05 TO STA. 122 + 37
13.	PLAN AND PROFILE - STA. 122 + 37 TO STA. 134 + 37
14.	PLAN AND PROFILE - STA. 134 + 37 TO STA. 146 + 37
15.	PLAN AND PROFILE - STA. 146 + 37 TO STA. 156 + 73.7
16.	VALVE VAULT DETAILS - CHELSEA ST. AND 30TH ST. Mc BERRY AVE. AND 30TH ST.
17.	MISCELLANEOUS DETAILS
18.	MISCELLANEOUS STANDARD DETAILS

AS BUILT
Cbr 7/16/91

GENERAL NOTES

1. *All elevations are referenced to City of Tampa Datum. To convert to National Ocean Survey Datum, subtract 0.15 feet.*
2. *Locations, elevations and dimensions of existing utilities, structures and other features are shown according to the best information available at the time of the preparation of these plans but do not purport to be absolutely correct. The Contractor shall verify the locations, elevations and dimensions of all existing utilities, structures and other features affecting his work prior to construction.*
3. *The Contractor shall provide at least 48 hours notice to the various utility companies in order to permit the location of existing underground utilities in advance of construction. The Contractor shall notify the various utility companies by calling the Utility Notification Center (1-800-282-8881) or, if necessary, by contacting the utilities individually.*
4. *Pipe joint openings used to accomplish small deflections shall not exceed a maximum of 1/2 inch for prestressed concrete cylinder pipe and 2 degrees for ductile iron pipe.*

PAUL E. LANGDON JR. CERTIFICATE No. 15473 STATE OF FLORIDA REGISTERED ENGINEER

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED R.A.K.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED J.W. Dettman DATE 1-9-74
SUPT. DEPT. OF SANITARY SEWERS
Paul E. Langdon Jr. DATE 11-23-73
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
2	7/16/91	E/a	As built as per survey notes and marked prints.
1	12/19/83	TLW	Revised Note 4

SCALE
8,000 0 8,000 16,000 FT.
1" = 8,000 FT.

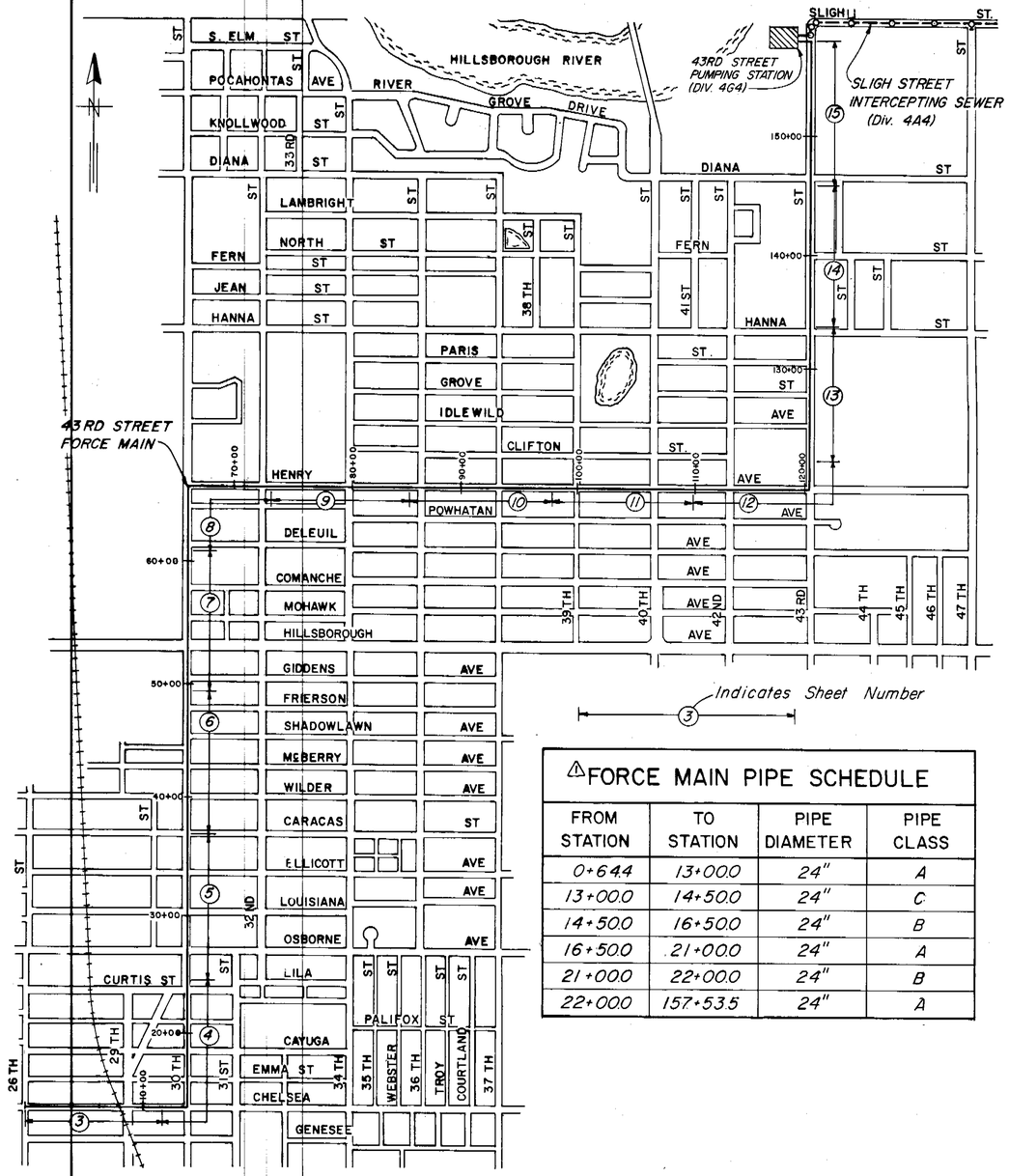
CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
LOCATION MAP AND INDEX

PROJ. NO. S202-70-30D 4.F4
SHEET 1 OF 18
DATE AUG. 1972 REV. 1

89-1

INDEX MAP



⚠FORCE MAIN PIPE SCHEDULE

FROM STATION	TO STATION	PIPE DIAMETER	PIPE CLASS
0+64.4	13+00.0	24"	A
13+00.0	14+50.0	24"	C
14+50.0	16+50.0	24"	B
16+50.0	21+00.0	24"	A
21+00.0	22+00.0	24"	B
22+00.0	157+53.5	24"	A

LEGEND

EXISTING STRUCTURES AND FEATURES

	UP TO 36"	36" AND LARGER
SANITARY SEWER & MANHOLE		
STORM SEWER & MANHOLE		
SANITARY FORCE MAIN	FM	
WATER MAIN		
GAS MAIN & DRIP		
ELECTRIC CABLE OR DUCT		
TELEPHONE CABLE OR DUCT		
FIRE ALARM CABLE	F F	
VALVE		
HYDRANT		
CATCH BASIN	CB CB	
POLE, POWER OR TELEPHONE		
VALVE VAULT	V	
WATER METER	M	
ELECTRIC MANHOLE OR VAULT	E	
TELEPHONE MANHOLE OR VAULT	T	
SPOT ELEVATION	30.5	

SANITARY HOUSE CONNECTIONS — (WYE IN SEWER), (DEPTH AT P.L.), (TEE IN SEWER)

FENCE

PROPERTY LINE — P.L.

PROPERTY CORNERS:
- IRON PIPE OR PIN — I.P.
- CONCRETE MONUMENT — Mon.
- "+" CUT IN CONCRETE — "+"

TREE AND HEDGE

RAILROAD TRACKS

BUILDING

SIGN OR SIGNAL

WATER COURSE

PAVEMENT — Pvmnt.

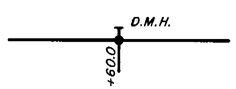
CONTOUR LINE — 40

SEWER CONSTRUCTION

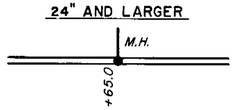
IN THIS DIVISION:

UP TO 21"

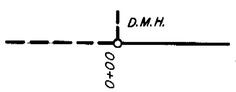




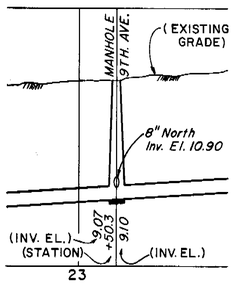
24" AND LARGER

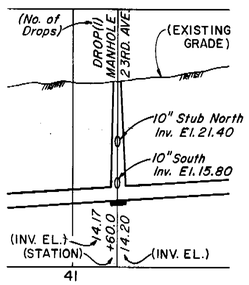


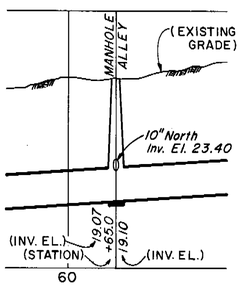
IN ADJOINING DIVISION:

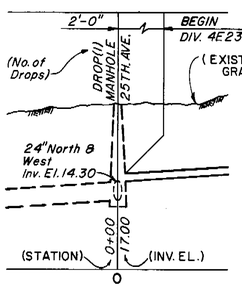


PLAN









PROFILE

AIR RELEASE SYSTEM — A

EMERGENCY DRAIN — D

AS BUILT
Clr 7/16/91

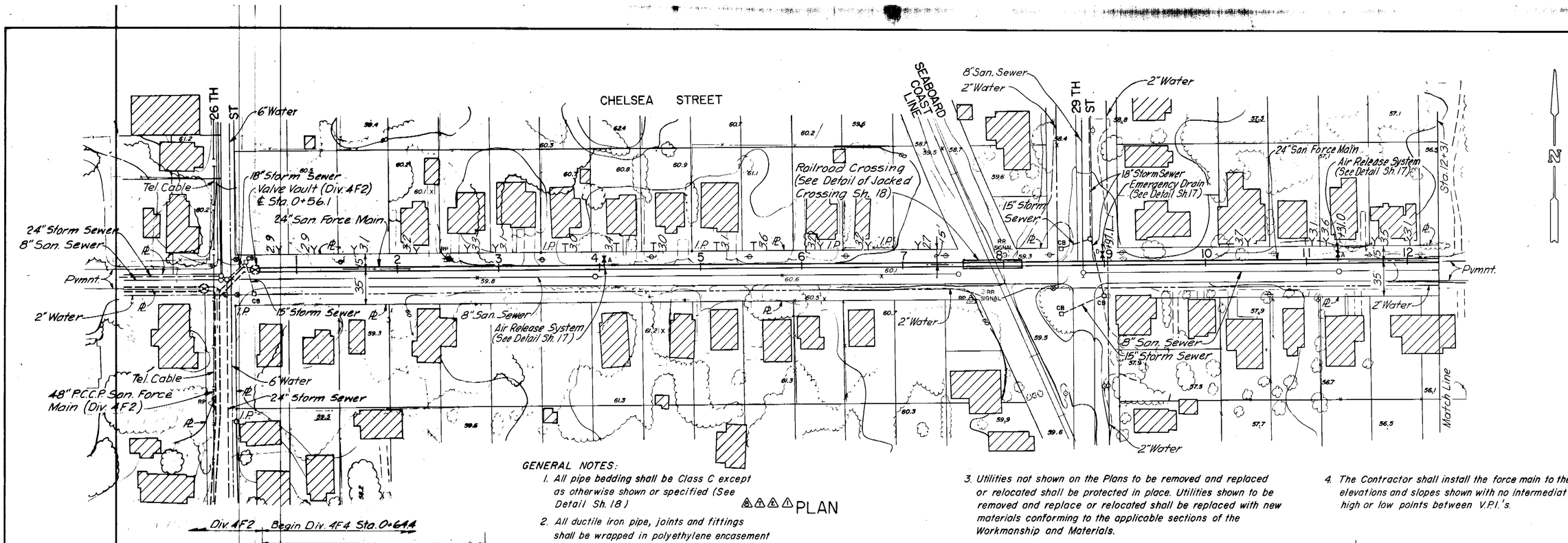
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED J.J.T. DRAWN W.R.B. CHECKED T.L.W.	APPROVED ____ DATE ____ SUPT., DEPT. OF SANITARY SEWERS ____ DATE ____ GREELEY AND HANSEN, ENGINEERS	NO.	DATE	APP.	REVISION	SCALE 600 0 600 1200 FT 1" = 600'
			2	7/16/91	E.L.	As built as per survey notes and marked prints.	
			1	12/8/83	T.L.W.	Rev. FM. Pipe Schedule	

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
INDEX MAP AND LEGEND

PROJ. NO. S202-70-30D 4F4
SHEET 2 OF 18
DATE AUG. 1972 REV. 1

189-2

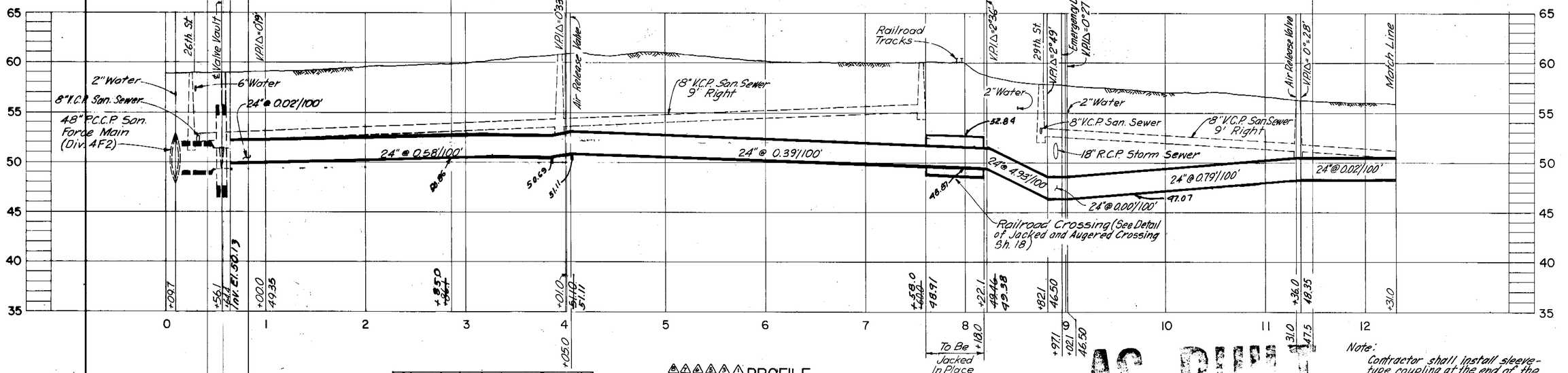


Div. 4F2 Begin Div. 4F4 Sta. 0+64.4

Harness Every Joint

Existing Pavement: Double Bituminous Surface Treatment on Shell Base

Harness Every Joint



GENERAL NOTES:

1. All pipe bedding shall be Class C except as otherwise shown or specified (See Detail Sh. 18)
2. All ductile iron pipe, joints and fittings shall be wrapped in polyethylene encasement conforming to the Specifications.
3. Utilities not shown on the Plans to be removed and replaced or relocated shall be protected in place. Utilities shown to be removed and replace or relocated shall be replaced with new materials conforming to the applicable sections of the Workmanship and Materials.
4. The Contractor shall install the force main to the elevations and slopes shown with no intermediate high or low points between V.P.I.'s.

△ PLAN

△ PROFILE

Note: Contractor shall install sleeve-type coupling at the end of the 24" steel pipe at Sta. 0+64.4 (Beginning of Div. 4F4).

AS BUILT
Elo 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
AERIAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN

DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

NO.	DATE	APP.	REVISION
7	7/16/91	Elo.	As built as per survey notes and marked prints.
6	6/20/85	TLW	Rev. R.R. Crossing Length
5	1/15/85	TLW	Add Air-Release & Emer. Drain
4	1/14/85	TLW	Rev. Vert. Align. Sta. 9+02.1 to 12+31.0
3	12/8/83	TLW	Rev. Harness Lengths (Typ)
2	12/8/83	TLW	Add General Notes
1	12/8/83	TLW	Rev. Vert. Align. Sta. 8+22.1 to 12+31.0
0	12/8/83	TLW	Update Utilities (Typ)
△	12/8/83	TLW	Rev. Pipe Dia. 36" to 24" (Typ)

SCALE
50 0 50 100 FT. HORIZ. 1"=50'
5 0 5 10 VERT. 1"=5'

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN J.R.S.
CHECKED T.L.W.

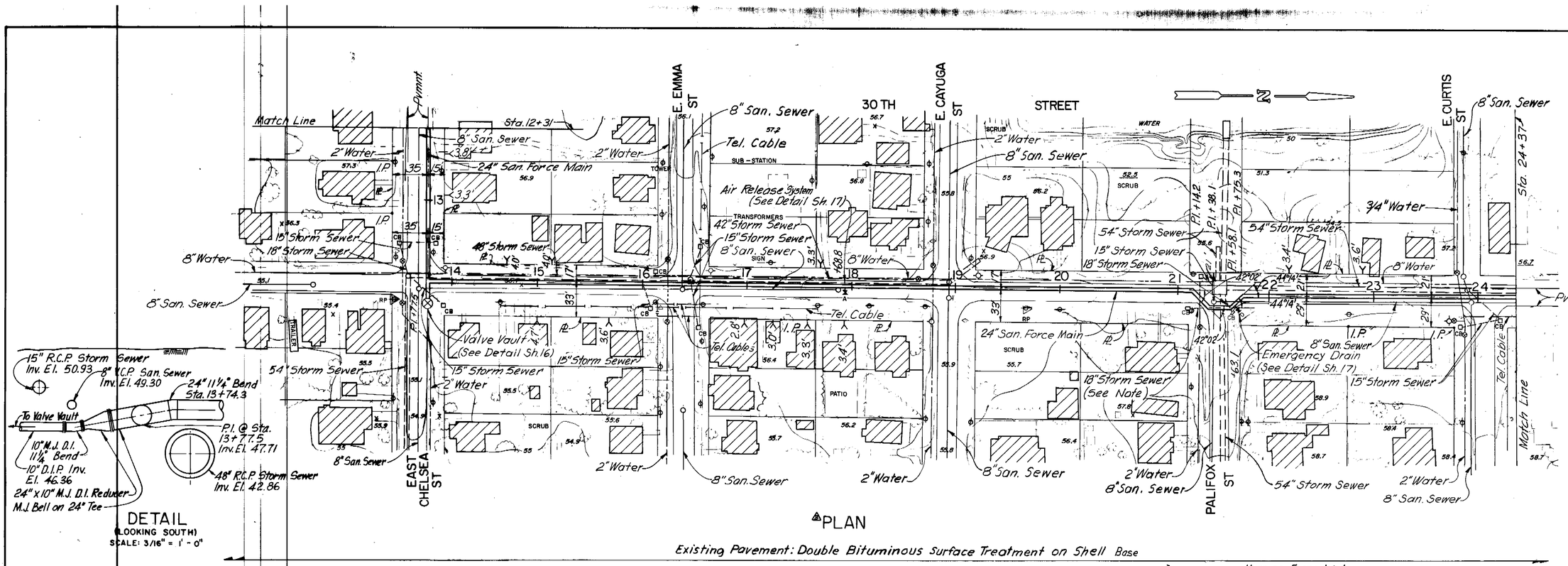
APPROVED
_____ DATE _____
SUPT., DEPT. OF SANITARY SEWERS
_____ DATE _____
GREELEY AND HANSEN, ENGINEERS

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 0+64.4 TO STA. 12+31

PROJ. NO. S202-70-30D 4F4
SHEET 3 OF 18
DATE AUG. 1972 REV. 8

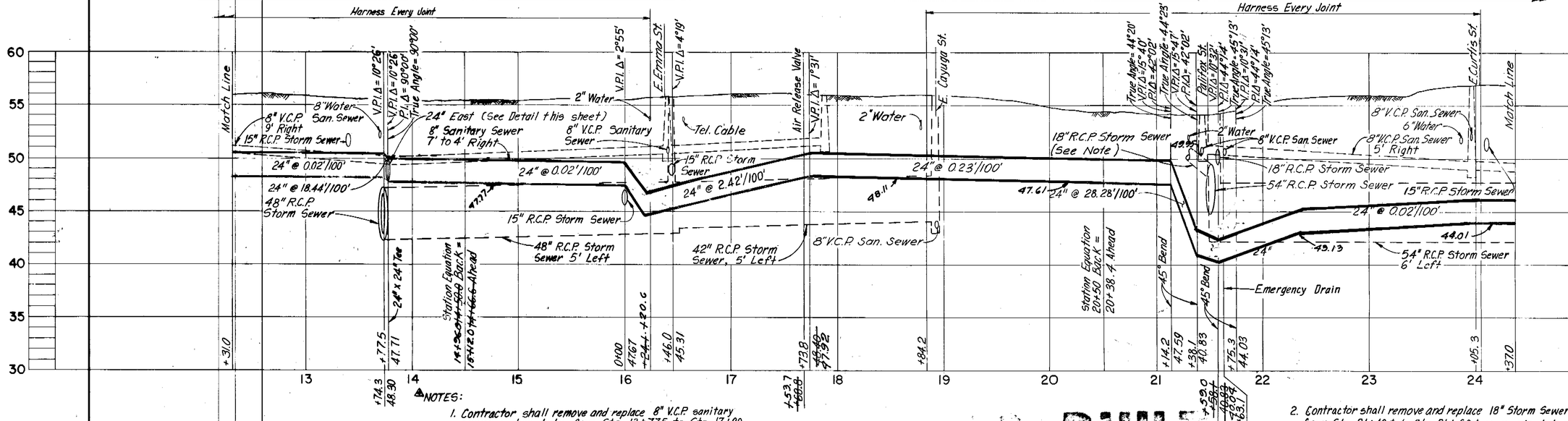
187-3



DETAIL
(LOOKING SOUTH)
SCALE: 3/16" = 1' - 0"

△PLAN

Existing Pavement: Double Bituminous Surface Treatment on Shell Base



△PROFILE

NOTES:

1. Contractor shall remove and replace 8" V.C.P. sanitary sewers and manholes from Sta. 13+77.5 to Sta. 17+90 and from Sta. 21+40 to Sta. 24+37 as required to permit construction of the new 24" sanitary force main. The replacement sewer shall be constructed at locations as directed by the Engineer. All existing house laterals shall be reconnected to the new 8" V.C.P. replacement sewers. Sanitary sewer service shall be maintained throughout construction by approved methods.
2. Contractor shall remove and replace 18" Storm Sewers and Catch Basins from Sta. 21+40 ± to Sta. 21+60 ± as required to permit construction of the new 24" San. Force Main.
3. Existing 42", 48", and 54" storm sewers and manholes shall be protected in place from any damage during construction as directed by the Engineer.

AS BUILT
EM 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△PP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

NO.	DATE	APP.	REVISION
6	7/16/91	ETS	As built as per survey notes and marked prints
5	11/15/85	TLW	Add Detail & Notes
4	1/14/85	TLW	Rev. Vert. & Horiz. Align. Entire Sht.
3	12/18/83	TLW	Add Note
2	12/8/83	TLW	Rev. Vert. Align. Entire Sheet
1	12/8/83	TLW	Rev. Vert. Align. Entire Sheet

SCALE
HORIZ. 1" = 50'
VERT. 1" = 5'

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I.S.S., J.R.S.
CHECKED T.L.W.

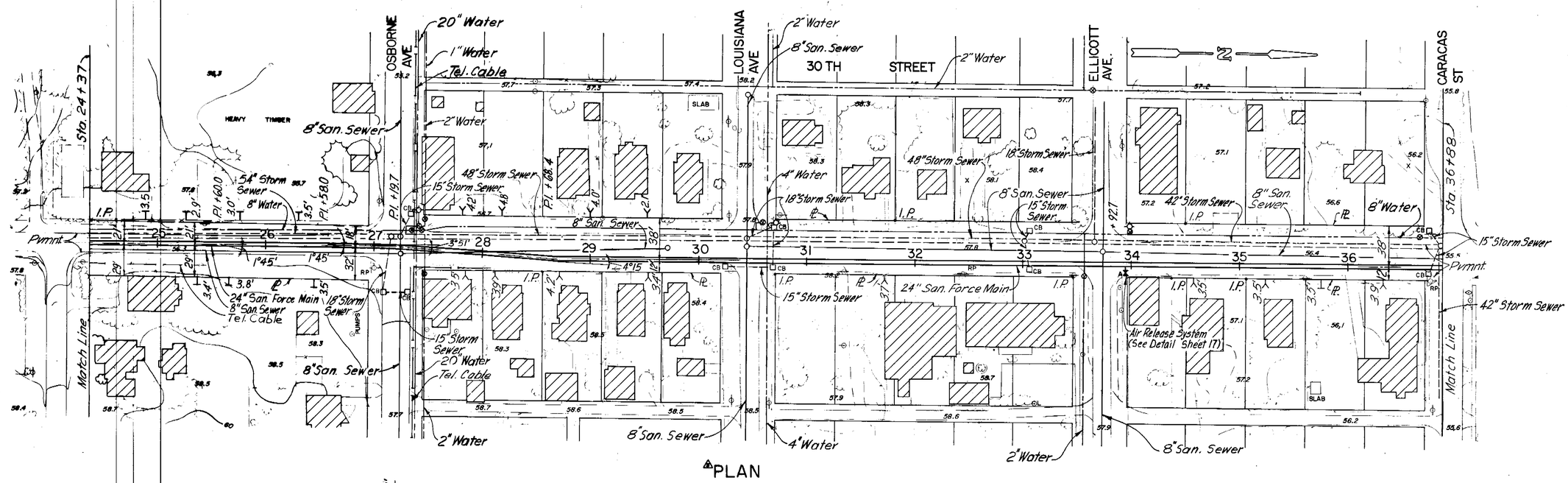
APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

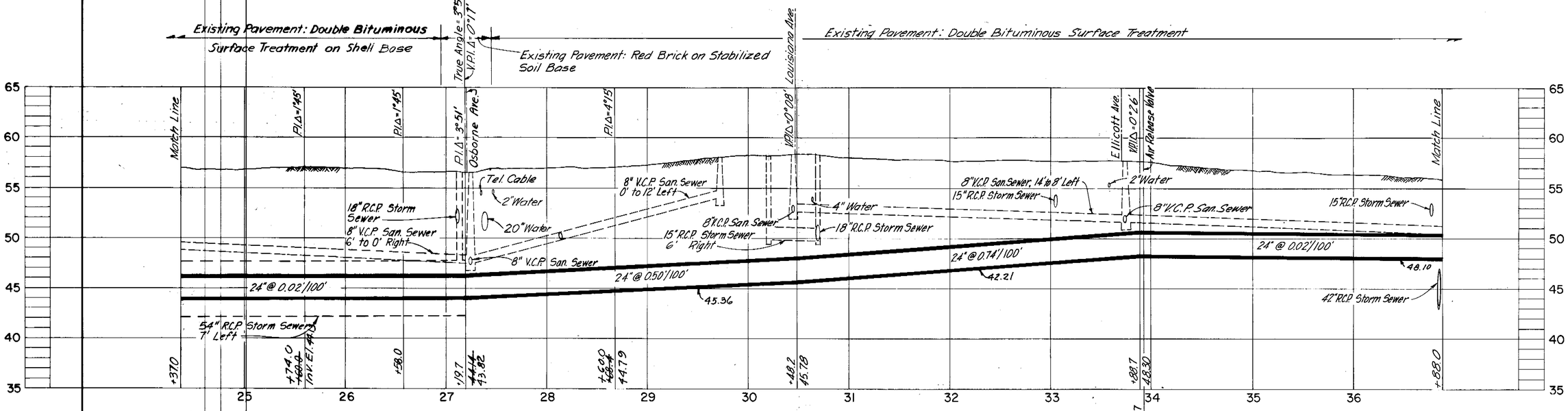
CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 12+31 TO STA. 24+37

PROJ. NO. S202-70-30D 4F4
SHEET 4 OF 18
DATE AUG. 1972 REV. 4

189-4





PROFILE

NOTES:

1. Existing 54" storm sewer from Sta. 24+37 to Sta. 27+25± shall be protected in place from any damage during construction as directed by the Engineer.
2. Contractor shall remove and replace 8" V.C.P. sanitary sewer from Sta. 24+37 to 29+00± as required to permit construction of the new 24" sanitary force main. The replacement shall be constructed at locations as directed by the Engineer. All existing house laterals shall be reconnected to the new 8" V.C.P. replacement sewer. Sanitary sewer service shall be maintained throughout construction by approved methods.
3. Contractor shall remove and replace 15" storm sewers and catch basins from Sta. 30+25± to Sta. 30+70± and at Sta. 33+05± and at Sta. 36+75± as required to permit construction of the new 24" sanitary force main.

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

NO.	DATE	APP.	REVISION
6	7/16/91	Elo.	As built as per survey notes and mar. Red prints.
5	11/15/85	TLW	Add Notes
4	11/15/85	TLW	Rev. Horiz. Align. Sta. 24+37 to 28+68
3	3/12/84	TLW	Add 15" Storm Sewer Sta. 30+20
2	12/8/83	TLW	Rev. Vert. Align. Sta. 27+44.14 to 36+80
1			

SCALE
HORIZ. 1" = 50'
VERT. 1" = 5'

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.
DRAWN I.S.S., F.F.L.
CHECKED T. L. W.

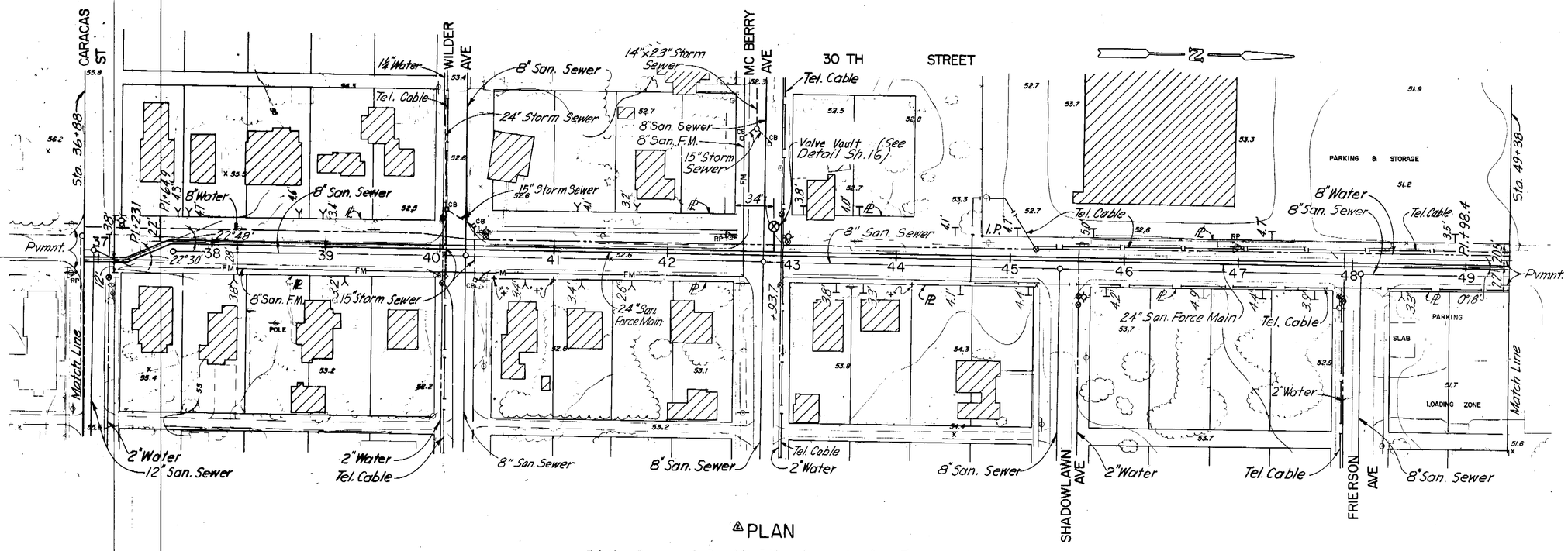
APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

Elo 7/16/91
DIVISION 4F4
PLAN AND PROFILE
STA. 24+37 TO STA. 36+88

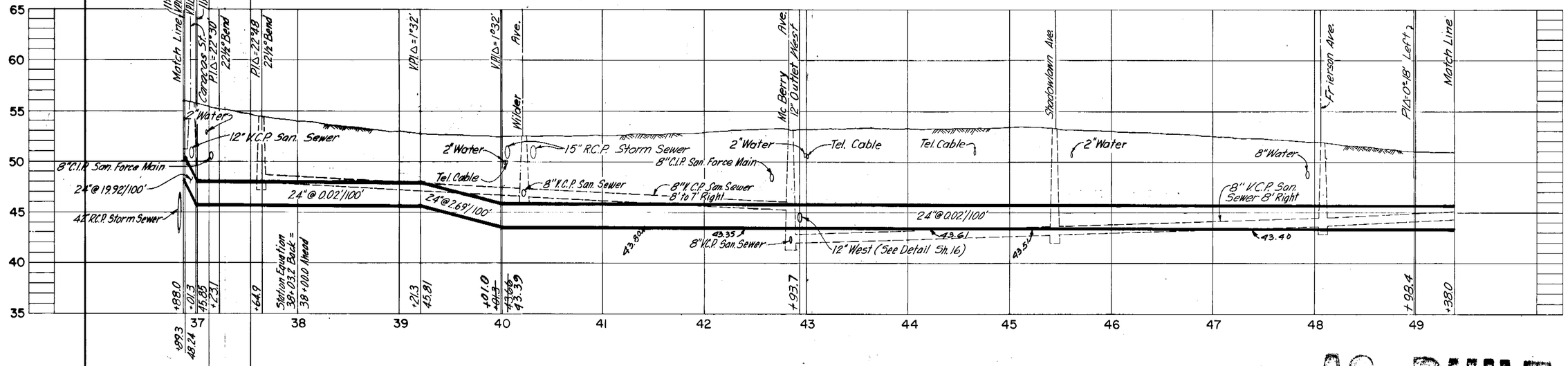
PROJ. NO. S202-70-30D 4F4
SHEET 5 OF 18
DATE AUG. 1972 REV. 4

189-5



PLAN

Existing Pavement: Double Bituminous Surface Treatment



PROFILE

AS BUILT
EJL 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.
DRAWN I.S.S., F.F.L.
CHECKED T.L.W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
3	7/16/91	EJL	As built as per surveyors and marked prints
2	12/18/73	TLW	Rev. Hor. Align. Sta. 37+23.1 to 49+38.0
1	12/18/73	TLW	Rev. Vert. Align. Entire Sheet.

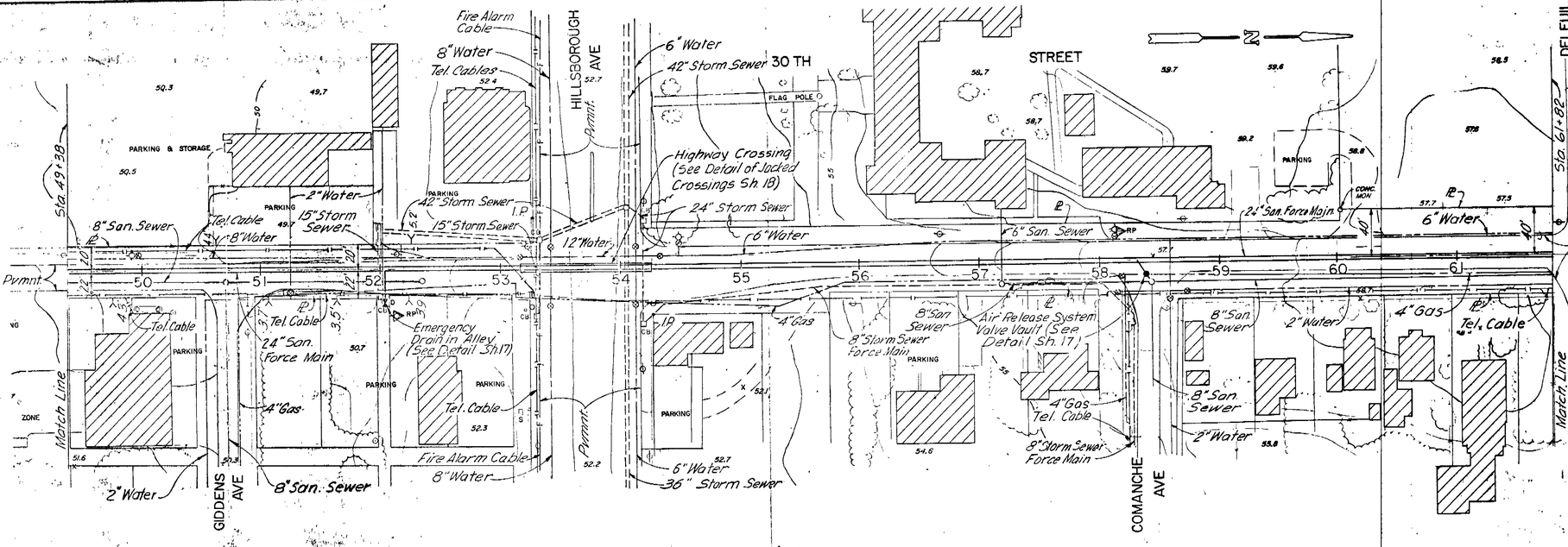
SCALE
HORIZ. 1" = 50'
VERT. 1" = 5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

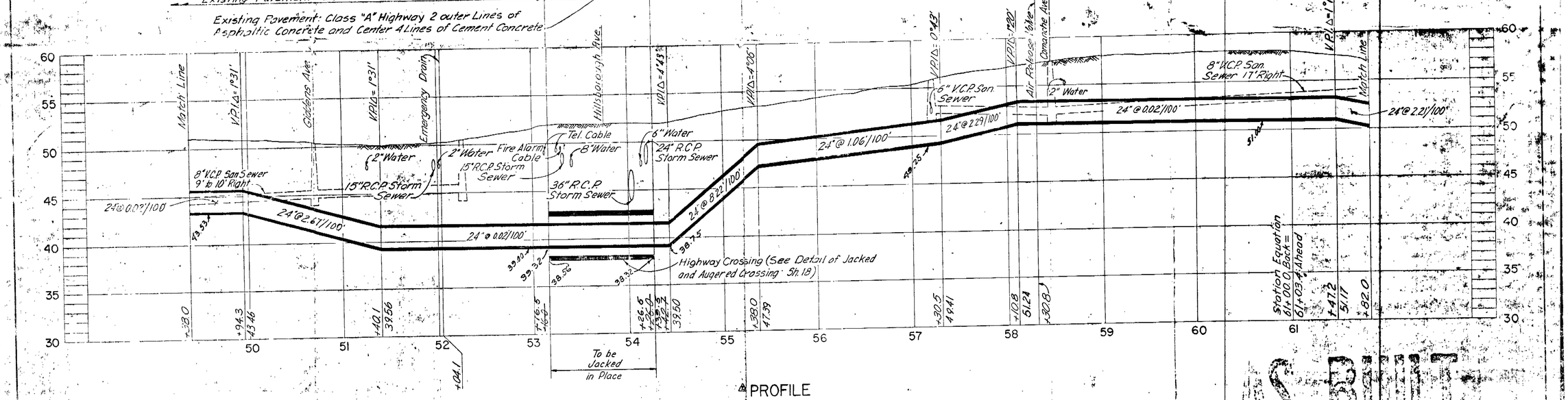
DIVISION 4F4
PLAN AND PROFILE
STA. 36+88 TO STA. 49+38

PROJ. NO. S202-70-30D 4F4
SHEET 6 OF 18
DATE AUG. 1972 REV. 2

189-6



PLAN



PROFILE

AS BUILT
Elo 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△HP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I.S.S., F.F.L.
CHECKED T.L.W.

APPROVED _____ DATE _____
SUPT., DEPT. OF SANITARY SEWERS
_____ DATE _____
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
D	7/16/91	Elo	As built as per surveyors orig marked prints
C	12/18/83	TLW	Rev Vert Allign Sta 49+360 to 51+40.1
B	12/9/83	TLW	Rev Hor Allign Entire Sheet

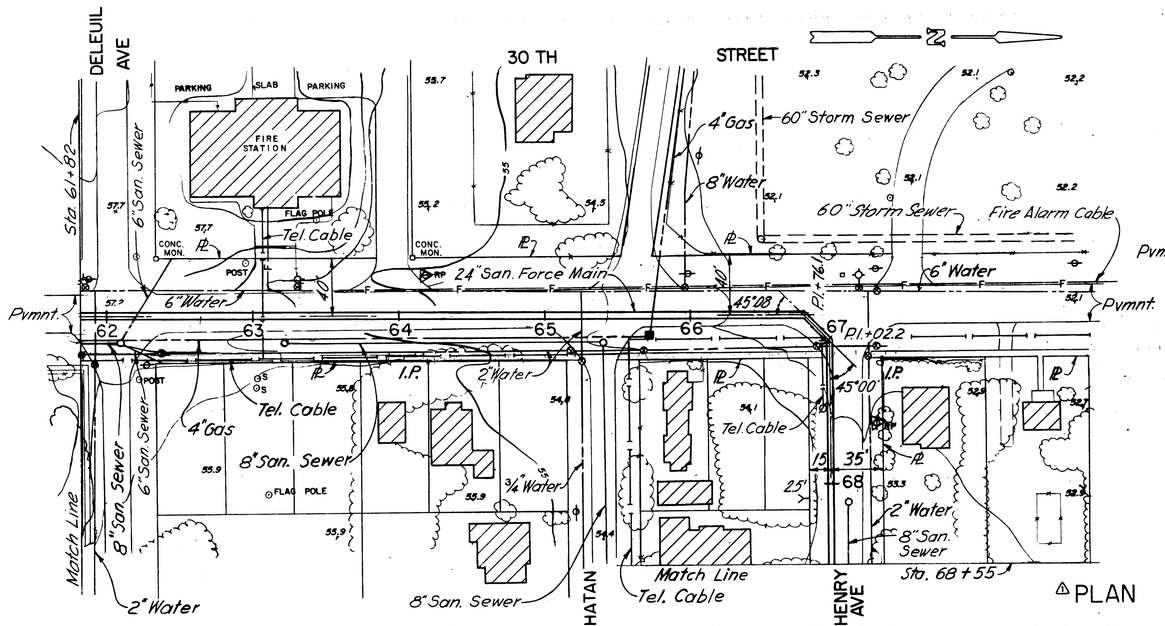
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5 0 5 10 VERT 1" = 5'

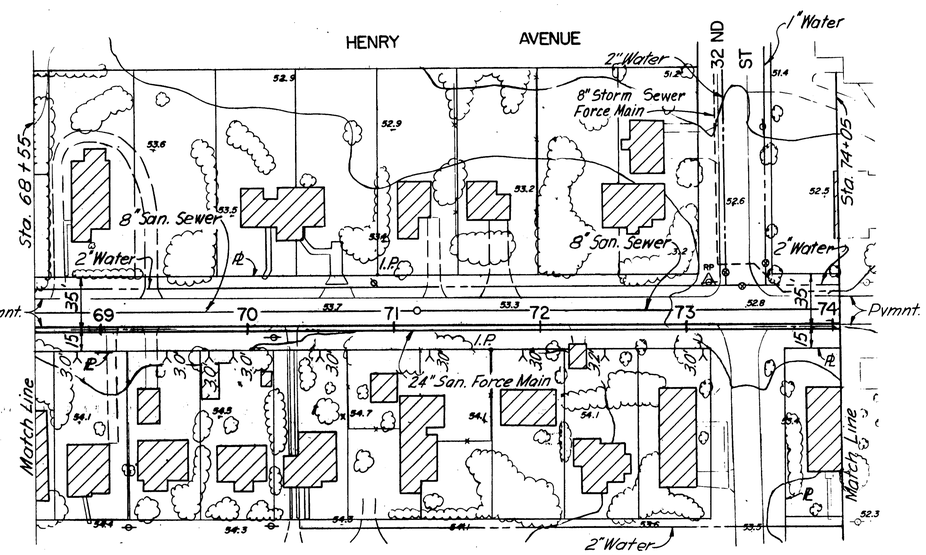
CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

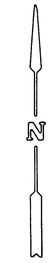
DIVISION 4F4
PLAN AND PROFILE
STA. 49+38 TO STA. 61+82

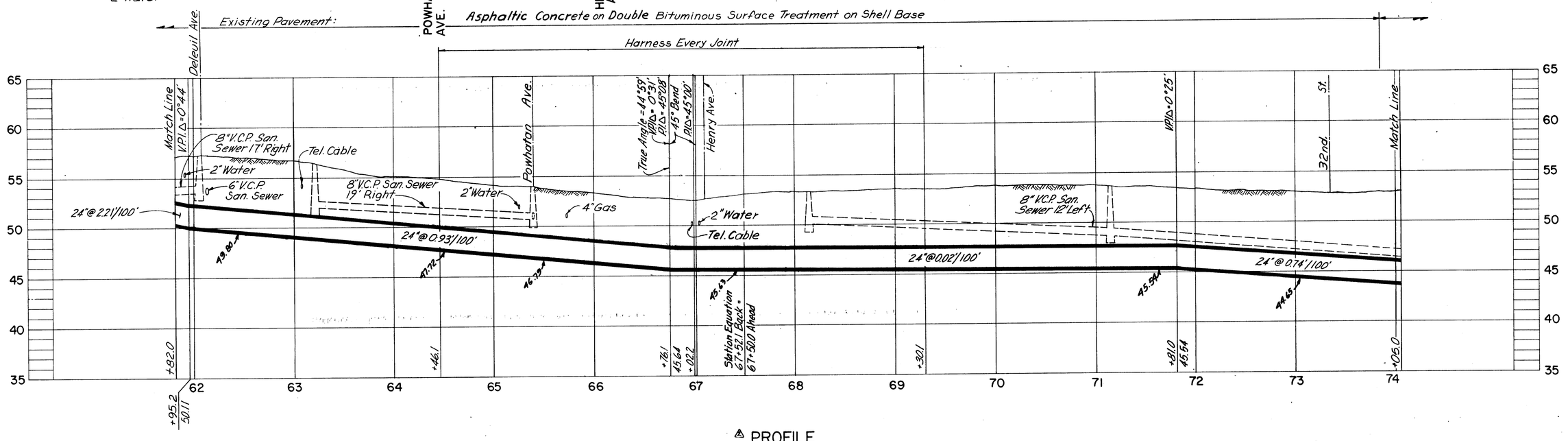
PROJ. NO. S202-470-300 4F4
SHEET 7 OF 18
DATE AUG. 1972 REV.

189-7









PROFILE

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED _____ DATE _____
SUPT., DEPT. OF SANITARY SEWERS
_____ DATE _____
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
2	12/18/73	T.L.W.	Rev. Vert. Align. Sta. 71+81.8 to 74+05.0
1	12/18/73	T.L.W.	Rev. Hor. Align. Sta. 61+82.0 to 67+02.2

SCALE
50 0 50 100 FT HORIZ. 1" = 50'
5 0 5 10 VERT. 1" = 5'

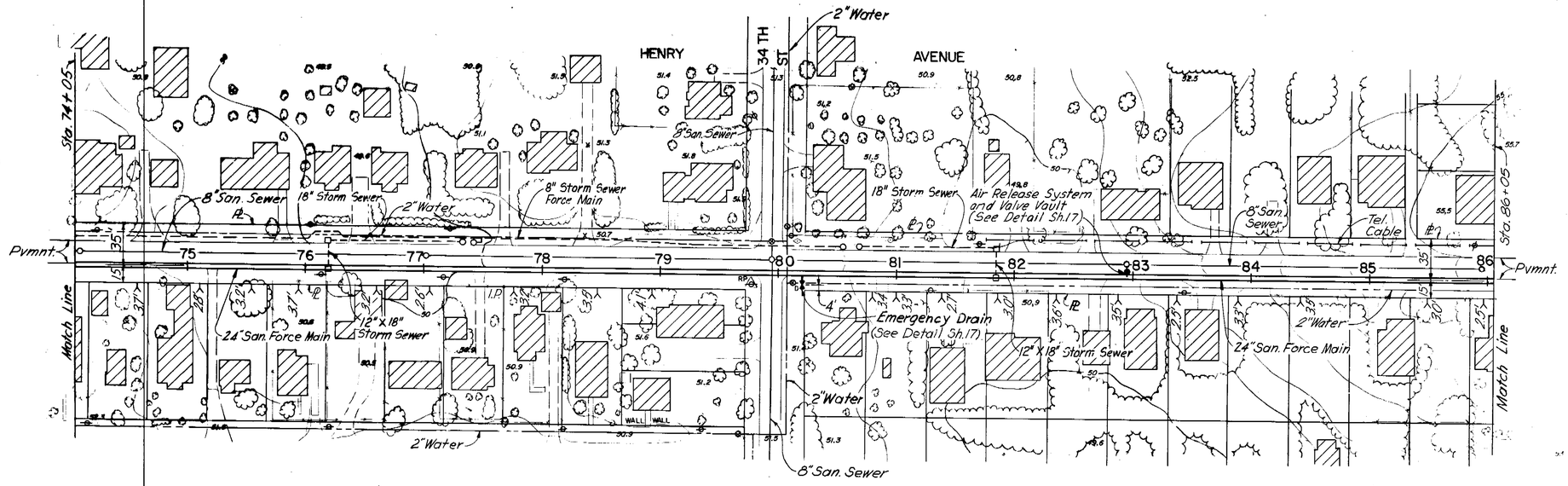
CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 61+82 TO STA. 74+05

PROJ. NO. S202-70-30D 4F4
SHEET 8 OF 18
DATE AUG. 1972 REV. 2

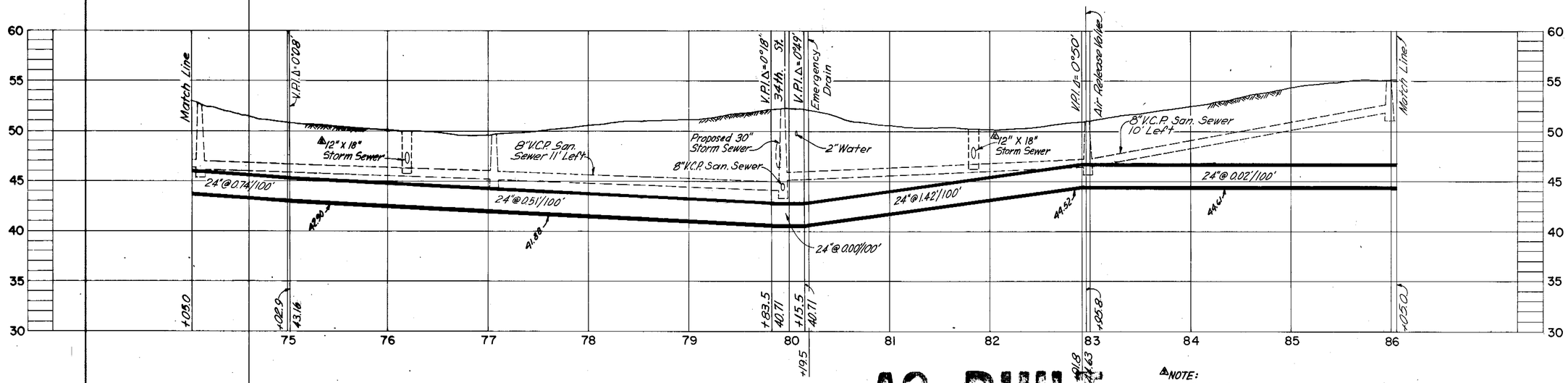
189-8

189-008



PLAN

Existing Pavement: Double Bituminous Surface Treatment On Shell Base



PROFILE

AS BUILT
7/16/91

NOTE:
Contractor shall remove and replace 12"x18" storm sewers and catch basins at Sta. 76+20± and Sta. 81+85± as required to permit construction of the new 24" Sanitary Force Main.

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1971

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
4	7/16/91	E/o	As built as per survey notes and marked prints.
3	1/23/85	TLW	Add Note
2	1/23/85	TLW	Add Storm Sewers
1	12/8/83	TLW	Rev Vert Align. Sta 74+05 & 79+83.5

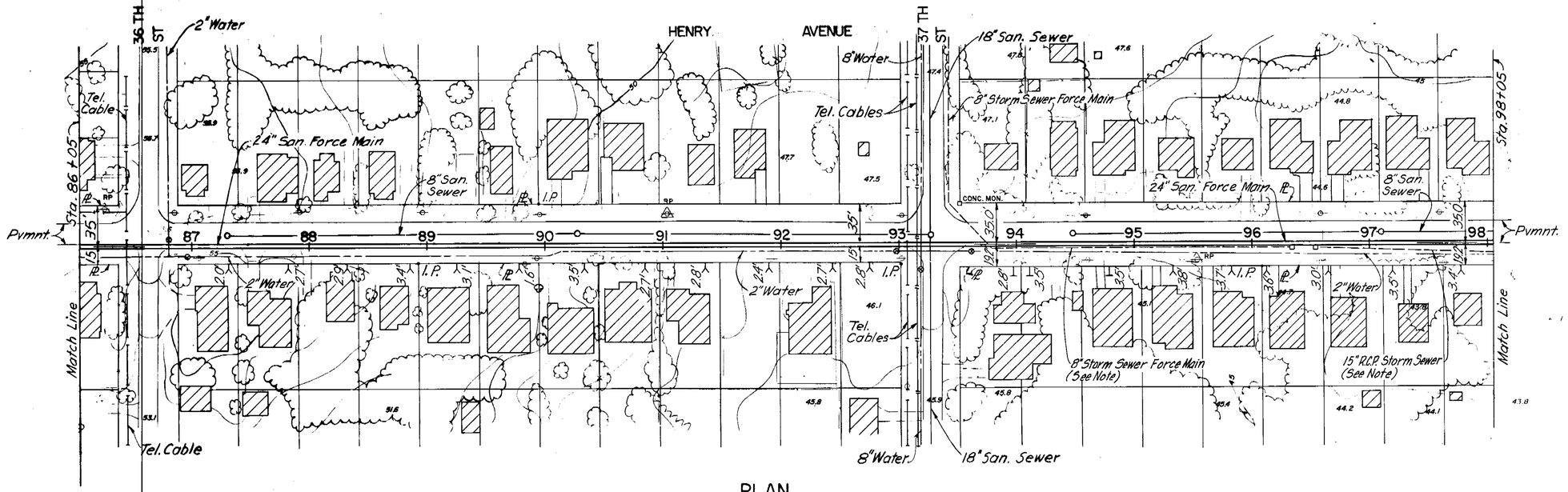
SCALE
50 0 50 100 FT HORIZ. 1"=50'
5 0 5 10 VERT. 1"=5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 74+05 TO STA. 86+05

PROJ. NO. S202-70-300 4F4
SHEET 9 OF 18
DATE AUG. 1972 REV. 3

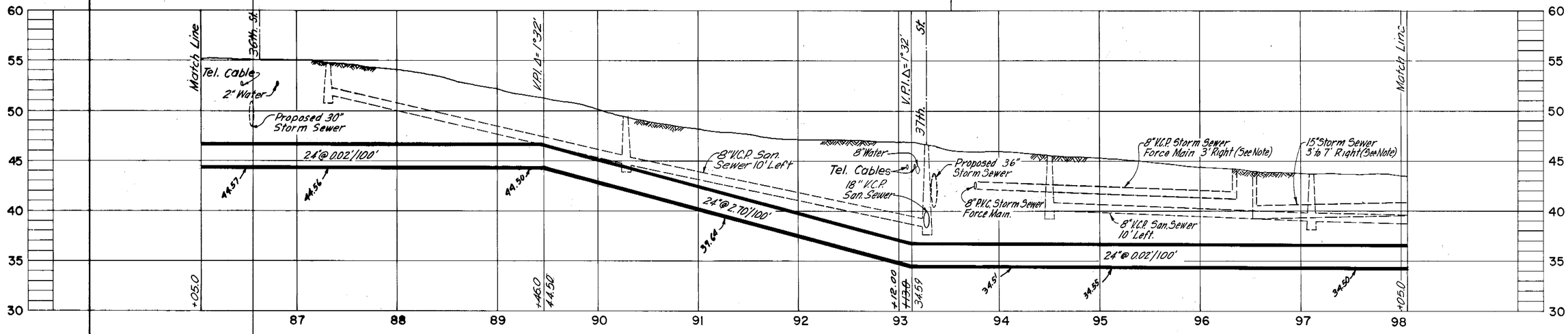
189-9



PLAN

Existing Pavement: Double Bituminous Surface Treatment on Shell Base

Existing Pavement: Single Bituminous Surface Treatment on Shell Base



PROFILE

AS BUILT
Elev. 7/16/91

NOTE:
Contractor shall remove and replace 8" P.V.C. Storm Sewer Force Main, 15" R.C.P. Storm Sewer and concrete vaults from Sta. 93+75± to Sta. 98+05 as required to permit construction of the new 24" San. Force Main.

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
1	7/16/91	Elo.	As built as per surveyors and marked prints.

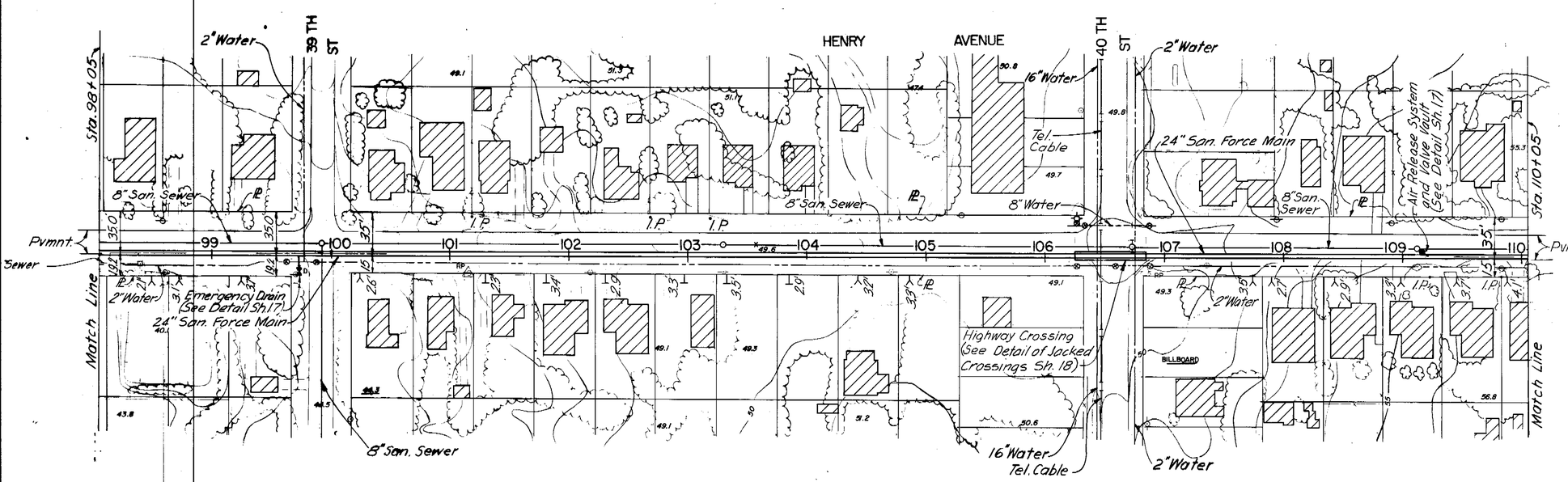
SCALE
50 0 50 100 FT HORIZ. 1" = 50'
5 0 5 10 VERT. 1" = 5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

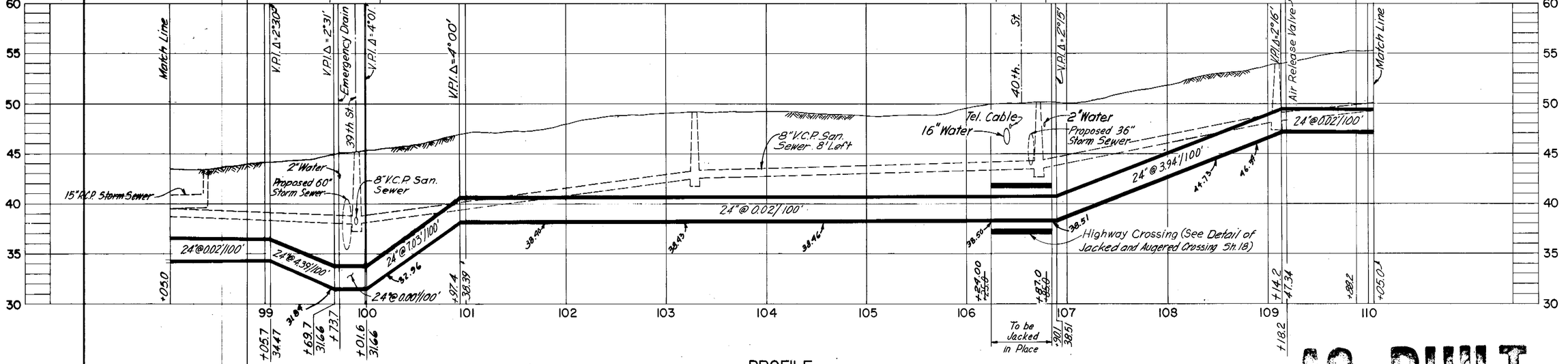
DIVISION 4F4
PLAN AND PROFILE
STA. 86+05 TO STA. 98+05

PROJ. NO. S202-70-30D 4F4
SHEET 10 OF 18
DATE AUG. 1972 REV. 0

189-10



PLAN



PROFILE

AS BUILT
Elev 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.,T.L.W.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
1	7/16/91	Elo.	As built as per survey notes and marked prints

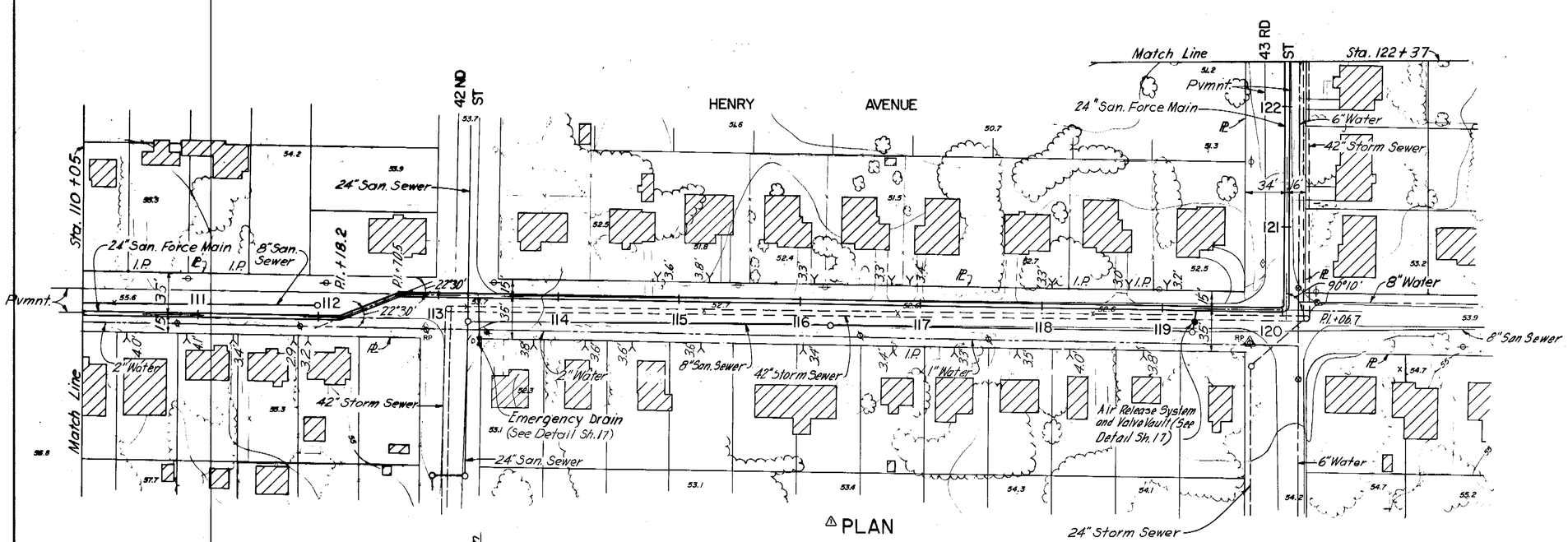
SCALE
50 0 50 100 FT HORIZ. 1"=50'
5 0 5 10 VERT. 1"=5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

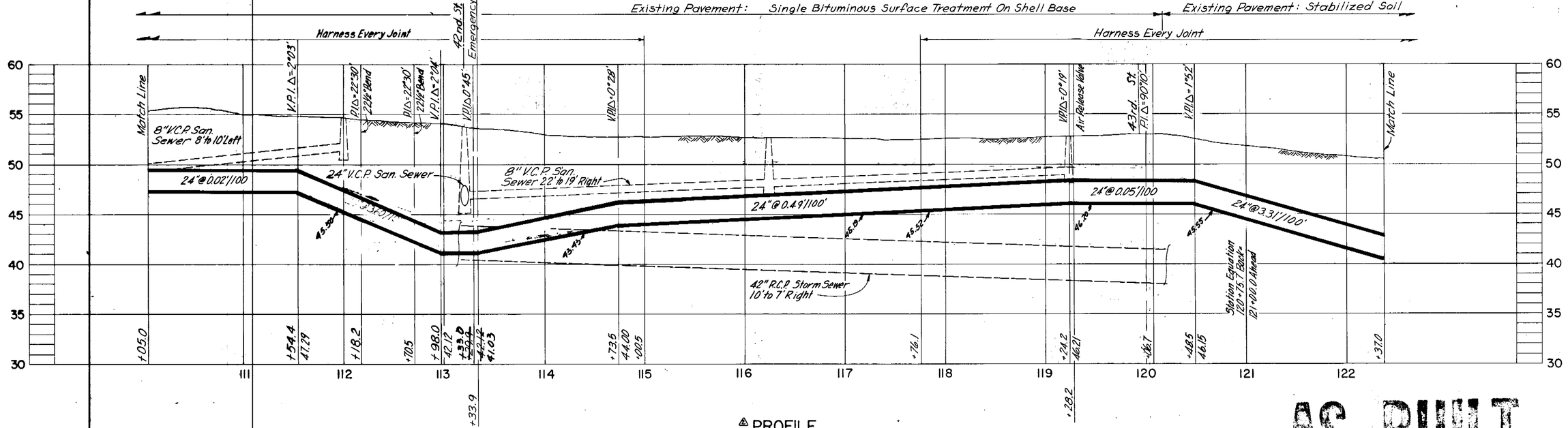
DIVISION 4F4
PLAN AND PROFILE
STA. 98+05 TO STA. 110+05

PROJ. NO. S202-70-30D 4F4
SHEET 11 OF 18
DATE AUG. 1972 REV. 0

189-11



△ PLAN



△ PROFILE

AS BUILT
Eto 7/16/81

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED
_____ DATE _____
SUPT., DEPT. OF SANITARY SEWERS
_____ DATE _____
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
3	7/16/81	Eto	As built as per survey notes and marked prints
2	12/8/83	T.L.W	Rev. Vert. Align. Entire Sheet
1	12/8/83	T.L.W	Rev. Hor. Align. Sta. 112+18.2 to 120+06.7

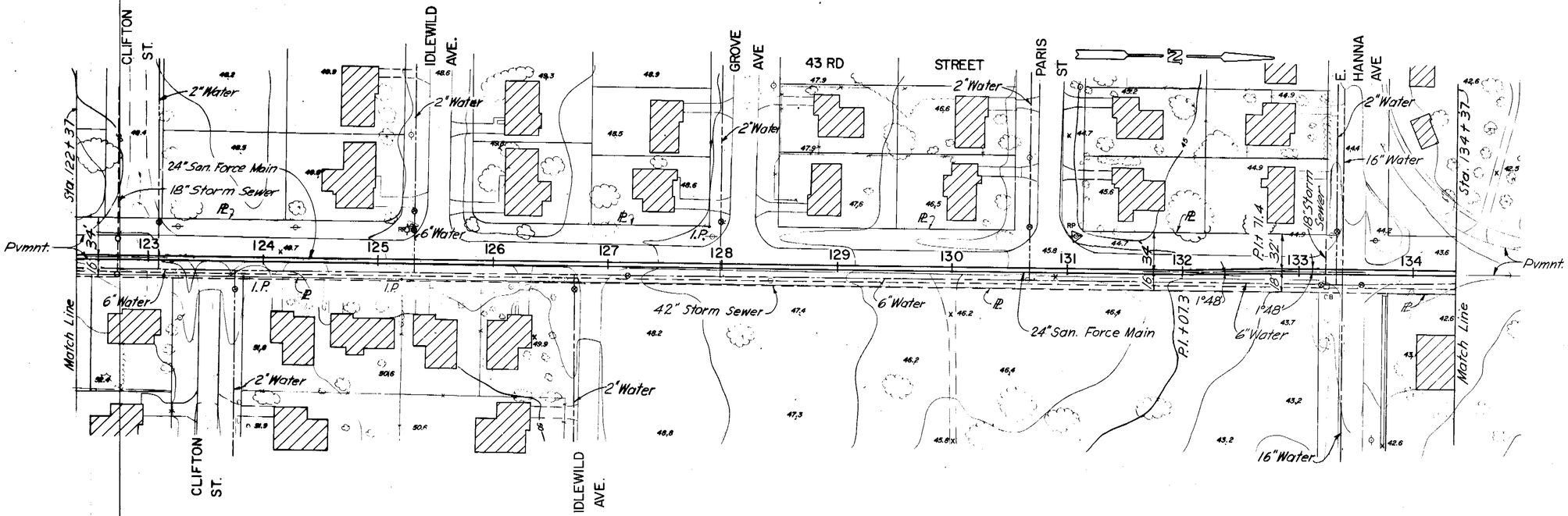
SCALE
50 0 50 100 FT HORIZ. 1"=50'
5 0 5 10 VERT. 1"=5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

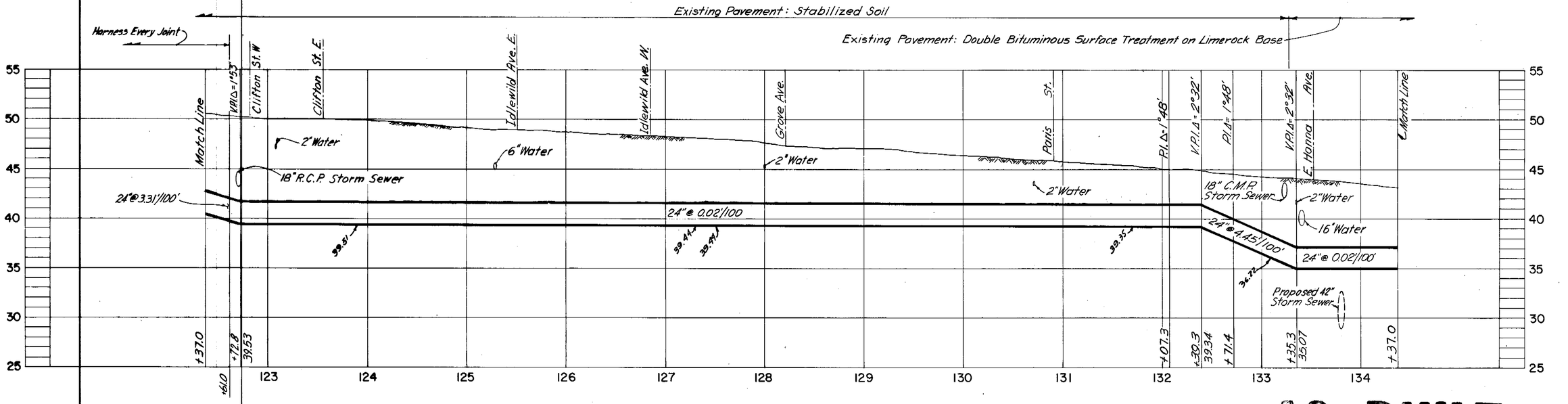
DIVISION 4F4
PLAN AND PROFILE
STA. 110+05 TO STA. 122+37

PROJ. NO. S202-70-30D 4F4
SHEET 12 OF 18
DATE AUG. 1972 REV. 2

189-12



PLAN



PROFILE

AS BUILT
Elo 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

△RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I. S. S.
CHECKED T. L. W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
1	7/16/91	Elo	As built as per survey notes and marked prints

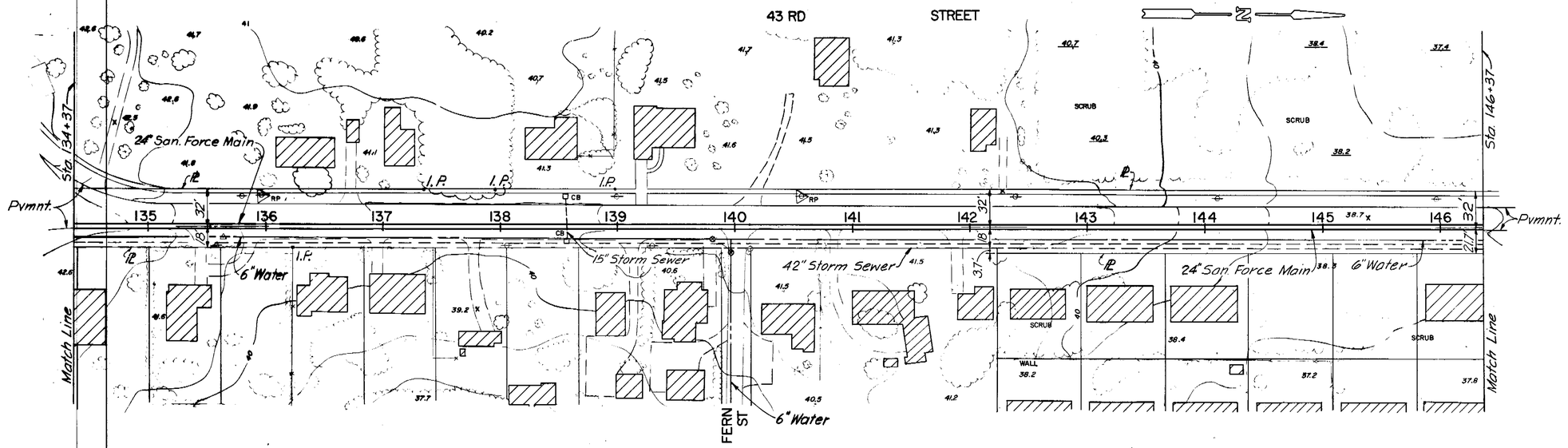
SCALE
50 0 50 100 FT HORIZ. 1"=50'
5 0 5 10 VERT. 1"=5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 122+37 TO STA. 134+37

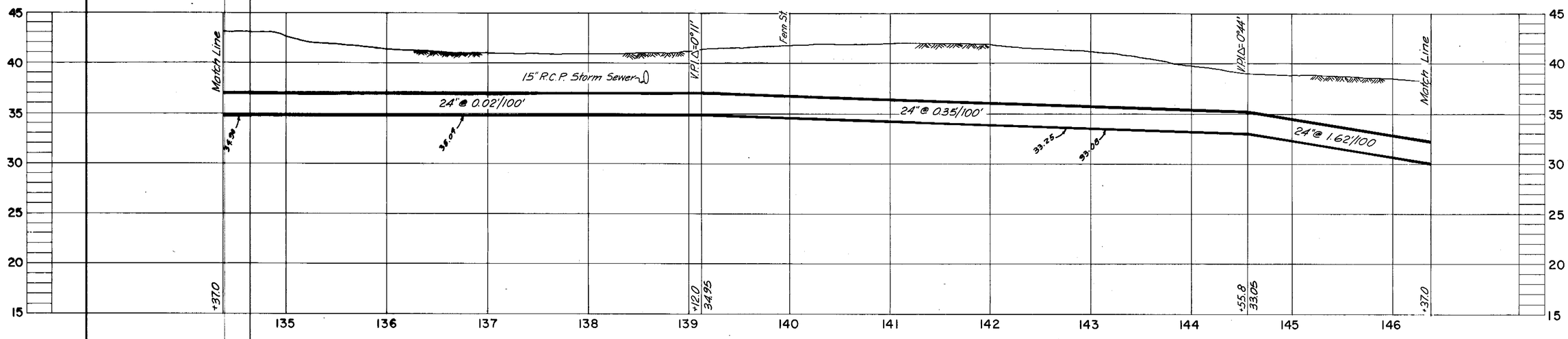
PROJ. NO. S202-70-30D 4F4
SHEET 13 OF 18
DATE AUG. 1972 REV. 0

1189+13



PLAN

Existing Pavement: Double Bituminous Surface Treatment on Limerock Base



PROFILE

AS BUILT
CLR 7/16/91

COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T.
DRAWN I.S.S.
CHECKED T.L.W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
1	7/16/91	Elo	As build as per survey notes and marked prints

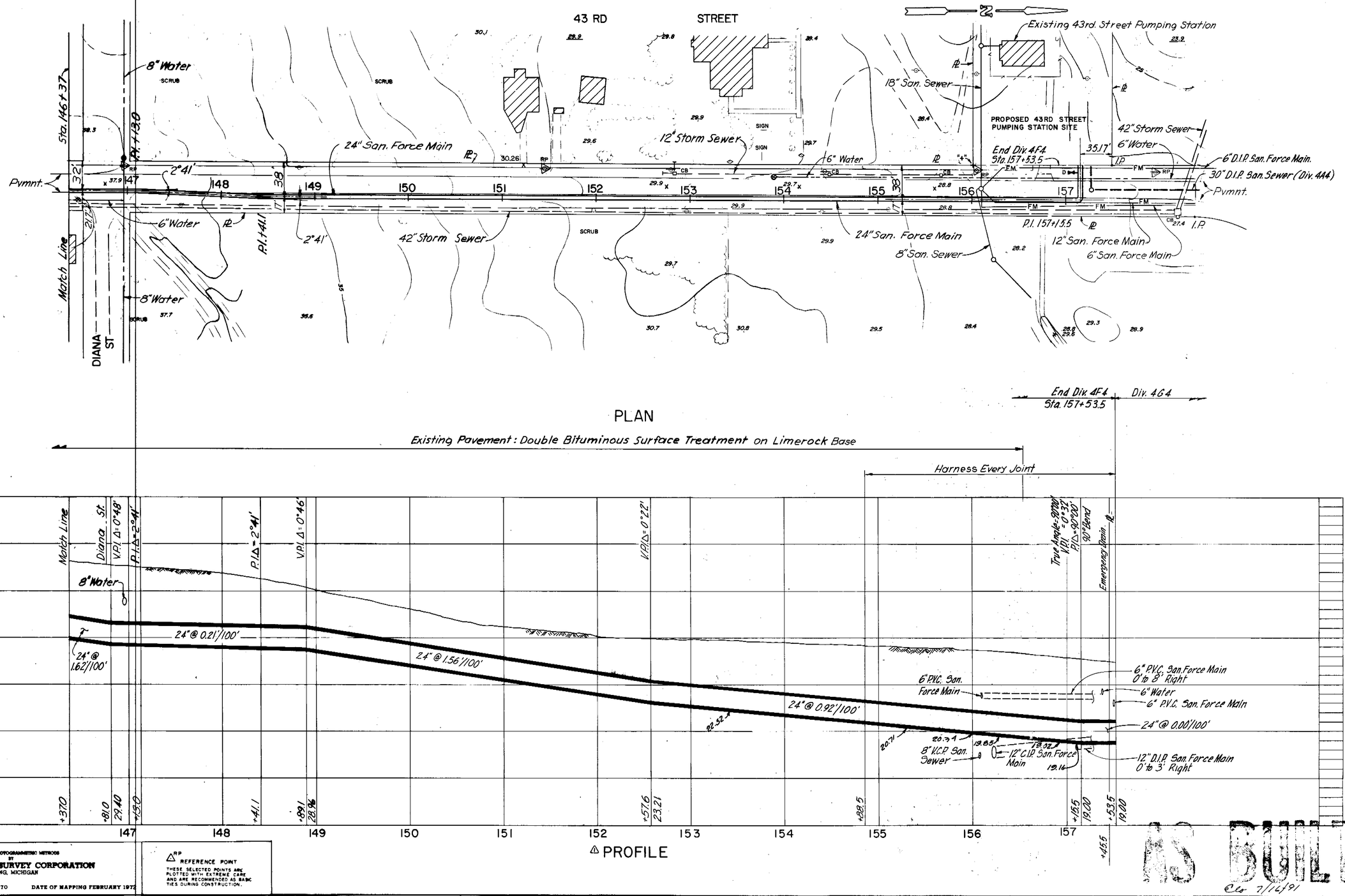
SCALE
50 0 50 100 FT HORIZ. 1"= 50'
5 0 5 10 VERT. 1"= 5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
PLAN AND PROFILE
STA. 134+37 TO STA. 146+37

PROJ. NO. S202-70-30D 4F4
SHEET 14 OF 18
DATE AUG. 1972 REV. 0

189-14



COMPILED BY PHOTOGRAMMETRIC METHODS BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN

DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING FEBRUARY 1972

RP REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.

AS BUILT
7/16/91

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED J.J.T., T.L.W.
DRAWN I.S.S.
CHECKED T. L. W.

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
1	7/16/91	E.L.	As built Da per survey notes and marked prints.
2	12/18/03	T.L.W.	Rev. Vert. Align. Sta 152+57.6 & 157+53.5

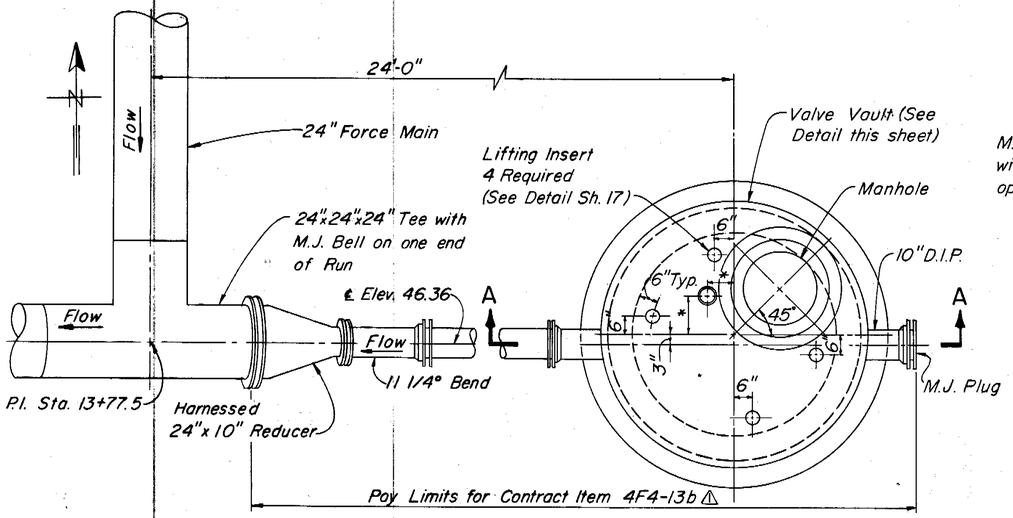
SCALE
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5 0 5 10 VERT. 1"=5'

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

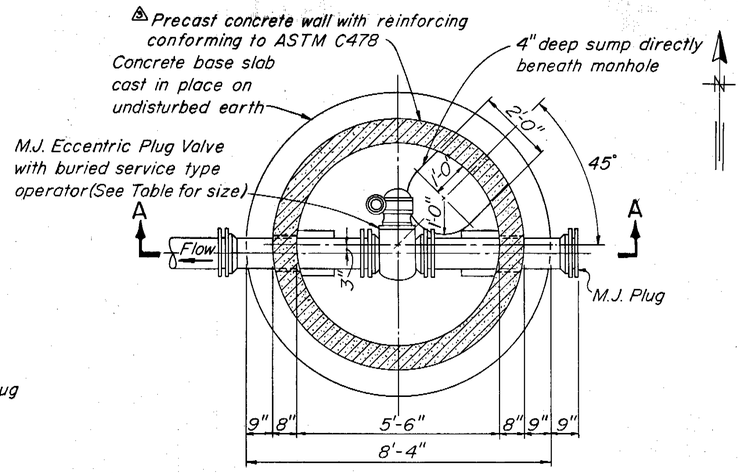
DIVISION 4F4
PLAN AND PROFILE
STA. 146+37 TO STA. 156+73.7

PROJ. NO. S202-70-30D 4F4
SHEET 15 OF 18
DATE AUG. 1972 REV. 1

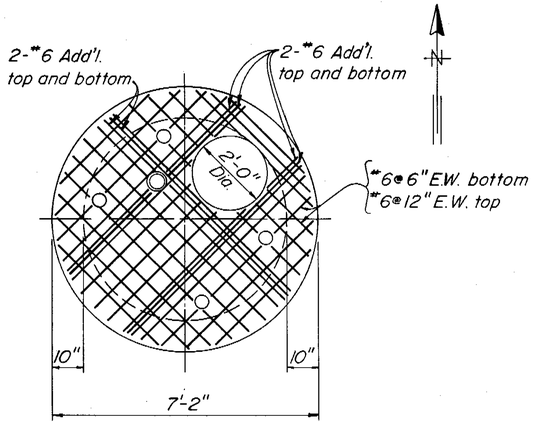
189-15



PLAN OF VALVE VAULT AT
CHELSEA ST. AND 30TH ST.



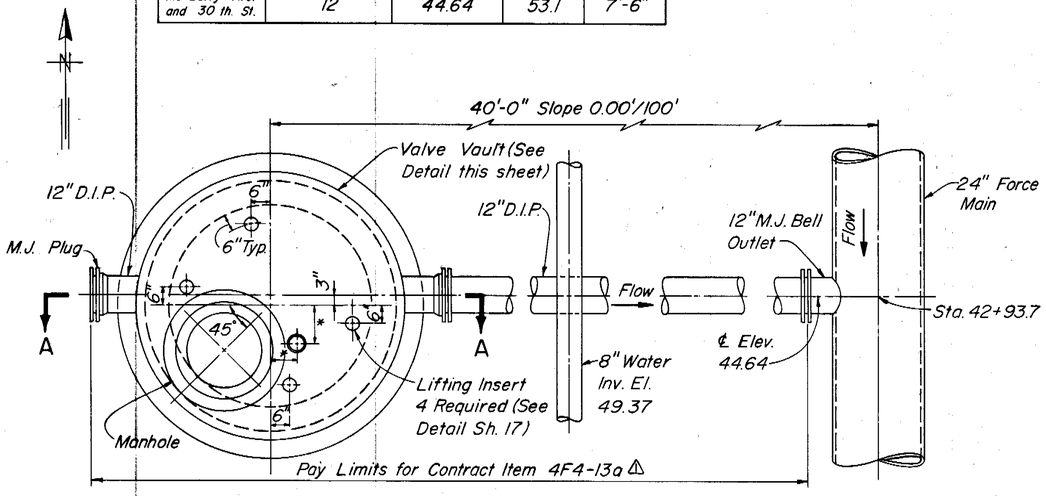
SECTIONAL PLAN



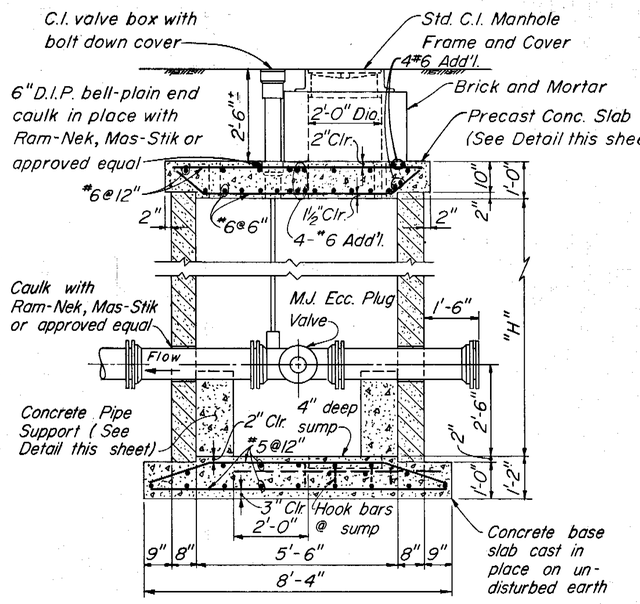
PRECAST CONCRETE SLAB DETAIL

VALVE VAULT SCHEDULE ⚠				
VAULT LOCATION	VALVE AND PIPE DIA.	VALVE ℄ ELEV.	GRADE ELEV.	"H"
Chelsea St. and 30 th. St.	10"	46.36	55.5	8'-2"
Mc Berry Ave. and 30 th. St.	12"	44.64	53.1	7'-6"

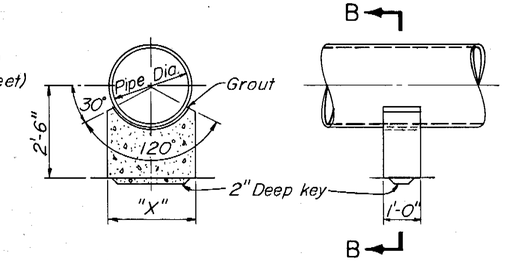
Notes:
1. All mechanical joints shall be harnessed.
2. * Dimension to be determined after valve selection.



PLAN OF VALVE VAULT AT
Mc BERRY AVE. AND 30TH ST.



SECTION A-A



SECTION B-B ELEVATION

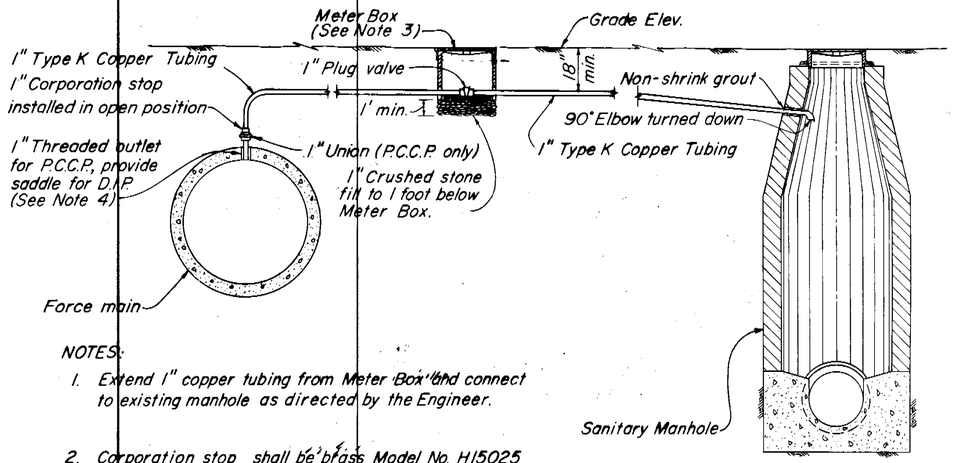
PIPE SUPPORT SCHEDULE		
VAULT LOCATION	PIPE DIA.	"X"
Mc Berry Ave. and 30 th. St.	12"	1'-6"
Chelsea St. and 30 th. St.	10"	1'-4"

PIPE SUPPORT DETAIL
FOR ALL VALVE VAULTS
NOT TO SCALE

AS BUILT
Elo 7/16/91

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED J.J.T. DRAWN A.A., R.D.C. CHECKED T.L.W.	APPROVED DATE SUPT., DEPT. OF SANITARY SEWERS DATE GREELEY AND HANSEN, ENGINEERS	⚠ 7/16/91 E.O. As-built as per survey notes and marked prints ⚠ 3/12/84 T.L.W. Rev. Valve Vault Walls ⚠ 3/12/84 T.L.W. Rev. Valve Vault Schedule ⚠ 6/17/74 T.L.W. Added Pay Limits NO. DATE APP. REVISION
SCALE 0 1 2 3 4 5 FT. ½"=1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM 43RD STREET FORCE MAIN	DIVISION 4F4 VALVE VAULT DETAILS CHELSEA ST. AND 30TH ST. Mc BERRY AVE. AND 30TH ST.	PROJ. NO. S 202-70-30D 4F4 SHEET 16 OF 18 DATE AUG. 1972 REV.

189-16

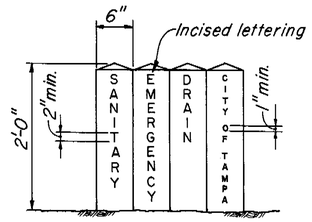


NOTES:

1. Extend 1" copper tubing from Meter Box and connect to existing manhole as directed by the Engineer.
2. Corporation stop shall be brass Model No. H15025 as manufactured by Mueller Co., Model No. 4704 as manufactured by A.Y. Mc Donald Mfg. Co. or equal.
3. Meter Box shall be Type 36T as manufactured by Brooks Products, No. 1 Box as manufactured by Sunshine Industries or equal. Meter Box cover shall be marked "DSS". Locate as directed by the Engineer.
4. Saddle for D.I.P. force main shall be Series 192 saddles as manufactured by Baker Industries, Super Seal as manufactured by Clow Corp. or equal. Tapping saddle straps shall be stainless steel.

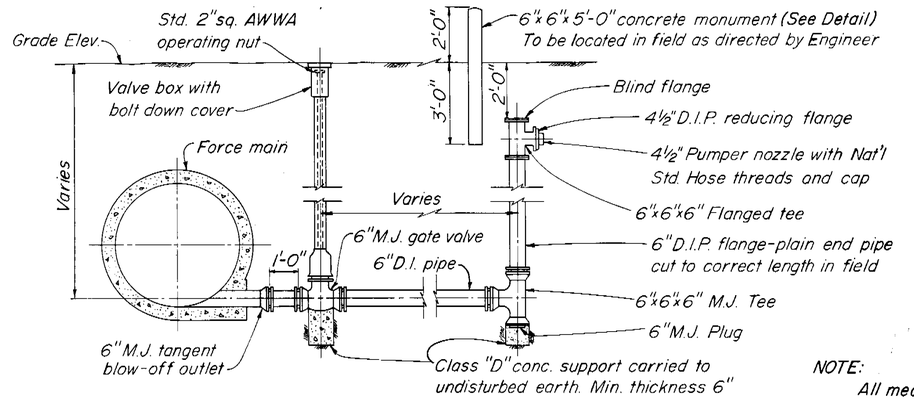
AIR RELEASE SYSTEM ⚠

NOT TO SCALE



DETAIL OF LETTERING ON CONCRETE MONUMENT

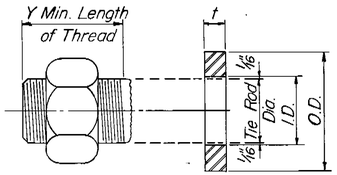
SCALE: 1"=1'-0"



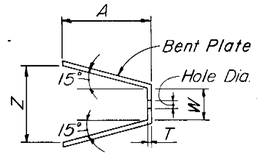
NOTE: All mechanical joints shall be harnessed

EMERGENCY DRAIN AND APPURTENANCES

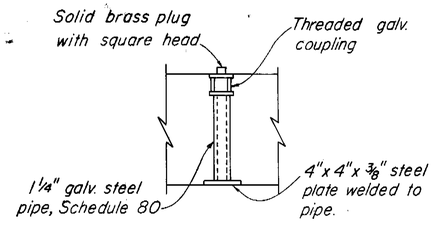
SCALE. 3/8"=1'-0"



NUT AND WASHER DETAIL

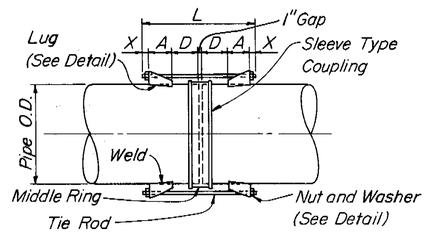


DETAIL OF LUG FOR ONE TIE ROD



LIFTING INSERT DETAIL

NOT TO SCALE



HARNESS ASSEMBLY

PIPE SIZE	WALL THICKNESS	PIPE O.D.	MIDDLE RING COUPLING		HARNESS TIE ROD						COUPLING JOINT LOCATION
			LENGTH	THICKNESS	NO.	DIA.	X	L	Y	THREADS PER IN.	
24"	⅜"	24"	7"	⅜"	2	1"	1⅞"	33"	2¼"	8	STATION 0+65±

TIE ROD DIA.	HARNESS LUGS – MINIMUM DIMENSIONS											NUT DIMENSIONS			WASHER DIMENSIONS		
	D	A	W	Z	T	E	H	H'	V	HOLE DIA.	WELD SIZE	HEIGHT	LONG DIA.	SHORT DIA.	I.D.	O.D.	t
1"	9"	5 1/8"	2⅛"	4 11/16"	⅜"	3¼"	4½"	2"	–	1⅜"	¼"	1"	1⅞"	1⅝"	1⅛"	2⅛"	⅜"

⚠ DETAILS OF HARNESSED SLEEVE-TYPE COUPLING JOINT

NOT TO SCALE

AS BUILT
Elo 7/16/91

⚠	7/16/91	Elo	As built as per survey notes and marked prints	
⚠	3/11/84	TLW	Rev. Air Release System	
⚠	8/28/77	TLW	Rev. Exp. Anchor Note	
⚠	7/24/75	TLW	Revised dimensions	
NO.	DATE	APP.	REVISION	

SCALE
0 2 FT 1" = 1'-0"
0 2 3 4 5 FT 1/2" = 1'-0"
0 2 3 4 5 6 7 FT 3/8" = 1'-0"

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED T.L.W.
DRAWN A.A.
CHECKED T.L.W.

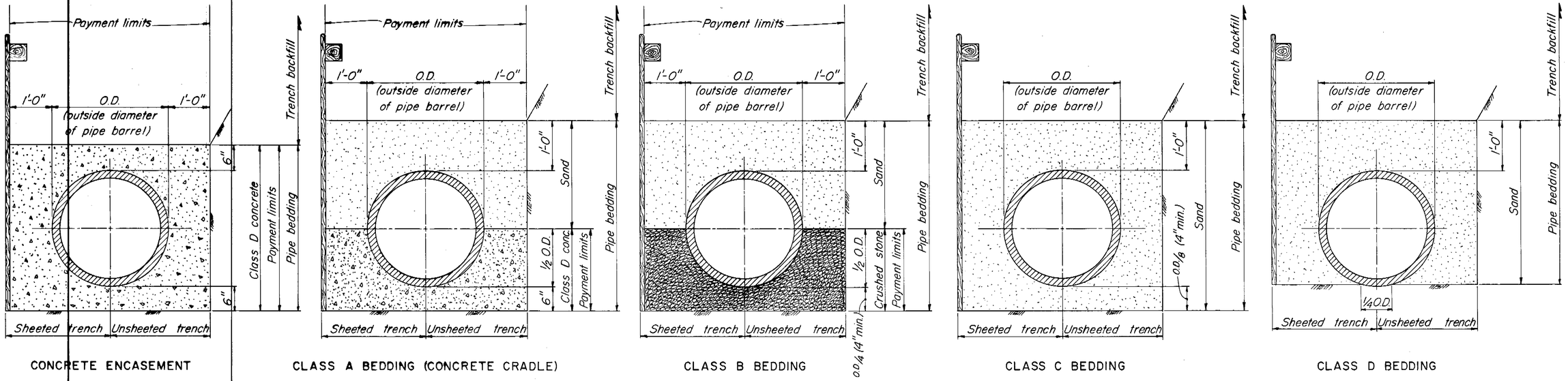
APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

DIVISION 4F4
MISCELLANEOUS DETAILS

PROJ. NO S202-70-30D 4F4
SHEET 17 OF 18
DATE AUG. 1972 REV. 3

189-17



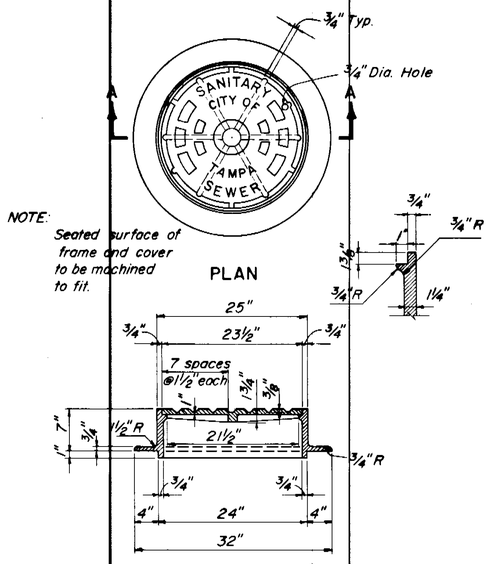
CONCRETE ENCASEMENT | CLASS A BEDDING (CONCRETE CRADLE) | CLASS B BEDDING | CLASS C BEDDING | CLASS D BEDDING

PIPE BEDDING DETAILS

NOT TO SCALE

NOTES: 1. All types of pipe bedding shall extend to undisturbed earth at the sides and bottom of the trench
2. Sand and crushed stone pipe bedding shall be placed and compacted in accordance with Specifications

QUANTITIES FOR PAYMENT FOR ADDITIONAL PIPE BEDDING MATERIALS ORDERED IN WRITING BY THE ENGINEER																					
NOMINAL INSIDE PIPE DIAMETER (INCHES)	6	8	10	12	14	15	16	18	20	21	24	27	30	36	42	48	54	60	66	72
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CONCRETE ENCASEMENT	0.141	0.167	0.191	0.216	0.229	0.256	0.252	0.299	0.300	0.340	0.383	0.427	0.472	0.588	0.690	0.797	0.909	1.027	1.150	1.279
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CLASS A BEDDING (CONCRETE CRADLE)	0.071	0.084	0.096	0.108	0.115	0.128	0.126	0.150	0.150	0.170	0.192	0.214	0.236	0.294	0.345	0.399	0.455	0.514	0.575	0.640
CUBIC YARDS OF CRUSHED STONE PER LINEAR FOOT OF PIPE IN CLASS B BEDDING	0.055	0.066	0.078	0.088	0.094	0.111	0.108	0.143	0.143	0.173	0.207	0.243	0.280	0.381	0.475	0.578	0.690	0.810	0.939	1.078

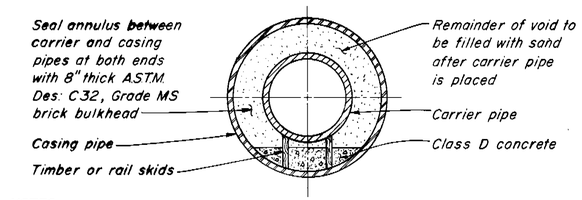


CAST IRON MANHOLE FRAME & COVER

FOR MANHOLES ON SEWERS 24" OR LESS IN DIAMETER

Approx. Wt.= 380#

SCALE: 1"= 1'-0"



NOTES:
1. All casing pipes shall be welded steel pipe conforming to A.S.T.M. Des. A139 or tongue and groove reinforced concrete pipe conforming to A.S.T.M. Des. C76, class V.
2. Minimum diameter for manually excavated casing pipes shall be 36 inches.

CORRESPONDING CARRIER AND CASING PIPE SIZES ⚠																				
NOMINAL INSIDE DIAMETER OF CARRIER PIPE (INCHES)	6	8	10	12	14	15	16	18	20	21	24	27	30	36	42	48	54	60	66	72
MINIMUM INSIDE DIAMETER OF CASING PIPE (INCHES)	18	21	24	26	28	30	30	34	36	36	45	45	51	60	66	75	84	90	96	102

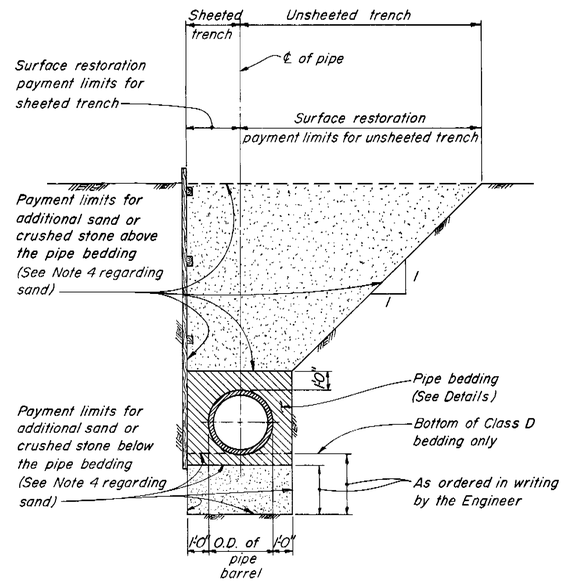
DETAIL OF JACKED CROSSINGS

NOT TO SCALE

AS BUILT
Eto 7/16/91

NOTES FOR PAYMENT:

1. Payment for additional crushed stone or class D concrete pipe bedding materials will be made only for pipe bedding not shown on the Plans and ordered in writing by the Engineer.
2. Payment for surface restoration will be made for the actual quantities, as determined by the Engineer, of surface restored within the payment limits shown.
3. Payment for additional sand or crushed stone for trench stabilization, ordered in writing by the Engineer, will be made for the actual compacted volume, as determined by the Engineer, of sand or crushed stone placed within the payment limits shown.
4. Contractor shall use all surplus sand, approved as suitable, from excavations in this Contract prior to supplying sand from other sources. Payment for additional sand will be made only for sand supplied from sources other than excavations in this Contract. See Specifications for materials requirements.



PAYMENT LIMITS FOR SURFACE RESTORATION AND ADDITIONAL SAND OR CRUSHED STONE FOR TRENCH STABILIZATION

NOT TO SCALE

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED TLW
DRAWN AA
CHECKED TLW

APPROVED
DATE
SUPT., DEPT. OF SANITARY SEWERS
DATE
GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
⚠	7/16/91	Eto	As built notes & add marked prints.
⚠	3/12/88	TLW	Rev. Dia. of 16" casing pipe
⚠	7/27/82	TLW	Rev. Entire Sheet

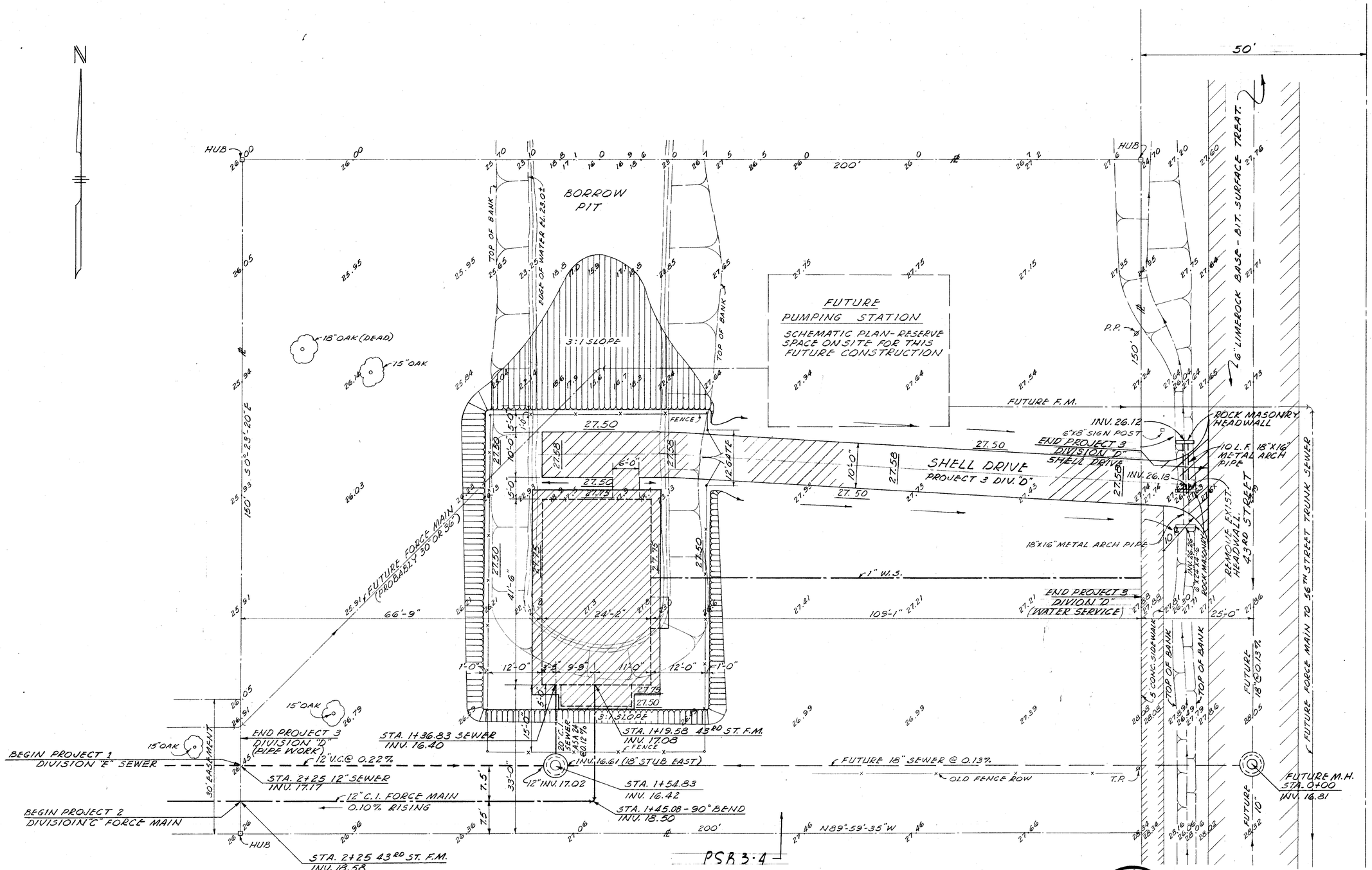
SCALE: 0 1 2 FT 1"= 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
43RD STREET FORCE MAIN

⚠ DIVISION 4F4
MISCELLANEOUS STANDARD DETAILS

PROJ. NO. S 202-70-30D 4F4
SHEET 18 OF 18
DATE AUG. 1972 REV. 2

189-18



LEGEND

EXISTING ELEV. 26.39

FINISHED GRADE 27.50

3:1 SLOPE (FILL)

GROUND TO SLOPE AWAY FROM STRUCTURE TOWARD NATURAL DRAINAGE.

LOCATION PLAN
43RD STREET PUMPING STATION

SCALE: 1" = 10'

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C.E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION
LOCATION PLAN

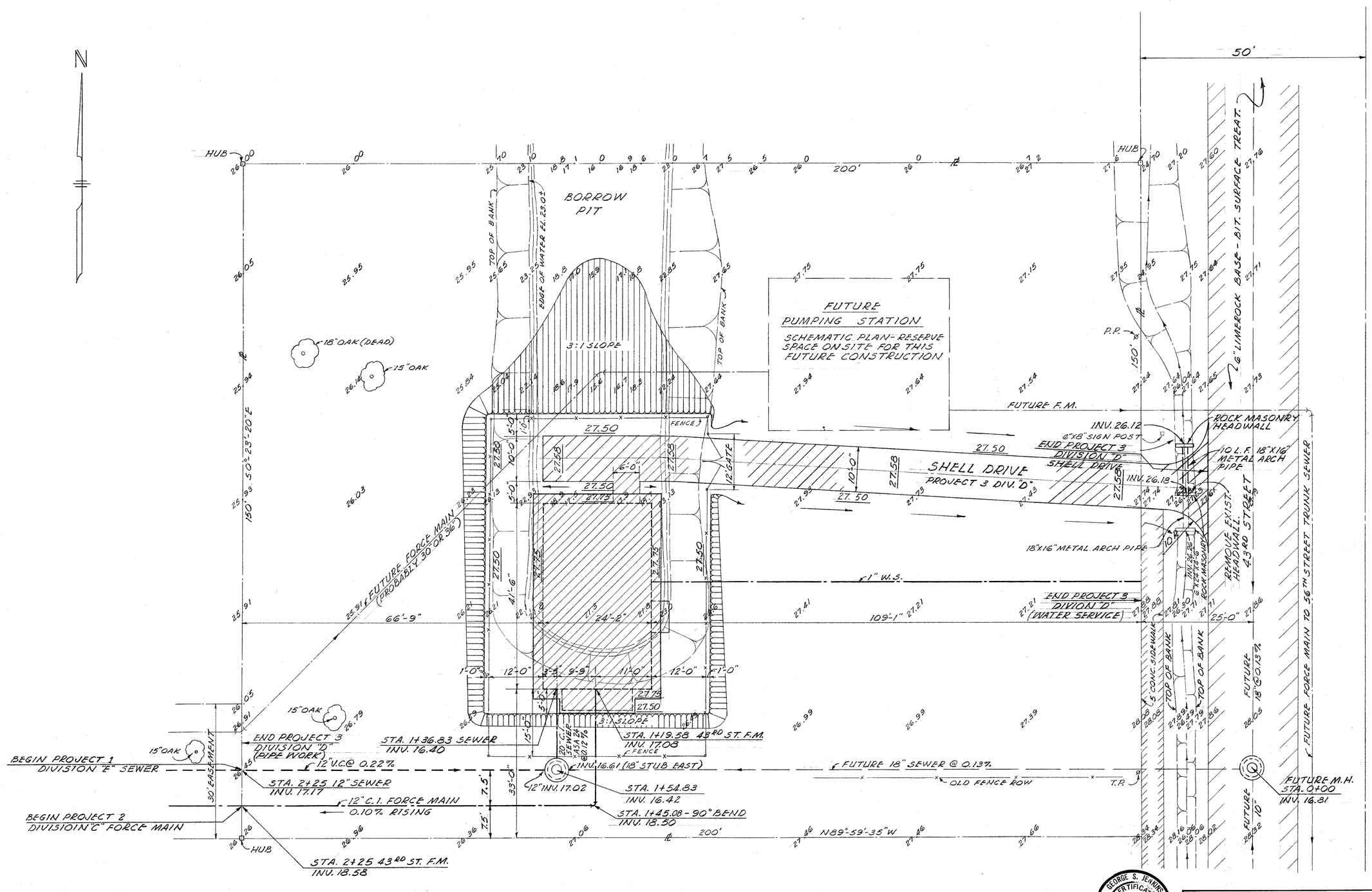
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. H.N.P.
DRN. R.N.C.
CKD. H.N.P.
SCALE AS SHOWN
DATE JAN. 1962

PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 20 OF 29.

87-20



LEGEND

EXISTING ELEV. 26.33

FINISHED GRADE 27.50

3:1 SLOPE (FILL)

GROUND TO SLOPE AWAY FROM STRUCTURE TOWARD NATURAL DRAINAGE.

LOCATION PLAN
43RD STREET PUMPING STATION

SCALE: 1" = 10'

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C. E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION
LOCATION PLAN

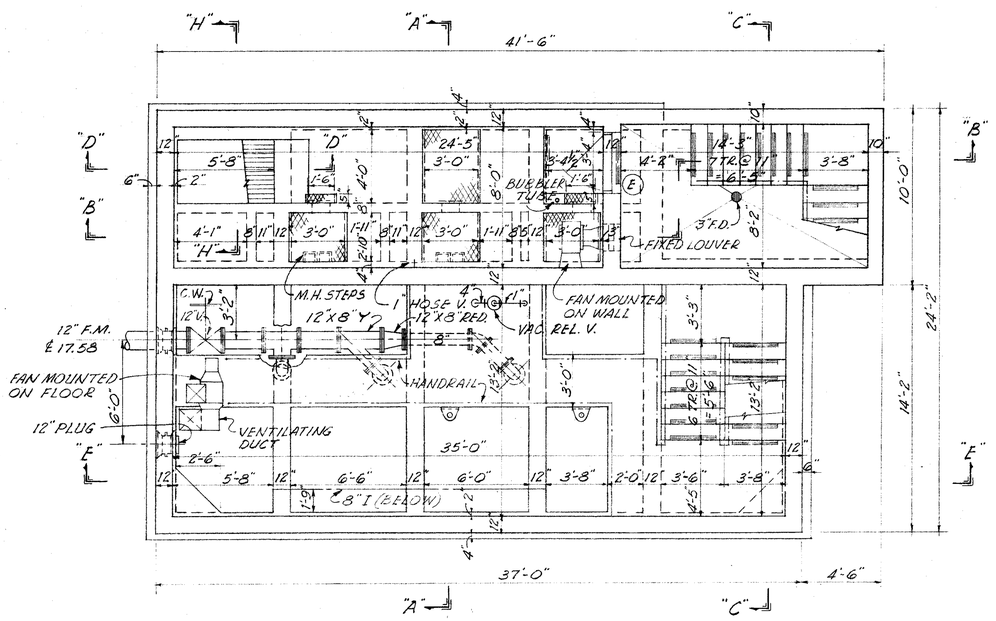
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS, TAMPA, FLORIDA — ASSOCIATE ENGINEERS, ATLANTA, GEORGIA

DES. H.N.R.
DRN. R.N.C.
CKD. H.N.R.
SCALE AS SHOWN
DATE JAN. 1962

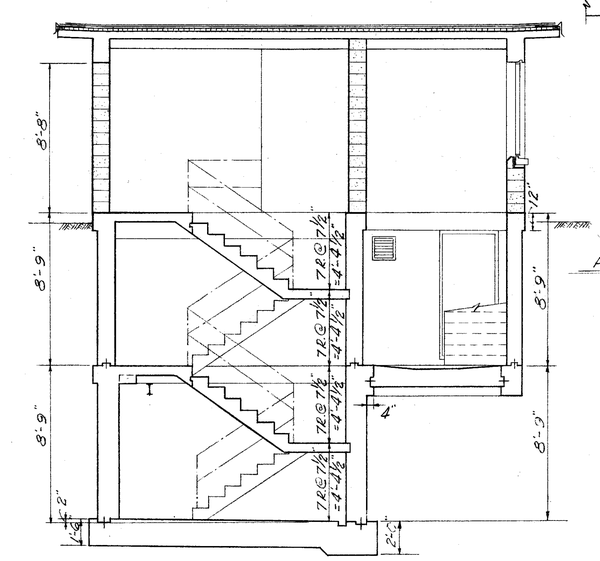
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 20 OF 29

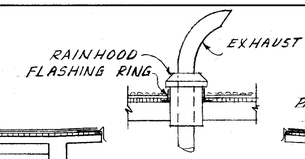
87-20A

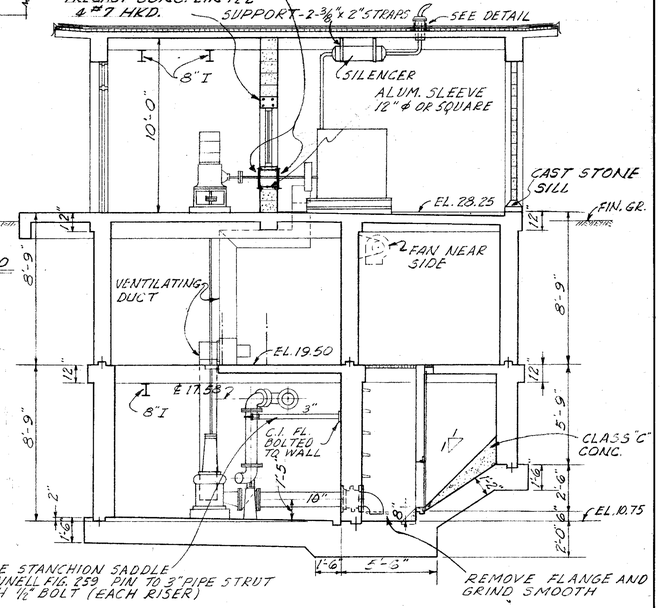


INTERMEDIATE PLAN
SCALE: 1/4"=1'-0"

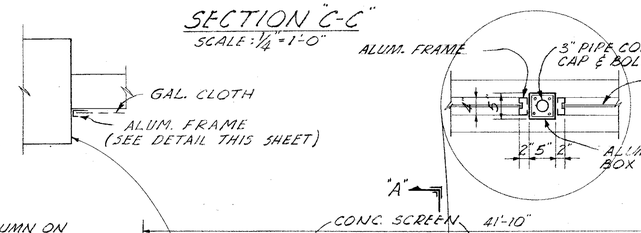


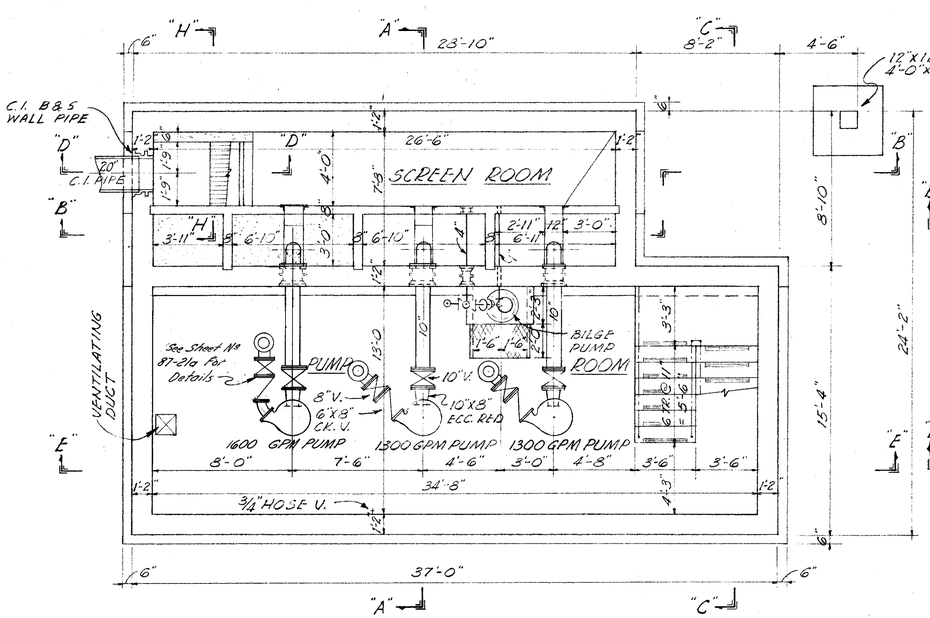
SECTION "C-C"
SCALE: 1/4"=1'-0"



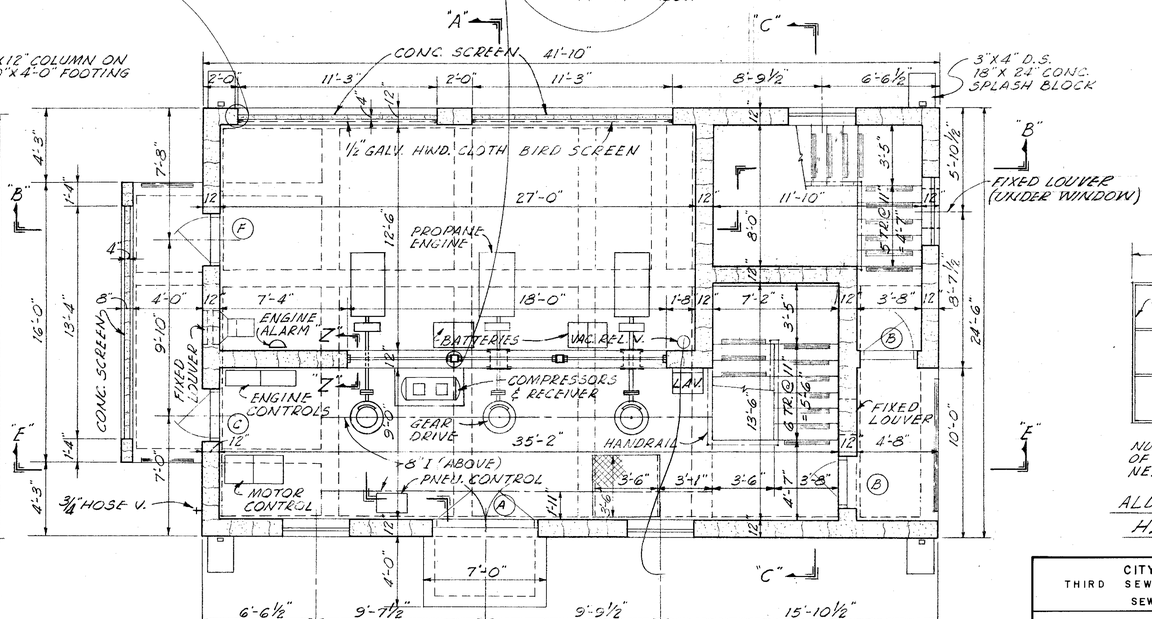


SECTION "A-A"
SCALE: 1/4"=1'-0"

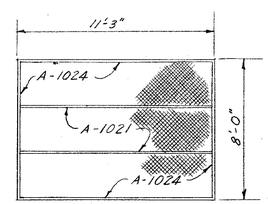




FOUNDATION PLAN
SCALE: 1/4"=1'-0"



ENTRANCE FLOOR PLAN
SCALE: 1/4"=1'-0"



NUMBERS ARE CAT. NUMBERS OF WILLIAM L. BONNELL CO., NEWNAN, GA.

ALUMINUM FRAME FOR HARDWARE CLOTH

D.E. DRUMMOND, JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

GEORGE S. JENNINGS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43 RD. STREET PUMPING STATION
EQUIPMENT & ARCHITECTURAL-PLANS

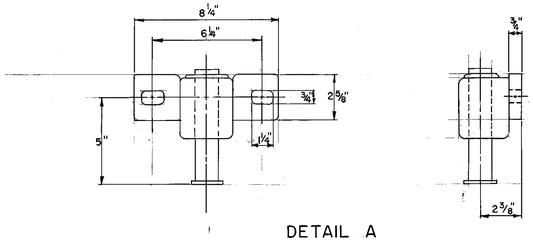
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. H.N.R.
DRN. R.N.C.
CKD. H.N.R.
SCALE AS SHOWN
DATE JAN. 1962

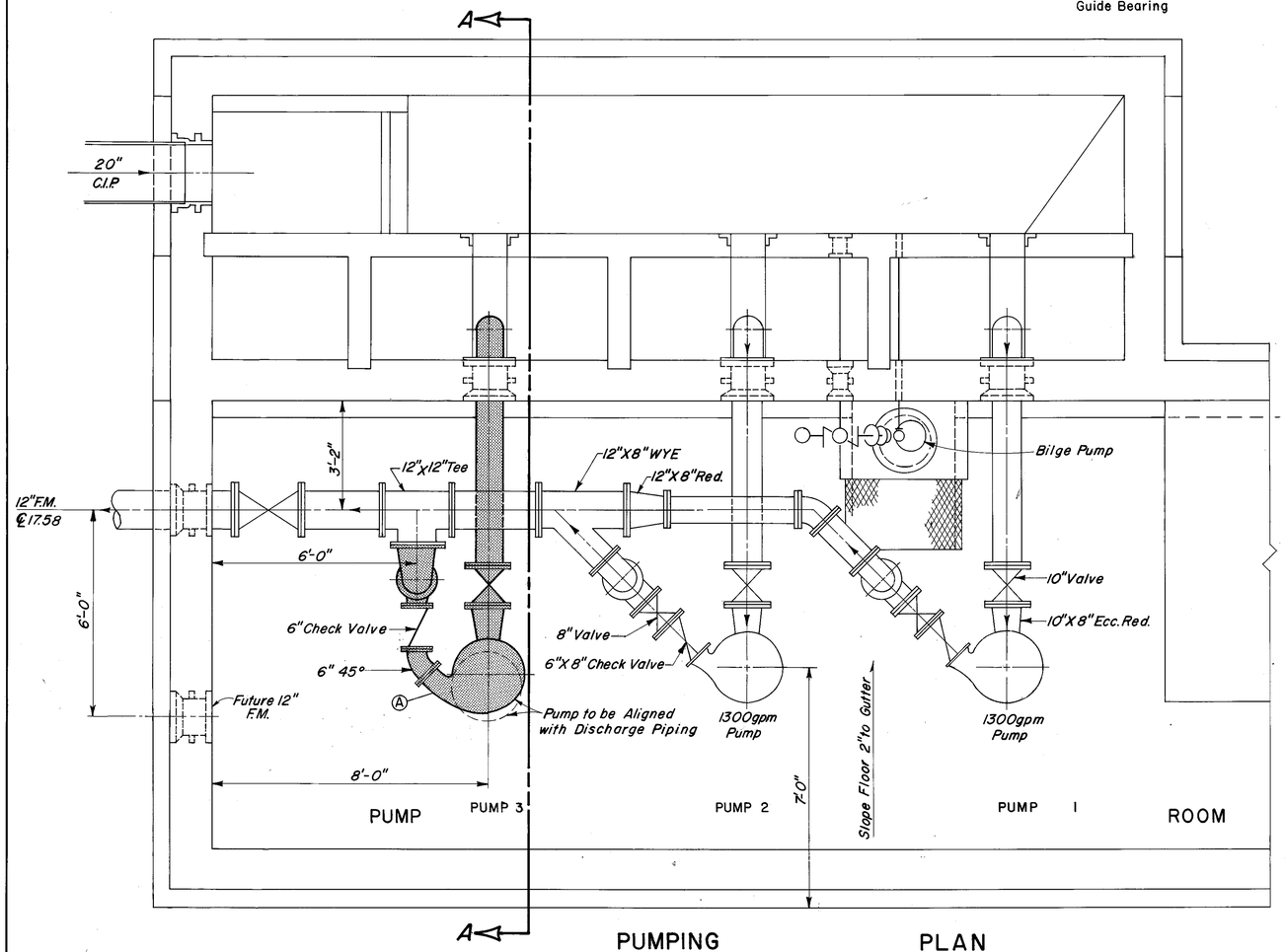
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 21 OF 29

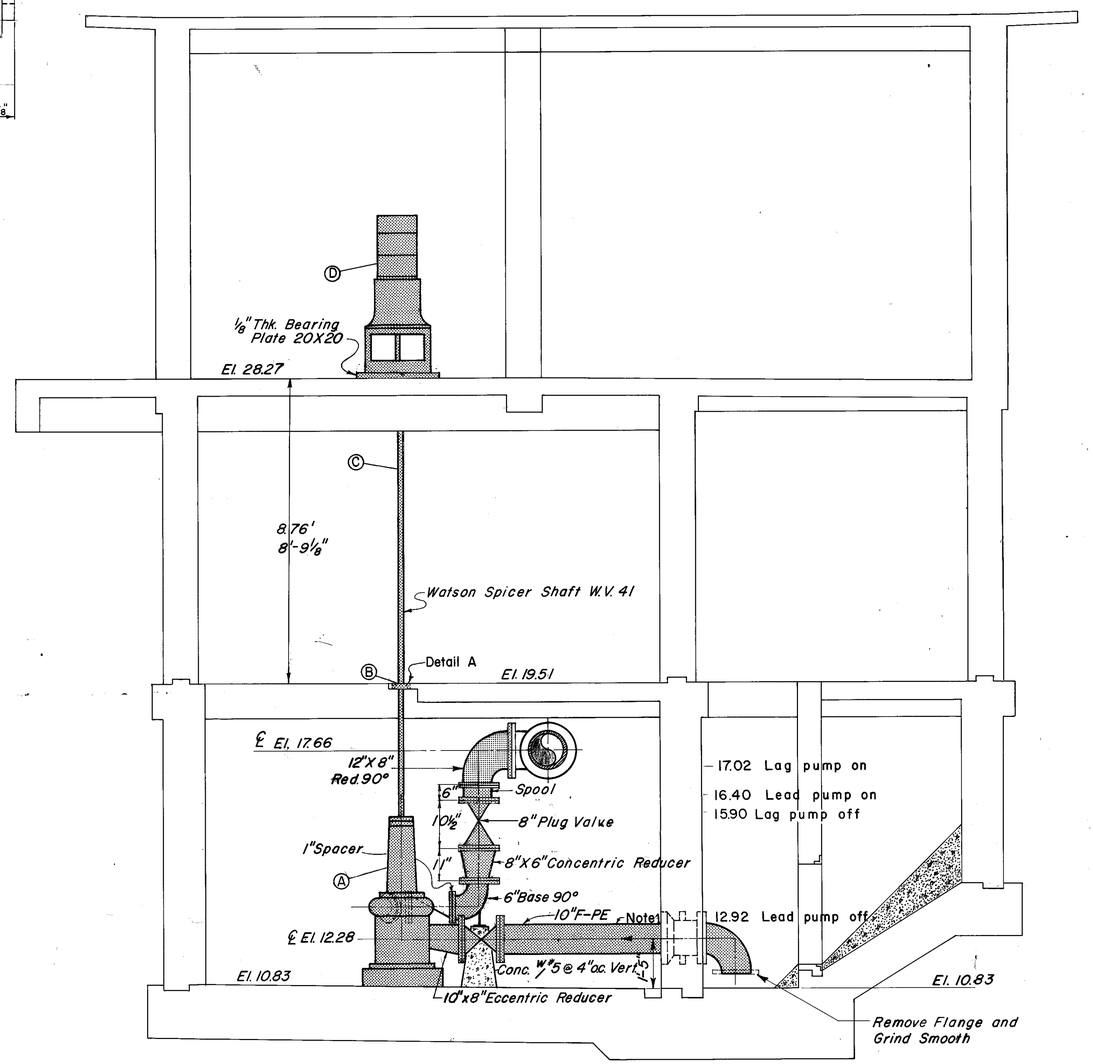
87-21



DETAIL A
Guide Bearing



PUMPING PLAN



SECTION "A-A"

= NEW CONSTRUCTION

A,B,C,D To be Included in Bid for Pump.

A - PUMP & BASE
B - GUIDE BEARING
C - INTERMEDIATE SHAFT
D - PUMP MOTOR & BASE

W.O. 2498

NOTE:
1. 10"F-PE. C.I. Suction Pipe to be Cut to fit in Field.
2. Pumps #1 & #2 will alternate as Lead Pump.

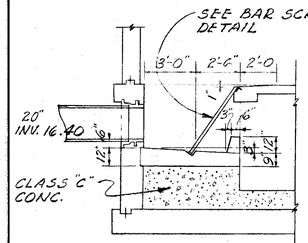
AS-BUILT PLAN
This drawing reflects actual conditions according to const. records as of May 14, 1976.
RMG

DEPARTMENT of SANITARY SEWERS
CITY of TAMPA, FLORIDA
RENEWAL & REPLACEMENT
SEWER IMPROVEMENTS

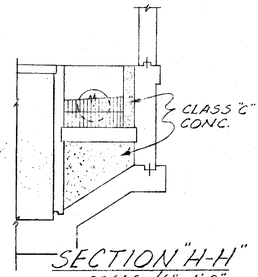
ADDITION TO 43rd ST. PUMPING STATION

DES: E.J.B.	SCALE	SHEET
DRN: MCH	1/2" = 1'-0"	
CK'D: E.J.B.		OF
DATE MAY, 1974		

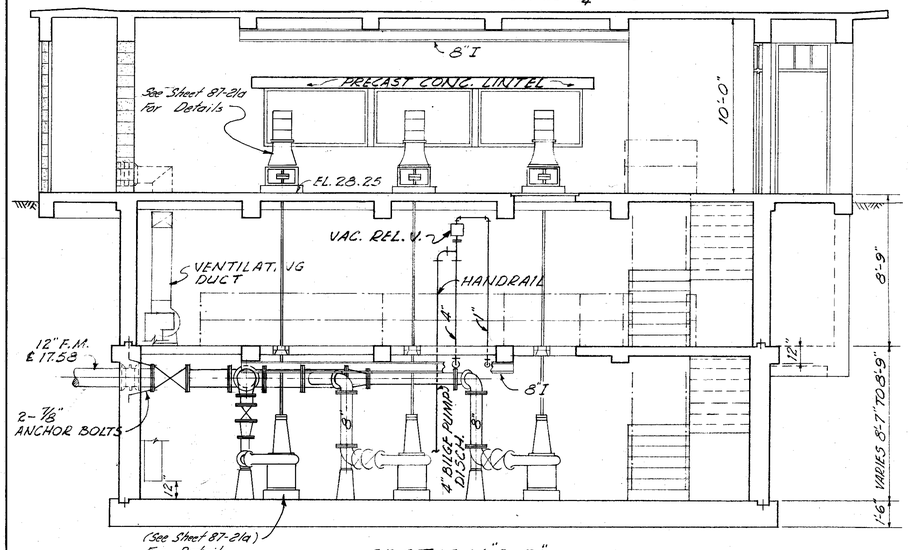
87-219



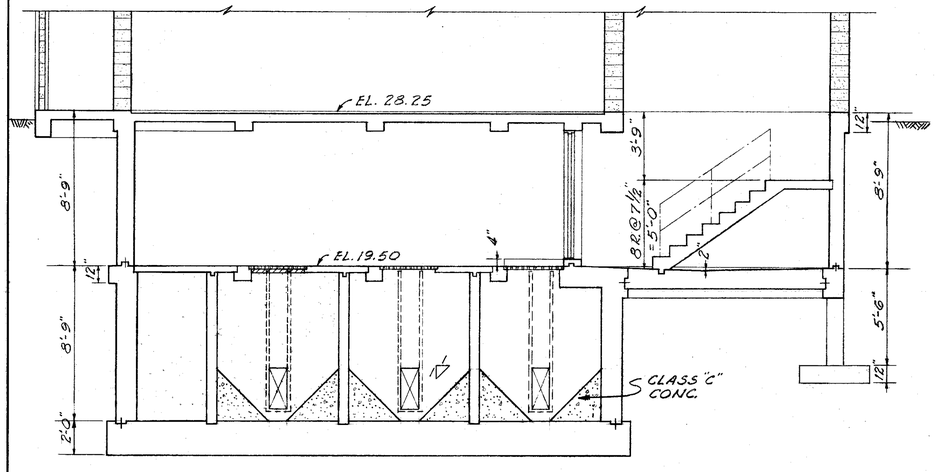
SECTION "D-D"
SCALE: 1/4"=1'-0"



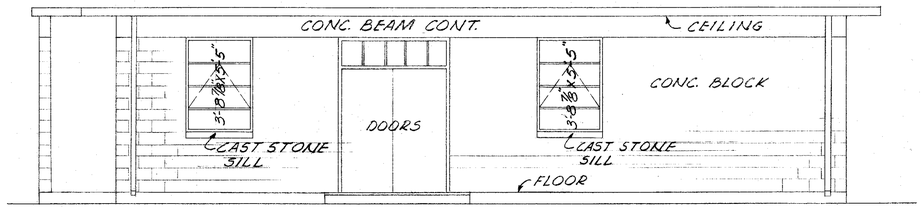
SECTION "H-H"
SCALE: 1/4"=1'-0"



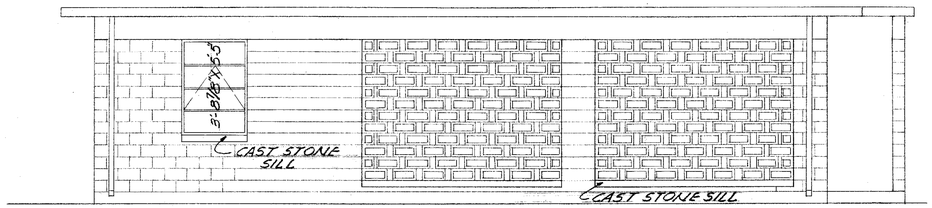
SECTION "E-E"
SCALE: 1/4"=1'-0"



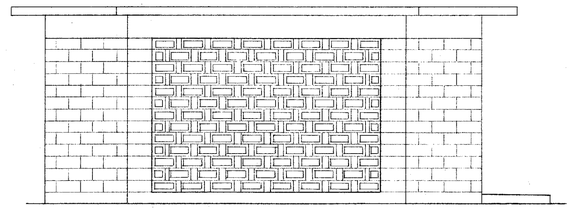
SECTION "B-B"
SCALE: 1/4"=1'-0"



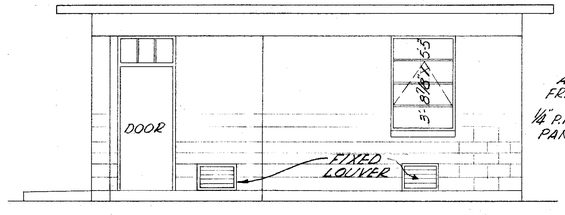
FRONT ELEVATION
SCALE: 1/4"=1'-0"



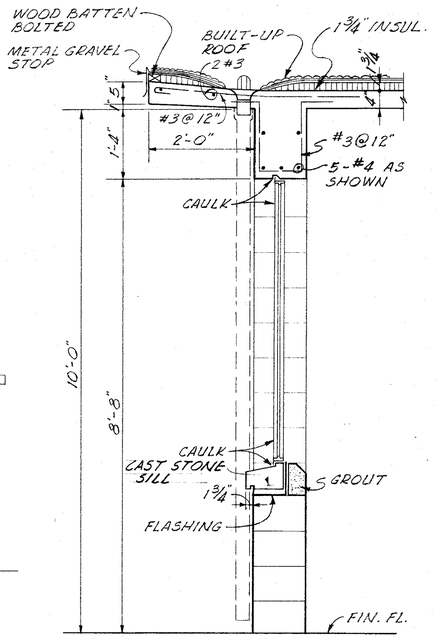
REAR ELEVATION
SCALE: 1/4"=1'-0"



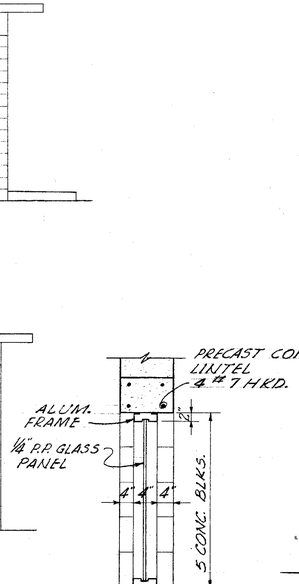
LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"



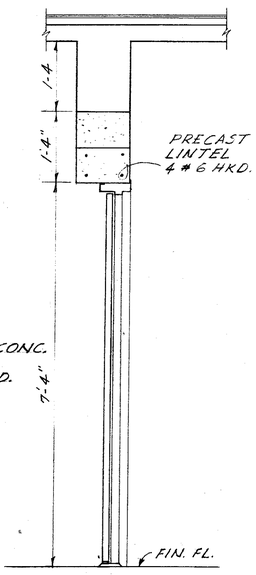
RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"



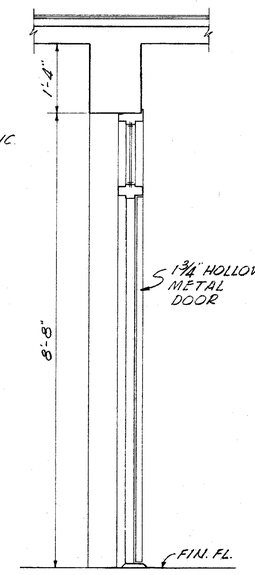
TYPICAL WALL SECTION
SCALE: 3/4"=1'-0"



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



SECTION DOOR (F & C)



SECTION DOOR (A & B)

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

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C.E. DRUMMOND, JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43 RD. STREET PUMPING STATION
EQUIPMENT & ARCHITECTURAL-SECTIONS

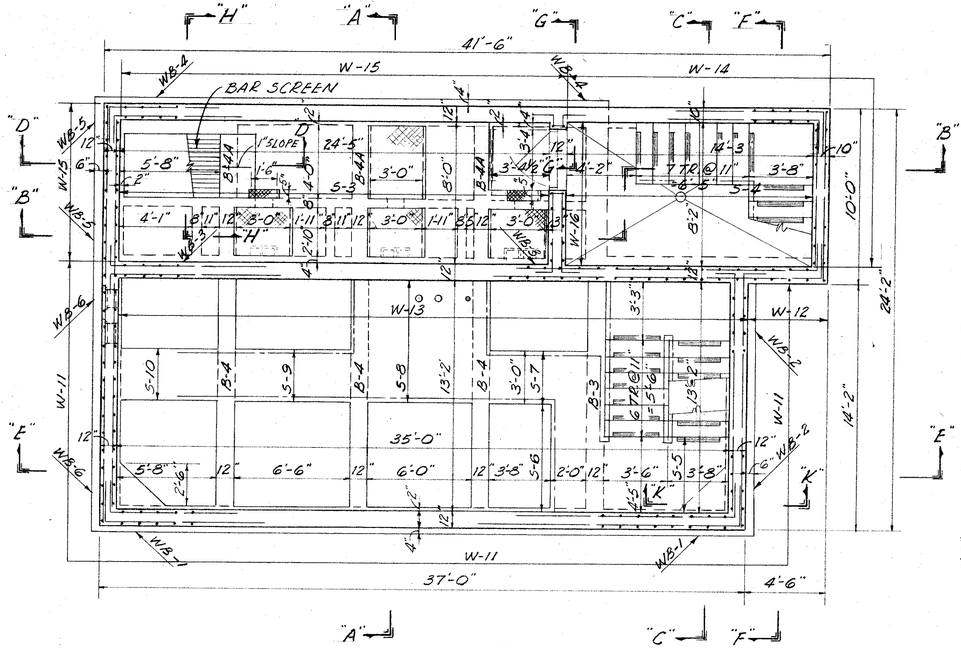
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. H.N.R
DRN. R.N.S
CKD. H.N.R
SCALE AS SHOWN
DATE JAN. 1962

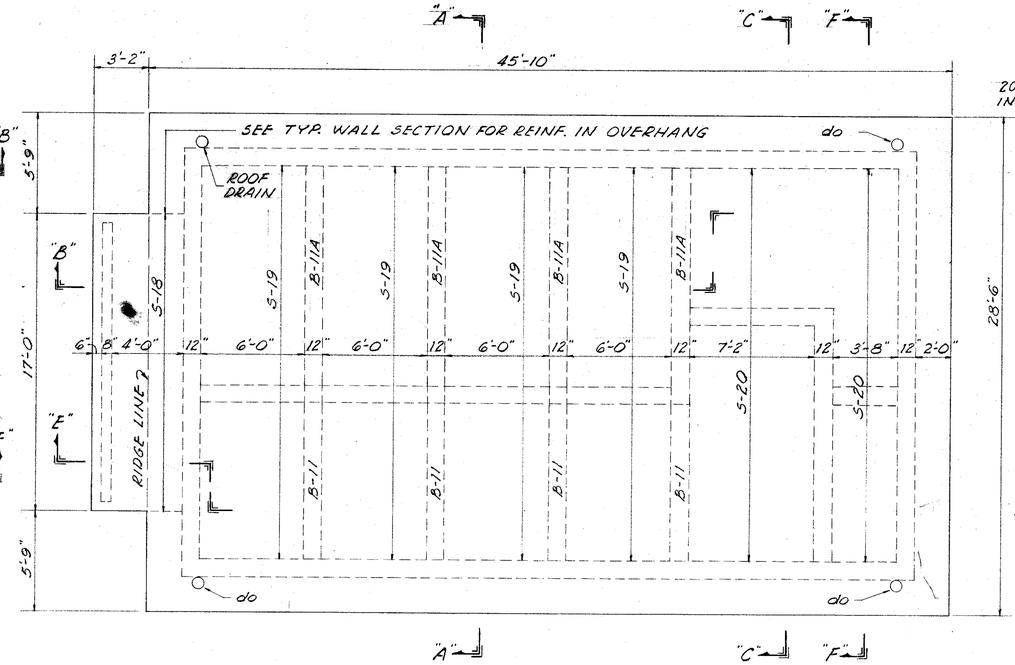
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 22 OF 29

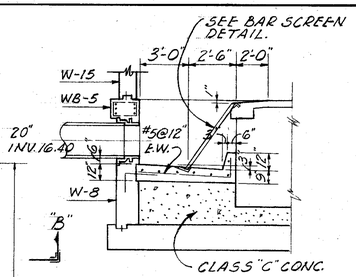
87-22



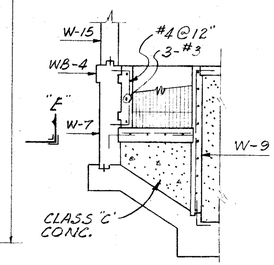
INTERMEDIATE PLAN
SCALE: 1/4"=1'-0"



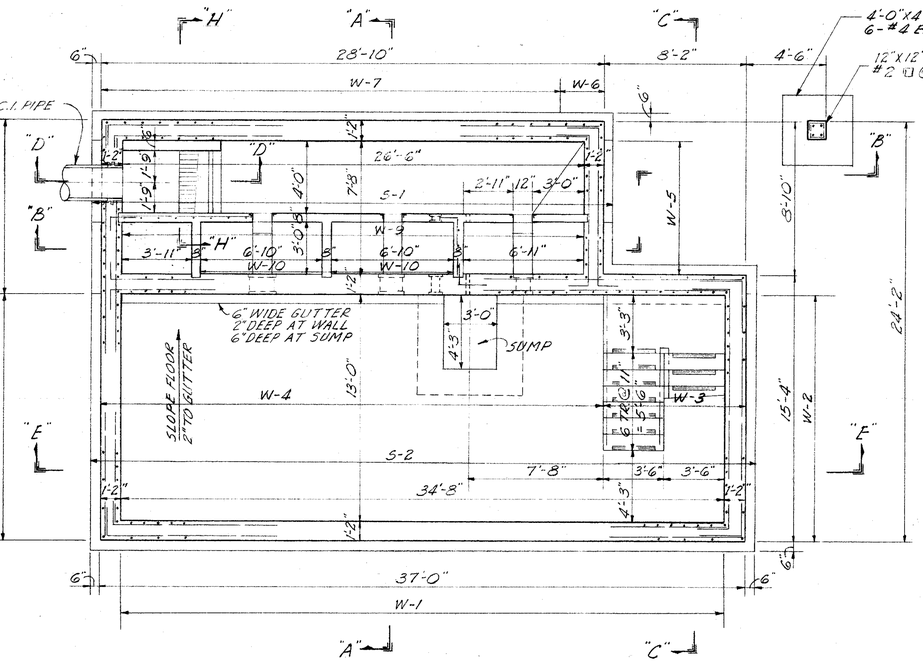
ROOF PLAN
SCALE: 1/4"=1'-0"



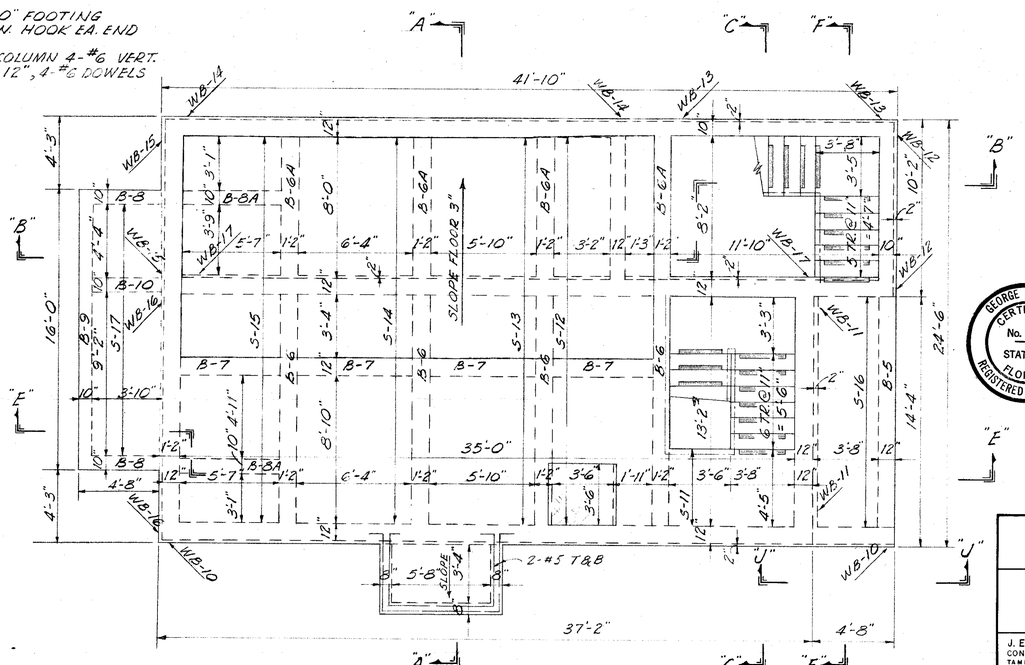
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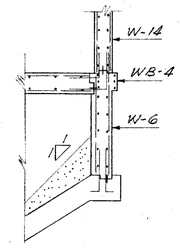
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SCALE: 1/4"=1'-0"



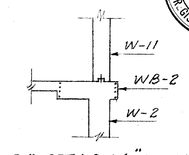
FOUNDATION PLAN
SCALE: 1/4"=1'-0"



ENTRANCE FLOOR PLAN
(SEE EQUIPMENT PLANS FOR SUPERSTRUCTURE)
SCALE: 1/4"=1'-0"



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



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

GEORGE S. JENKINS
CERTIFICATE
No. 6858
STATE OF
FLORIDA
REGISTERED ENGINEER

C.E. DRUMMOND, JR.
CERTIFICATE
No. 8983
STATE OF
FLORIDA
REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43 RD. STREET PUMPING STATION
STRUCTURAL—PLANS & SECTIONS

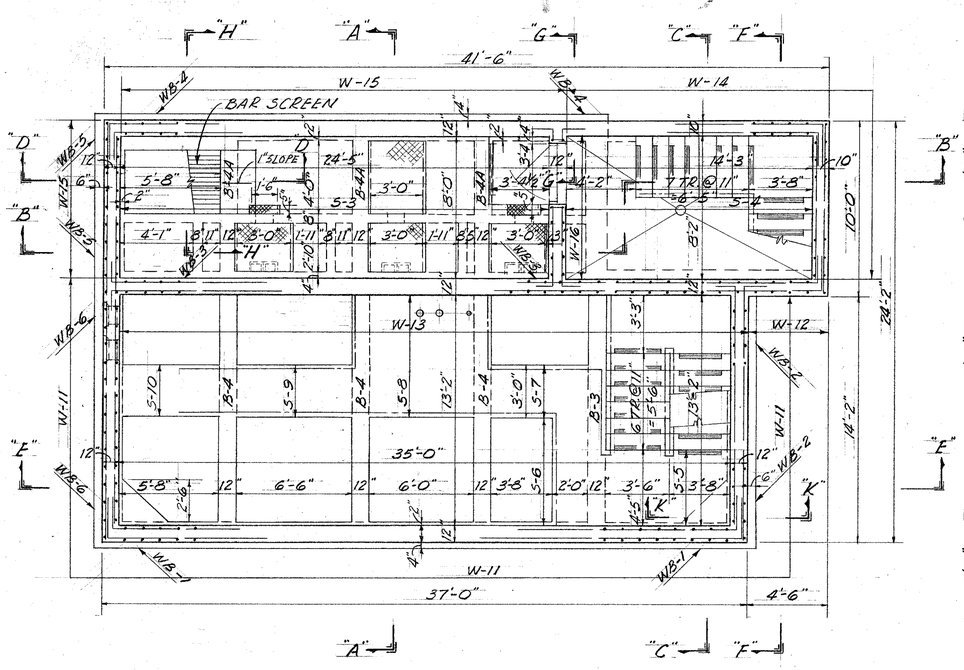
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. W.N.P.
DRN. E.N.C.
CKD. W.N.P.
SCALE AS SHOWN
DATE JAN. 1962

PROJECT 3
DIVISION D
SUBDISTRICT A-10

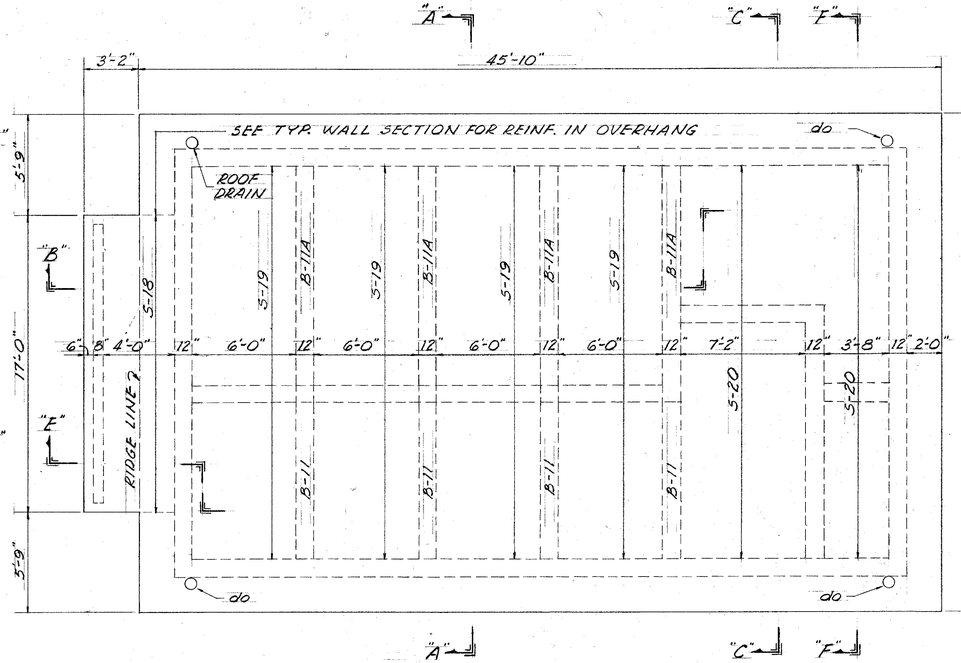
SHEET 23 OF 29

87-23



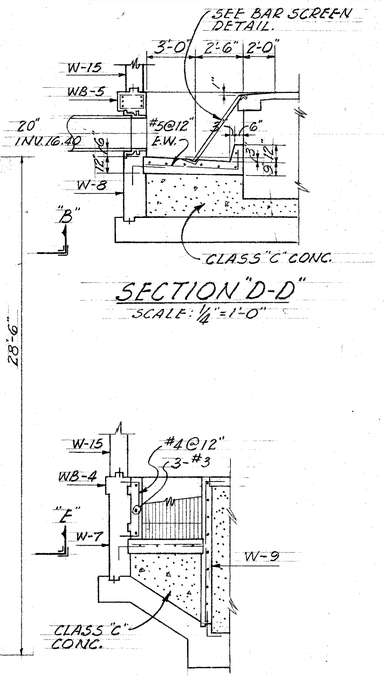
INTERMEDIATE PLAN

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



ROOF PLAN

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

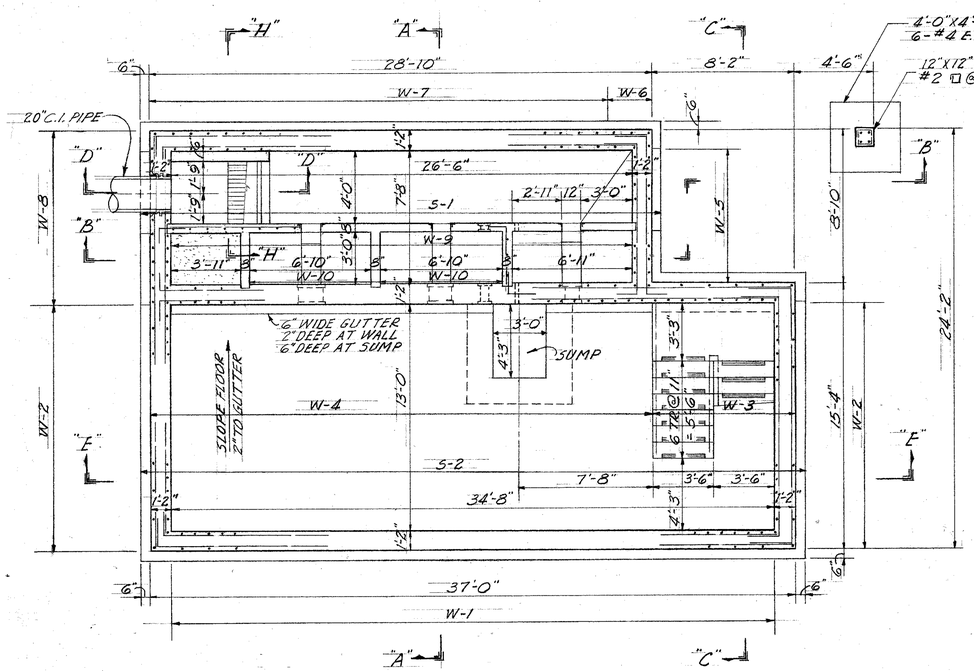


SECTION "D-D"

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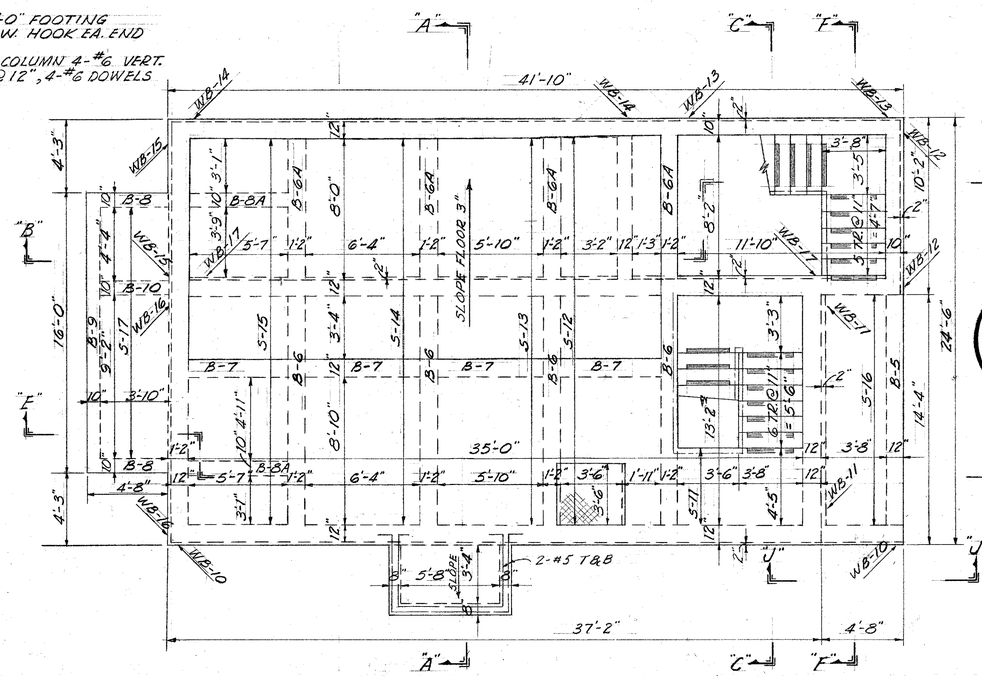
SECTION "H-H"

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



FOUNDATION PLAN

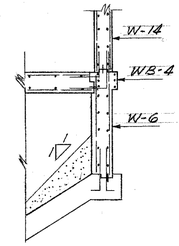
SCALE: 1/4"=1'-0"



ENTRANCE FLOOR PLAN

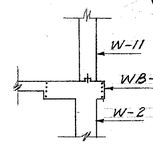
(SEE EQUIPMENT PLANS FOR SUPERSTRUCTURE)

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



SECTION "G-G"

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



SECTION "K-K"

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

C.E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA

THIRD SEWER REVENUE BOND PROGRAM

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43 RD. STREET PUMPING STATION

STRUCTURAL-PLANS & SECTIONS

J.E. GREINER COMPANY — CONSULTING ENGINEERS, TAMPA, FLORIDA

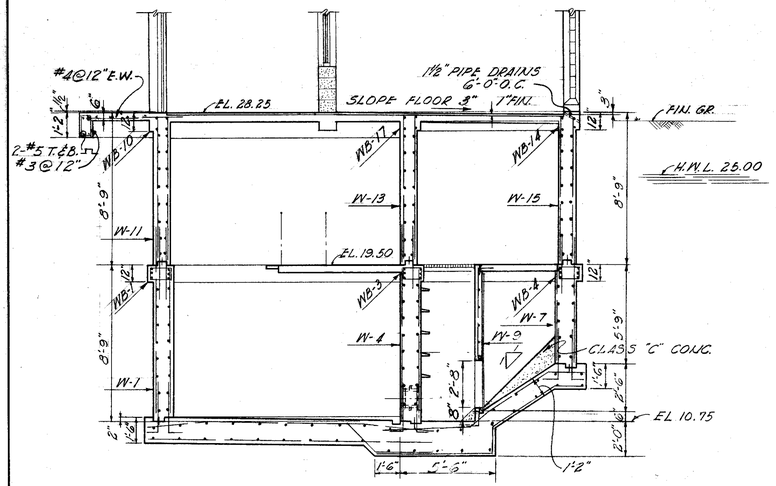
WIEDEMAN & SINGLETON, ENGINEERS — ASSOCIATE ENGINEERS, ATLANTA, GEORGIA

DES. W.N.P.
DRN. R.N.C.
CHD. W.N.P.
SCALE AS SHOWN
DATE JAN. 1962

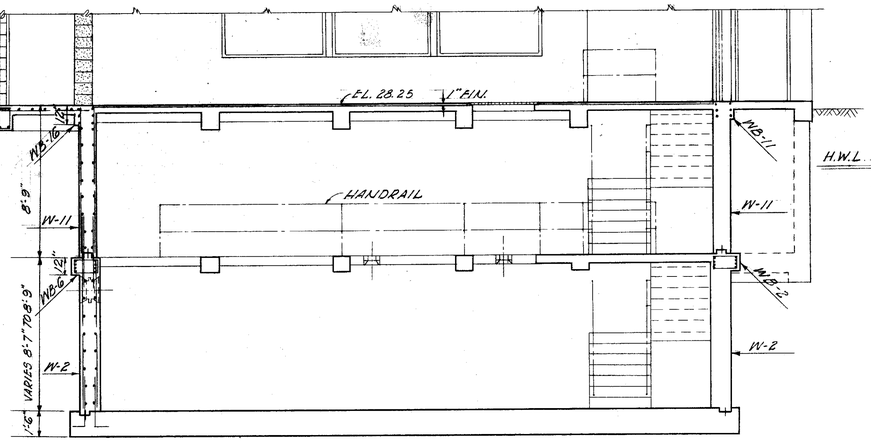
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 23 OF 29

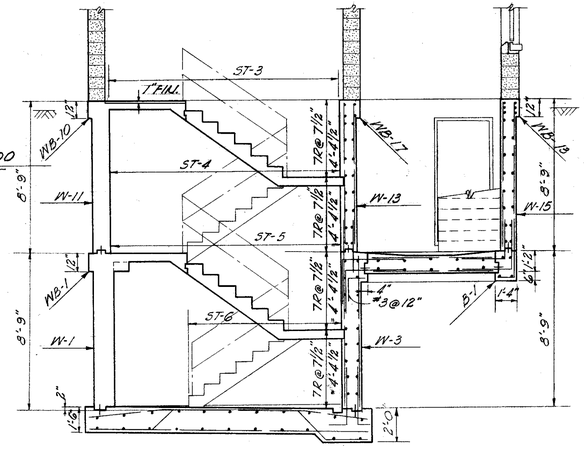
87-23A



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



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



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

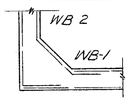
NOTE: WATERSTOPS REQUIRED IN ALL CONSTRUCTION JOINTS IN EXTERIOR WALLS AND WALL BETWEEN SCREEN ROOM AND PUMP ROOM

WALL SCHEDULE

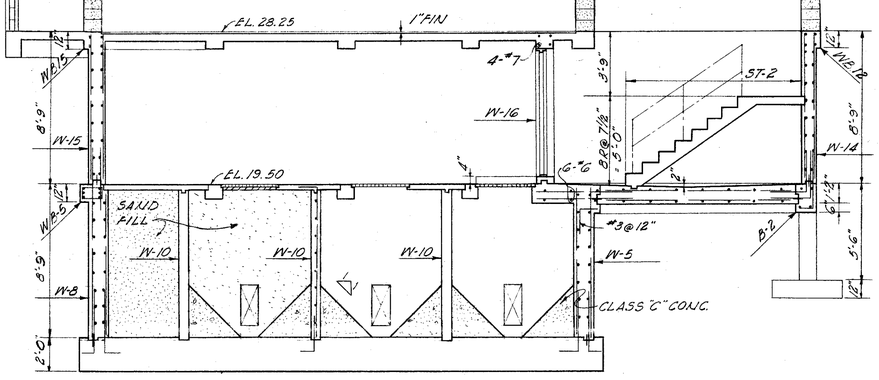
MARK	DOWELS	VERTICAL	HORIZONTAL	REMARKS
W-1	#5@9"E.F.	#5@9" I.F. #5@18" O.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-2	#5@9"E.F.	#5@9" I.F. #5@18" O.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-3	#5@9"E.F.	#5@9" I.F. #5@18" O.F.	#4@12"E.F.	EXTEND I.F. BARS INTO WALL ABOVE FOR DOWELS. SEE SEC. "C-C"
W-4	#5@9"E.F.	#5@9" PUMP RM. F. #5@18" SCR. RM. F.	#4@12"E.F.	EXTEND PUMP RM. F. BARS INTO WALL ABOVE FOR DOWELS.
W-5	#5@9"E.F.	#5@9" E.F.	#4@12"E.F.	
W-6	#5@12"E.F.	#5@12"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-7	#5@12"E.F.	#6@12"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-8	#5@9"E.F.	#5@9"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-9	#5@9"CENTER	#5@9"CENTER	#4@12"	KEY AND DOWEL INTO BOTTOM AND MAIN WALLS. SEE SEC. "W-W"
W-10	#4@12"CENTER	#4@12"CENTER	#4@12"	KEY AND DOWEL INTO BOTTOM AND MAIN WALLS SEE SEC. "B-B"
W-11	#4@12"E.F.	#4@12"E.F.	#4@12"E.F.	
W-12	#4@12"O.F.	#4@12"E.F.	#4@12"E.F.	SEE SEC. "F-F"
W-13	#5@9"SCR. RM. F.	#4@12"E.F.	#4@12"E.F.	
W-14	#4@12"O.F.	#4@12"E.F.	#4@12"E.F.	SEE SEC. "A-F"
W-15	#5@12"I.F.	#4@12"E.F.	#4@12"E.F.	
W-16	#4@12"E.F.	#4@12"E.F.	#4@12"E.F. & #7 TOP	SEE SEC. "B-B"

WALL BEAM SCHEDULE

MARK	BARS	TIES @	REMARKS
WB-1	3-#6 E.F.	#3@12"	SEE SKETCH
WB-2	4-#7 E.F.	#3@12"	
WB-3	3-#6 E.F.	#3@12"	
WB-4	3-#5 E.F.	#3@12"	
WB-5	3-#7 E.F.	#3@12"	
WB-6	4-#7 E.F.	#3@12"	BEND INTO WB-1 LIKE WB-2
WB-10	2-#5 E.F.		
WB-11	3-#5 E.F.		
WB-12	2-#6 E.F.		
WB-13	3-#6 E.F.		
WB-14	2-#5 E.F.		
WB-15	2-#6 E.F.		
WB-16	3-#5 E.F.		
WB-17	2-#5 E.F.		



SKETCH



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

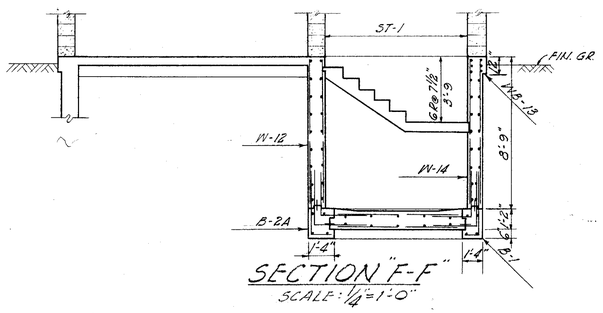
SLAB SCHEDULE

MARK	THICK	TOP	TRUSS	BOT.	TEMP.	REMARKS
S-1		#7@18"		#7@18"	#6@18"E.F.	SEE SEC. "A-A"
S-2		#8@18"	#8@18"	#8@18"	#6@18"E.F.	SEE SEC. "A-A"
S-3	4"			#3@9"	#3@9"	
S-4	14"	#5@18"		#5@18"	#5@18"E.F.	DOWELS #5@18"E.F. & EDGES SEE SEC. "B-B" & "C-C"
S-5	6"		#4@16"	#4@16"	CONT. STAIR REINF. THRU S-5	
S-6	6"	3-#4 ⊐			#3@9"	
S-7	6"	5-#4 IN CENTER			#3@9"	
S-8	6"	5-#4 IN CENTER			#3@9"	
S-9	6"	5-#4 IN CENTER			#3@9"	
S-10	6"	5-#4 IN CENTER			#3@9"	
S-11	7"*	#4@16"	#4@16"		CONT. STAIR REINF. THRU S-11	
S-12	8"*	#4@10"	#4@10"		#4@12"E.F.	
S-13	8"*	#4@10"	#4@10"		#4@12"E.F.	
S-14	6"*	#4@10"	#4@10"		#4@12"E.F.	
S-15	8"*	#4@10"	#6@10"		#4@12"E.F.	
S-16	6"	#4@12" IN CENTER			3-#4	
S-17	6"	#3@12"		#3@12"	#3@12"E.F.	
S-18	6"&4"	#3@8" IN CENTER			#3@12"	
S-19	4"	#3@8" IN CENTER			#3@12"	
S-20	4"	#3@6" IN CENTER			#3@6"	

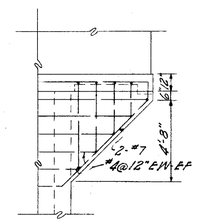
* INCLUDES 1" FL. FIN. WHERE SHOWN

STAIR SCHEDULE

MARK	THICK	LONG BARS	SHORT BARS
ST-1	6"	5-#4	2-#3 ⊐ EA. TRD.
ST-2	6"	6-#4	2-#3 ⊐ EA. TRD. #3@12"E.F. & DOWELS AT LANDING
ST-3	6"	8-#5	2-#3 ⊐ EA. TRD. #3@12"E.F. & DOWELS AT LANDING
ST-4	6"	8-#5	2-#8 EA. TRD.
ST-5	6"	8-#5	2-#3 ⊐ EA. TRD #3@12"E.F. & DOWELS AT LANDING
ST-6	6"	6-#5	2-#8 EA. TRD.



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



12" BRACKET
SECTION "J-J"
SCALE: 1/4"=1'-0"

BEAM SCHEDULE

MARK	SIZE	TOP	TRUSS	BOT.	TIES @	REMARKS
B-1	16"x20"	2-#8		2-#8		SEE SEC. "C-C"
B-2	16"x20"	2-#7		2-#7		SEE SEC. "B-B"
B-2A	16"x20"	2-#7		2-#7		SEE SEC. "F-F"
B-3	12"x12"	2-#6	2-#6	2-#6		
B-4	12"x12"	2-#6	2-#6	2-#6	#3@12"	EXTEND T&B BARS THRU B-4A
B-4A	12"x12"				#3@12"	AND HOOK
B-5	12"x14"	2-#4	2-#4	2-#4	#3@12"	
B-6	14"x19"*	2-#8	2-#8	2-#8	#3@6"	EXTEND TOP BARS THRU B-6A
B-6A	14"x13"*			2-#8	#3@12"	AND HOOK
B-7	12"x13"*	2-#6		2-#6	#3@12"	
B-8	10"x18"	2-#8		2-#4	#3@12"	BEND INTO B-9 EXTEND TOP
B-8A	10"x12"*			2-#4	#3@12"	BARS THRU B-8A
B-9	10"x13"*	2-#7		2-#7	#3@12"	
B-10	10"x18"	2-#8		2-#4	#3@12"	BEND INTO B-9 EXTEND INTO W-13
B-11	12 x 12"	2-#5	2-#5	2-#5	#3@12"	
B-11A	12 x 12"	2-#5	2-#5	2-#5	#3@12"	

* INCLUDES 1" FL. FIN. WHERE SHOWN

GEORGE S. JENNINGS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

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CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
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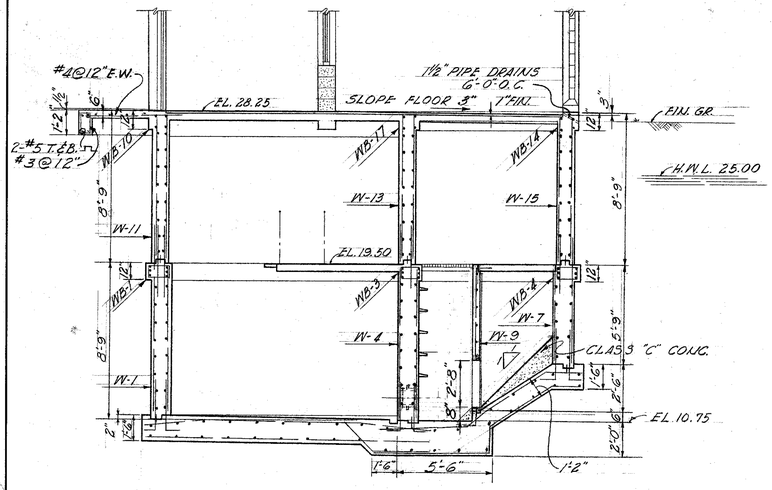
J. E. GREINER COMPANY — CONSULTING ENGINEERS, TAMPA, FLORIDA
WIEDEMAN & SINGLETON, ENGINEERS ASSOCIATE ENGINEERS, ATLANTA, GEORGIA

DES. H.N.P.
DRN. B.N.C.
CKD. H.N.P.
SCALE AS SHOWN
DATE JAN. 1962

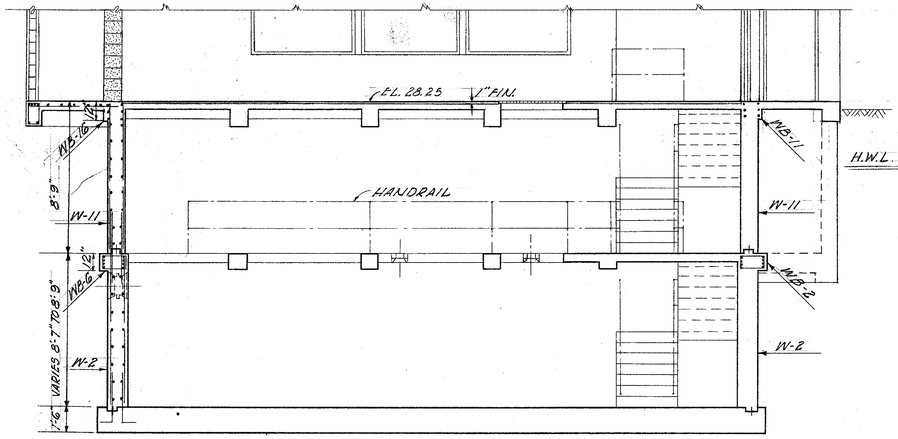
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 24 OF 29

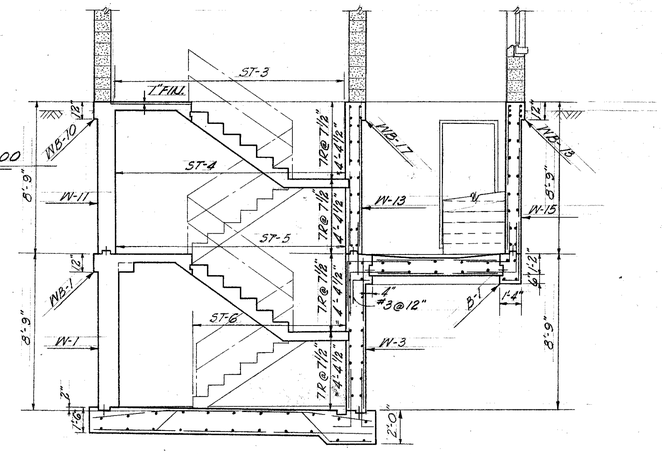
87-24



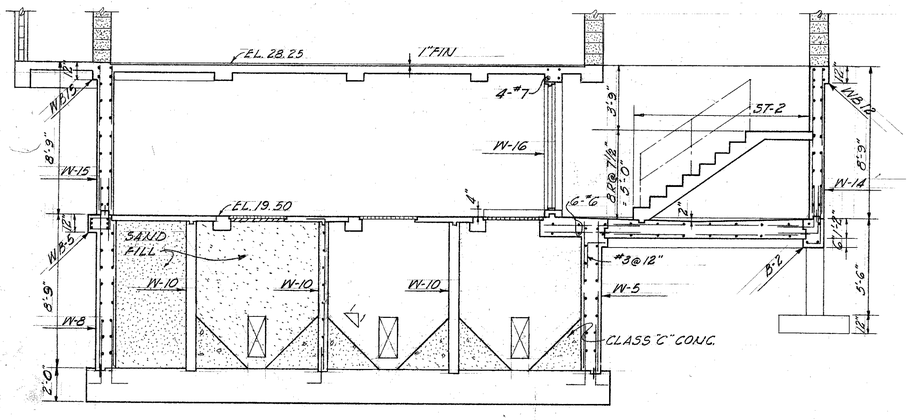
SECTION "A-A"
SCALE: 1/4"=1'-0"



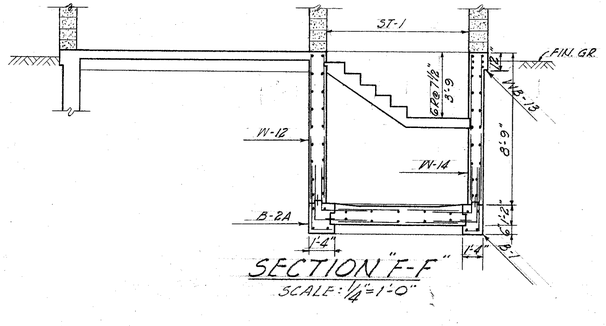
SECTION "E-E"
SCALE: 1/4"=1'-0"



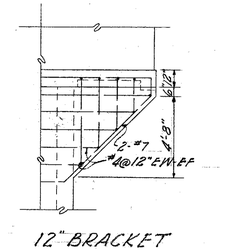
SECTION "C-C"
SCALE: 1/4"=1'-0"



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



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



12" BRACKET
SECTION "J-J"
SCALE: 1/4"=1'-0"

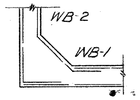
NOTE: WATERSTOPS REQUIRED IN ALL CONSTRUCTION JOINTS IN EXTERIOR WALLS AND WALL BETWEEN SCREEN ROOM AND PUMP ROOM

WALL SCHEDULE

MARK	DOWELS	VERTICAL	HORIZONTAL	REMARKS
W-1	#5@9"E.F.	#5@9"I.F. #5@18"O.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-2	#5@9"E.F.	#5@9"I.F. #5@18"O.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-3	#5@9"E.F.	#5@9"I.F. #5@18"O.F.	#4@12"E.F.	EXTEND I.F. BARS INTO WALL ABOVE FOR DOWELS. SEE SEC."C-C"
W-4	#5@9"E.F.	#5@8" PUMP RM. F. #5@18" SCR. RM. F.	#4@12"E.F.	EXTEND PUMP RM. F. BARS INTO WALL ABOVE FOR DOWELS.
W-5	#5@9"E.F.	#5@9"E.F.	#4@12"E.F.	
W-6	#5@12"E.F.	#5@12"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-7	#5@12"E.F.	#5@12"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-8	#5@9"E.F.	#5@9"E.F.	#4@12"E.F.	EXTEND O.F. BARS INTO WALL ABOVE FOR DOWELS.
W-9	#5@9"CENTER	#5@9"CENTER	#4@12"	KEY AND DOWEL INTO BOTTOM AND MAIN WALLS. SEE SEC. "H-H"
W-10	#4@12"CENTER	#4@12"CENTER	#4@12"	KEY AND DOWEL INTO BOTTOM AND MAIN WALLS SEE SEC. "B-B"
W-11	#4@12"E.F.	#4@18"E.F.	#4@12"E.F.	
W-12	#4@12"O.F.	#4@12"E.F.	#4@12"E.F.	SEE SEC. "F-F"
W-13	#5@8"SCR. RM. F.	#4@12"E.F.	#4@12"E.F.	
W-14	#4@12"O.F.	#4@12"E.F.	#4@12"E.F.	SEE SEC. "F-F"
W-15	#5@12"I.F.	#4@12"E.F.	#4@12"E.F.	
W-16	#4@12"E.F.	#4@12"E.F.	#4@12"E.F.&#4"-T TOP	SEE SEC. "B-B"

WALL BEAM SCHEDULE

MARK	BARS	TIES @	REMARKS
WB-1	3-#6 E.F.	#3@12"	SEE SKETCH
WB-2	4-#7 E.F.	#3@12"	
WB-3	3-#6 E.F.	#3@12"	
WB-4	3-#6 E.F.	#3@12"	
WB-5	3-#7 E.F.	#3@12"	
WB-6	4-#7 E.F.	#3@12"	BEND INTO WB-1 LIKE WB-2
WB-10	2-#5 E.F.		
WB-11	3-#5 E.F.		
WB-12	2-#6 E.F.		
WB-13	3-#6 E.F.		
WB-14	2-#5 E.F.		
WB-15	2-#5 E.F.		
WB-16	3-#5 E.F.		
WB-17	2-#5 E.F.		



SKETCH

SLAB SCHEDULE

MARK	THICK	TOP	TRUSS	BOT.	TEMP.	REMARKS
S-1		#7@18"		#7@18"	#6@18"E.F.	SEE SEC. "A-A"
S-2		#8@18"	#8@18"	#8@18"	#6@18"E.F.	SEE SEC. "A-A"
S-3	4"			#3@9"	#3@9"	
S-4	14"	#5@18"		#5@18"	#5@18"E.F.	DOWELS #5@18"E.F. 4 EDGES SEE SEC."B-B" & "C-C"
S-5	6"		#4@16"	#4@16"	CONT. STAIR REINF. THRU S-5	
S-6	6"	B-#4 ⊓			#3@9"	
S-7	6"	5-#4 IN CENTER			#3@9"	
S-8	6"	5-#4 IN CENTER			#3@9"	
S-9	6"	5-#4 IN CENTER			#3@9"	
S-10	6"	5-#4 IN CENTER			#3@9"	
S-11	7"*		#4@16"	#4@16"	CONT. STAIR REINF. THRU S-11	
S-12	8"*		#4@10"	#4@10"	#4@12"E.F.	
S-13	8"*		#4@10"	#4@10"	#4@12"E.F.	
S-14	8"*		#4@10"	#4@10"	#4@12"E.F.	
S-15	8"*		#4@10"	#4@10"	#4@12"E.F.	
S-16	6"	#4@12" IN CENTER			5-#4	
S-17	6"	#3@12"		#3@12"	#3@12"E.F.	
S-18	6"&4"	#3@8" IN CENTER			#3@12"	
S-19	4"	#3@8" IN CENTER			#5@12"	
S-20	4"	#3@6" IN CENTER			#3@6"	

* INCLUDES 1" FL. FIN. WHERE SHOWN

BEAM SCHEDULE

MARK	SIZE	TOP	TRUSS	BOT.	TIES @	REMARKS
B-1	16"x20"	2-#8		2-#8		SEE SEC. "C-C"
B-2	16"x20"	2-#7		2-#7		SEE SEC. "B-B"
B-2A	16"x20"	2-#7		2-#7		SEE SEC. "F-F"
B-3	12"x12"	2-#6	2-#6	2-#6		
B-4	12"x12"	2-#6	2-#6	2-#6	#3@12"	EXTEND T&B BARS THRU B-4A
B-4A	12"x12"				#3@12"	AND HOOK
B-5	12"x14"	2-#4	2-#4	2-#4	#3@12"	
B-6	14"x18"*	2-#8	2-#8	2-#8	#3@6"	EXTEND TOP BARS THRU B-6A
B-6A	14"x13"*			2-#8	#3@12"	AND HOOK
B-7	12"x13"*	2-#6		2-#6	#3@12"	
B-8	10"x12"	2-#6		2-#4	#3@12"	BEND INTO B-9 EXTEND TOP
B-8A	10"x13"*			2-#4	#3@12"	BARS THRU B-8A
B-9	10"x13"*	2-#7		2-#7	#3@12"	
B-10	10"x18"	2-#8		2-#4	#3@12"	BEND INTO B-9 EXTEND INTO W-18
B-11	12x12"	2-#5	2-#5	2-#5	#5@12"	
B-11A	12x12"	2-#5	2-#5	2-#5	#5@12"	

* INCLUDES 1" FL. FIN. WHERE SHOWN

STAIR SCHEDULE

MARK	THICK	LONG BARS	SHORT BARS
ST-1	6"	5-#4	2-#3 ⊐ EA. TRD.
ST-2	6"	6-#4	2-#3 ⊐ EA. TRD. #3@12"E.F. & DOWELS AT LANDING
ST-3	6"	8-#5	2-#3 ⊐ EA. TRD. #3@12"E.F. & DOWELS AT LANDING
ST-4	6"	8-#5	2-#3 EA. TRD.
ST-5	6"	8-#5	2-#3 ⊐ EA. TRD. #3@12"E.F. & DOWELS AT LANDING
ST-6	6"	6-#5	2-#3 EA. TRD.

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C. E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION
STRUCTURAL-SECTIONS

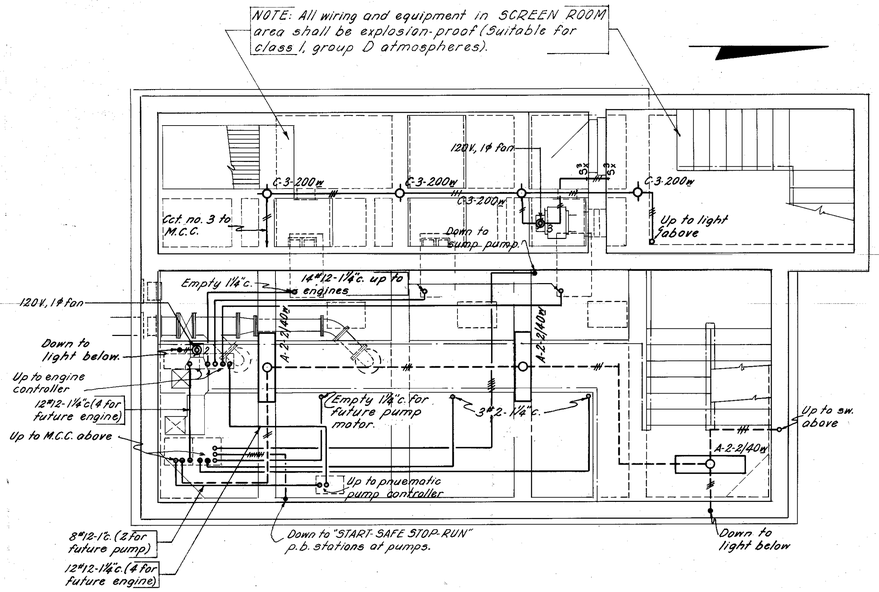
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. H.N.B.
DRN. R.N.C.
CKD. H.N.B.
SCALE AS SHOWN
DATE JAN. 1962

PROJECT 3
DIVISION D
SUBDISTRICT A-10

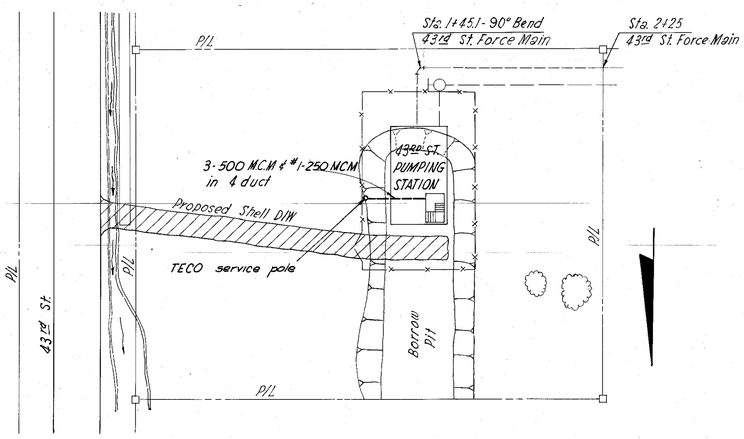
SHEET 24 OF 29

87-24A



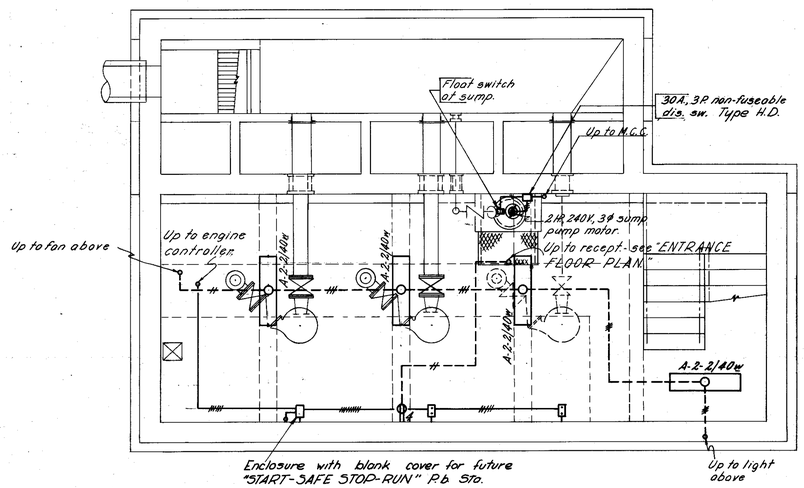
INTERMEDIATE FLOOR PLAN

Scale: ¼" = 1'-0"



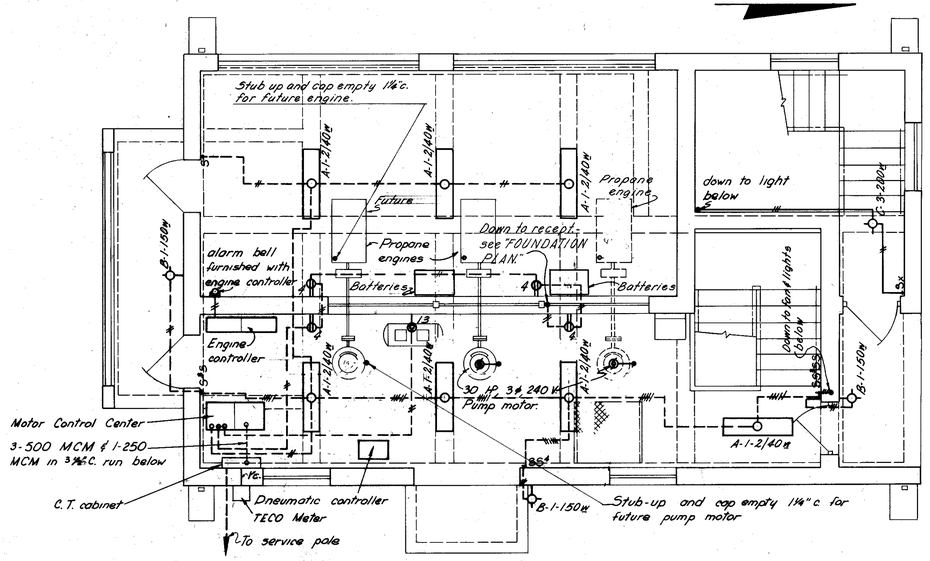
LOCATION PLAN

Scale: 1" = 30'



FOUNDATION PLAN

Scale: ¼" = 1'-0"



ENTRANCE FLOOR PLAN

Scale: ¼" = 1'-0"

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C.E. DRUMMOND, JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA

THIRD SEWER REVENUE BOND PROGRAM

SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION ELECTRICAL PLANS

J.E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS

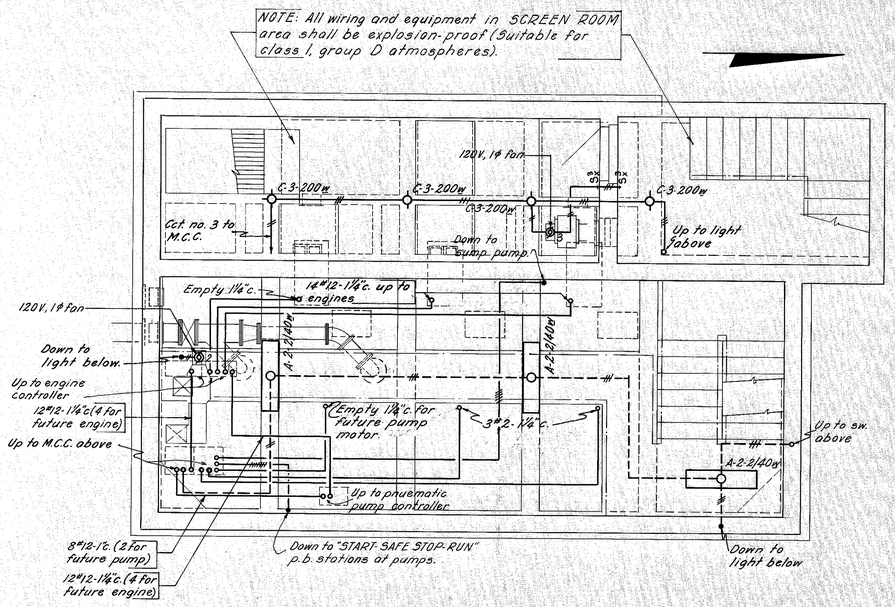
CONSULTING ENGINEERS — TAMPA, FLORIDA — ASSOCIATE ENGINEERS — ATLANTA, GEORGIA

DES. GG
DRN. GG
CKD. GG
SCALE 1/4"
DATE

PROJECT 3
DIVISION D
SUBDISTRICT A-10

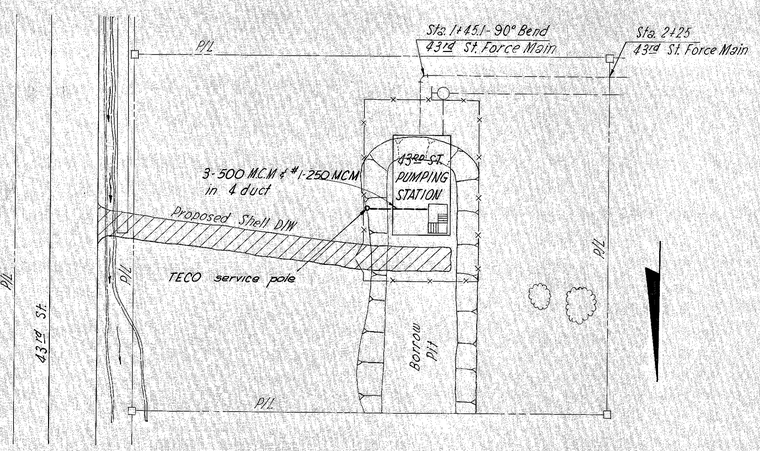
SHEET 25 OF 29

87-25



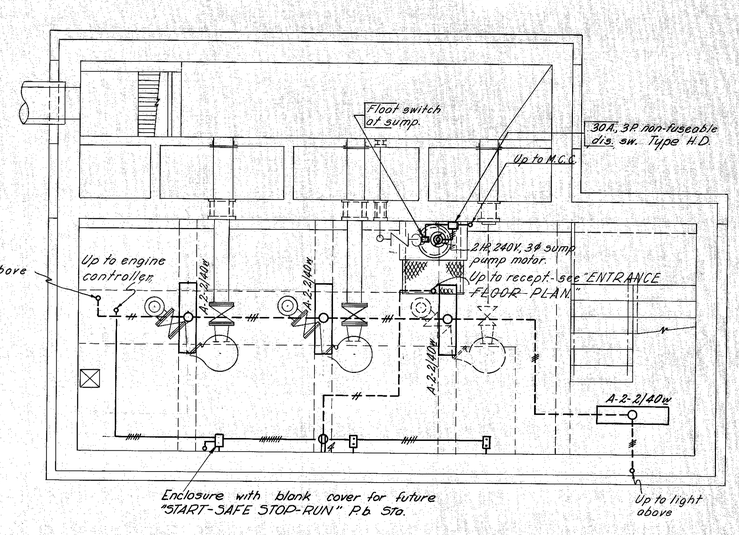
INTERMEDIATE FLOOR PLAN

Scale: ¼" = 1'-0"



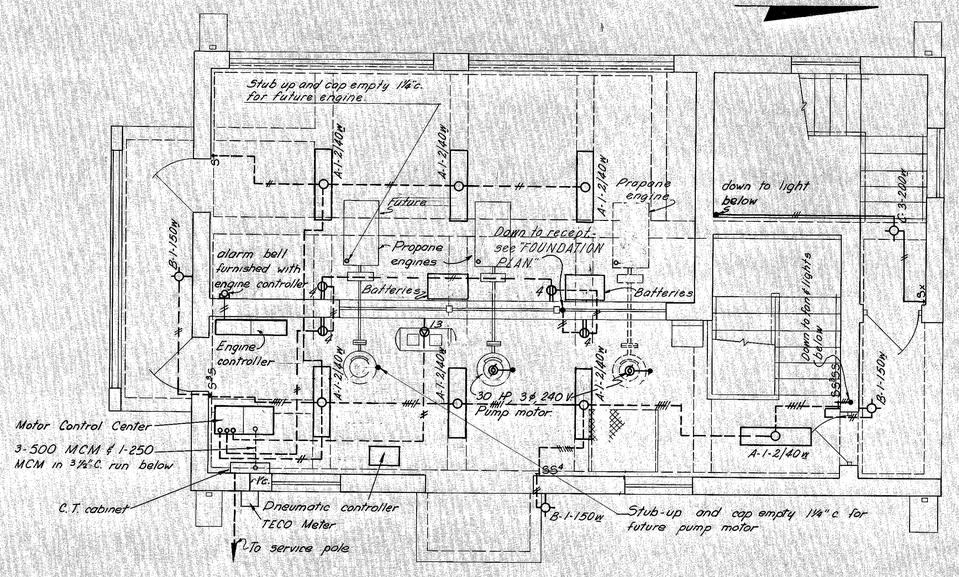
LOCATION PLAN

Scale: 1" = 30'



FOUNDATION PLAN

Scale: ¼" = 1'-0"



ENTRANCE FLOOR PLAN

Scale: ¼" = 1'-0"

GEORGE S. JETNAS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C. E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION ELECTRICAL PLANS

J.E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES.	G.C.J.
DWN.	G.C.
CKD.	G.C.J.
SCALE	Noted
DATE	

PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 25 OF 29

87-3-23A

CONDUIT NUMBER & SIZE		CONDUCTOR QUANTITY & SIZE	FROM	TO	REMARKS
PF-1A	4	3-350MCM&1#2GND	TECO TRANSFORMER	MCC-VFD	-
PF-1B	4	3-350MCM&1#2GND	TECO TRANSFORMER	MCC-VFD	-
PF-1C	4	3-350MCM&1#2GND	TECO TRANSFORMER	MCC-VFD	-
PF-2A	4	3-500MCM&1#1/0GND	STANDBY GENERATOR	MCC-VFD	-
PF-2B	4	3-500MCM&1#1/0GND	STANDBY GENERATOR	MCC-VFD	-
P1	3/4	3#10&1#12 GND	MCC-VFD	LIGHTING TRANSFORMER	-
P1A	1-1/4	4#6&1#8 GND	LIGHTING TRANSFORMER	LP-1	-
2 P2	**1**	**3#8**	MCC-VFD	**AIR COMPRESSOR NO. 1**	**CONTROL PANEL**
P3	1	3#12&4#14	MCC-VFD	RADIATOR FAN	-
P4	1	3#12&4#14	MCC-VFD	EAF-2	-
P5	1	3#12&4#14	MCC-VFD	EAF-3	-
P6	3/4	3#12	MCC-VFD	SUMP PUMP CONTROL PNL	-
P7	1-1/4	6#12&4#14	MCC-VFD	SAF-1	-
P8	1-1/4	6#12&4#14	MCC-VFD	EAF-1	-
P9	3	3-350MCM&1#2GND	MCC-VFD	SEWAGE PUMP NO. 1	-
P10	3	3-350MCM&1#2GND	MCC-VFD	SEWAGE PUMP NO. 2	-
P11	3	3-350MCM&1#2GND	MCC-VFD	SEWAGE PUMP NO. 3	-
P12	3	3-350MCM&1#2GND	MCC-VFD	SEWAGE PUMP NO. 4	-
P13	**3/4**	**3#12**	**MCC-VFD**	**FAN**	**ODOR CONTROL PANEL**
2 **P14**	**1**	**3#8**	**MCC-VFD**	**AIR COMPRESSOR NO.2**	**CONTROL PANEL**
C1	3/4	4#14	MCC-VFD	STANDBY GENERATOR	CONTROL PANEL
C2	1	8#14	MCC-VFD	SEWAGE PUMP NO. 1	-
C3	1	8#14	MCC-VFD	SEWAGE PUMP NO. 2	-
C4	1	8#14	MCC-VFD	SEWAGE PUMP NO. 3	-
C5	1	8#14	MCC-VFD	SEWAGE PUMP NO. 4	-
C6	3/4	3#14	MCC-VFD	THERMOSTATS	-
C7	4	100#14	MCC-VFD	PUMP CONT LOGIC UNIT	-
C8	**NOT USED**				
C9	**NOT USED**				
2 C10	**NOT USED**				
C11	**NOT USED**				
C12	3/4	4#14	PUMP CONT LOGIC UNIT	LIMIT SWITCHES	STATION DISCHARGE
C13	3/4	2#14	PUMP CONT LOGIC UNIT	FLOAT SWITCHES	-
C14	3/4	2#14	PUMP CONT LOGIC UNIT	GENERATOR CONTROL PANEL	-
C15	3/4	2#14	PUMP CONT LOGIC UNIT	PRESSURE SWITCH	-
1 C16	3/4	2#10	GENERATOR CONT. PNL	STARTING BATTERY	-
N1	3/4	2-2/C#16	MCC-VFD	PUMP CONT LOGIC UNIT	-
N2	1	2-2/C#16&4#14	FLOW METERS MS-1&MS-2	PUMP CONT LOGIC UNIT	-

1/17 85 CABCON.4G41

CIRCUIT SCHEDULE - LIGHTING PANEL LP-1

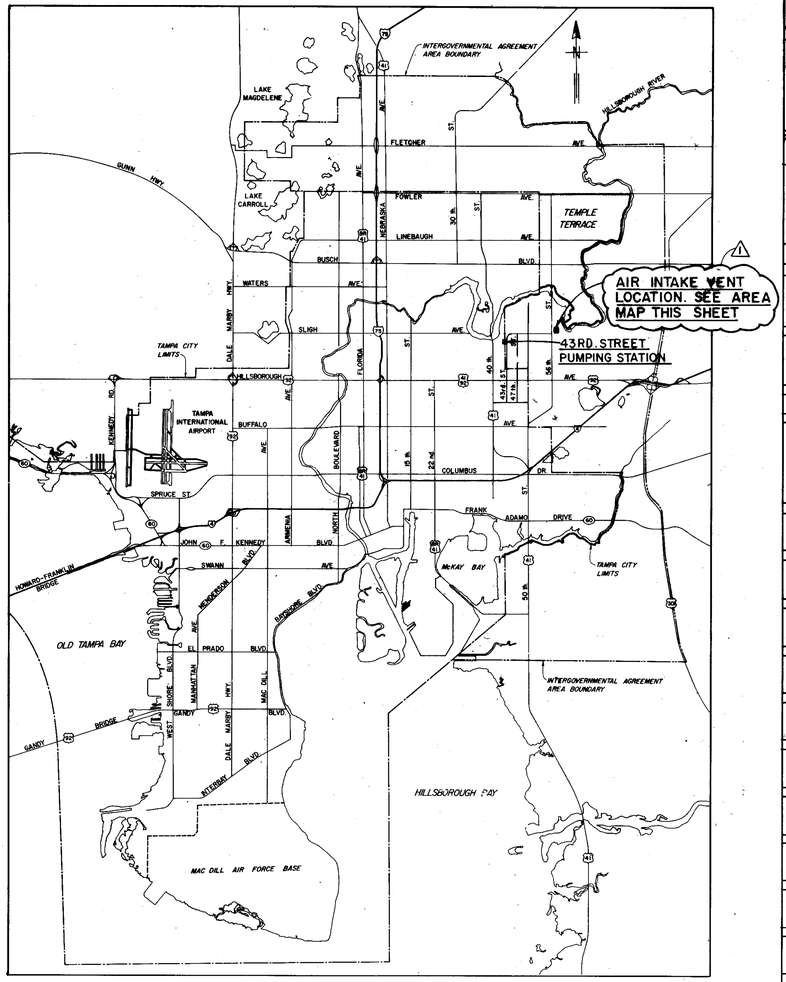
CKT NO.	LOCATION	FL EL	MTG HGT	FIXT TYPE	LIGHTS MOTORS	RCPT	TOTAL WATTS	REMARKS
1	EQUIPMENT ROOM	28-9	10-0	A	11@100W	-	-	-
	EQUIPMENT ROOM	28-9	10-0	B	3@100W	-	1400	-
2	BASEMENT	18-3	8-0	A	11@100W	-	-	-
	BASEMENT	18-3	-	B	3@100W	-	1400	-
2 3	EQUIPMENT ROOM	28-9	2-0	-	-	5		**GFI BREAKER**
	OUTDOOR	**28-9**	**2-0**	-	-	**1**	**1200**	-
4	BASEMENT	18-3	2-0	-	-	5	1000	GFI BREAKER
2 5	OUTDOOR	28-9	8-0	C	**7@200W**	-	**1400**	-
6	EQUIPMENT ROOM	28-9	-	-	-	-	100	MCC-AFD
7	EQUIPMENT ROOM	28-9	-	-	-	-	1000	DAY TANK
8	SPARE							
9	EQUIPMENT ROOM	28-9	-	-	-	-	1000	GENERATOR CONTROL PANEL
10	SPARE							
2 11	BASEMENT	18-3	-	-	-	-	20	FLOW METERS MS-1 & MS-2
12	EQUIPMENT ROOM	28-9	-	-	-	-	1000	PUMP CONTROL LOGIC UNIT
13/18	SPARES							

2 SURFACE MOUNTED 208Y/120V, 3PH, 4-W, 100A MAIN BREAKER TOTAL WATTS **9520**

1/17/85 LTGPNL.4G4

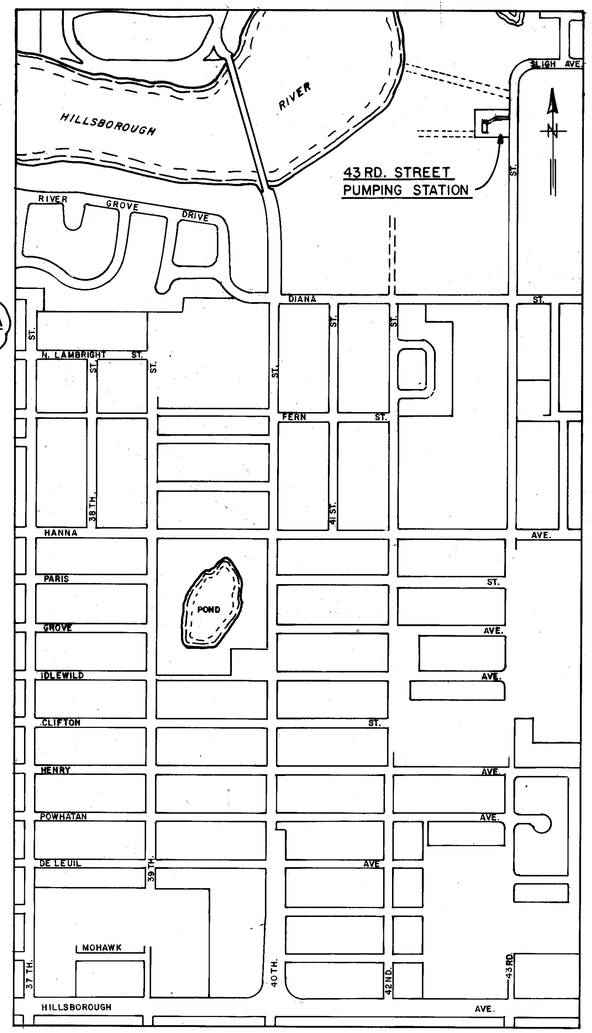
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED BBK DRAWN KZK CHECKED BBK	APPROVED	2 JAN 85 JRP REVISED SCHEDULES 1 MAR 84 JRP REVISED SCHEDULE NO. DATE. APP. REVISION	SCALE NO SCALE	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 4G4 43RD. STREET PUMPING STATION	ELECTRICAL SCHEDULES	PROJ NO. DWG. E3 SHEET 17 OF 17 DATE DEC 1983 REV. 2

87-269



LOCATION MAP

SCALE: 1" = 8,000'

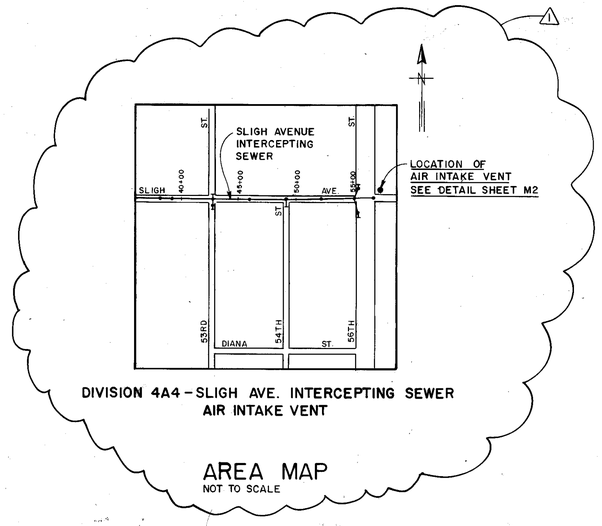


AREA MAP

SCALE: 1" = 400'

INDEX

SHEET NO.	DRAWING NO.	TITLE
1	I1	LOCATION MAP, AREA MAP AND INDEX
GENERAL		
2	G1	SITE PLAN, SECTIONS AND DETAILS
3	G2	STANDARD MANHOLE DETAILS
4	G3	STANDARD MANHOLE DETAILS
5	G4	MISCELLANEOUS STANDARD DETAILS
STRUCTURAL		
6	S1	PLANS AND SECTIONS
7	S2	PLANS AND SECTIONS
8	S3	SECTIONS
9	S4	SECTIONS, DETAILS AND GENERAL NOTES
ARCHITECTURAL		
10	A1	PLANS, ELEVATIONS AND SECTION
11	A2	SECTIONS AND DETAILS
MECHANICAL		
12	M1	PLANS, SECTIONS AND DETAILS
13	M2	SECTIONS, DETAILS AND DIAGRAMS
VENTILATING		
14	V1	PLANS AND DETAIL
ELECTRICAL		
15	E1	MOTOR CONTROL CENTER, VARIABLE FREQUENCY DRIVE, ONE LINE DIAGRAM AND ELEVATION
16	E2	POWER AND LIGHTING PLANS
17	E3	SCHEDULES



DIVISION 4A4 – SLIGH AVE. INTERCEPTING SEWER
AIR INTAKE VENT

AREA MAP
NOT TO SCALE

PAUL E. LANGDON JR. CERTIFICATION No. 15473 STATE OF FLORIDA REGISTERED ENGINEER

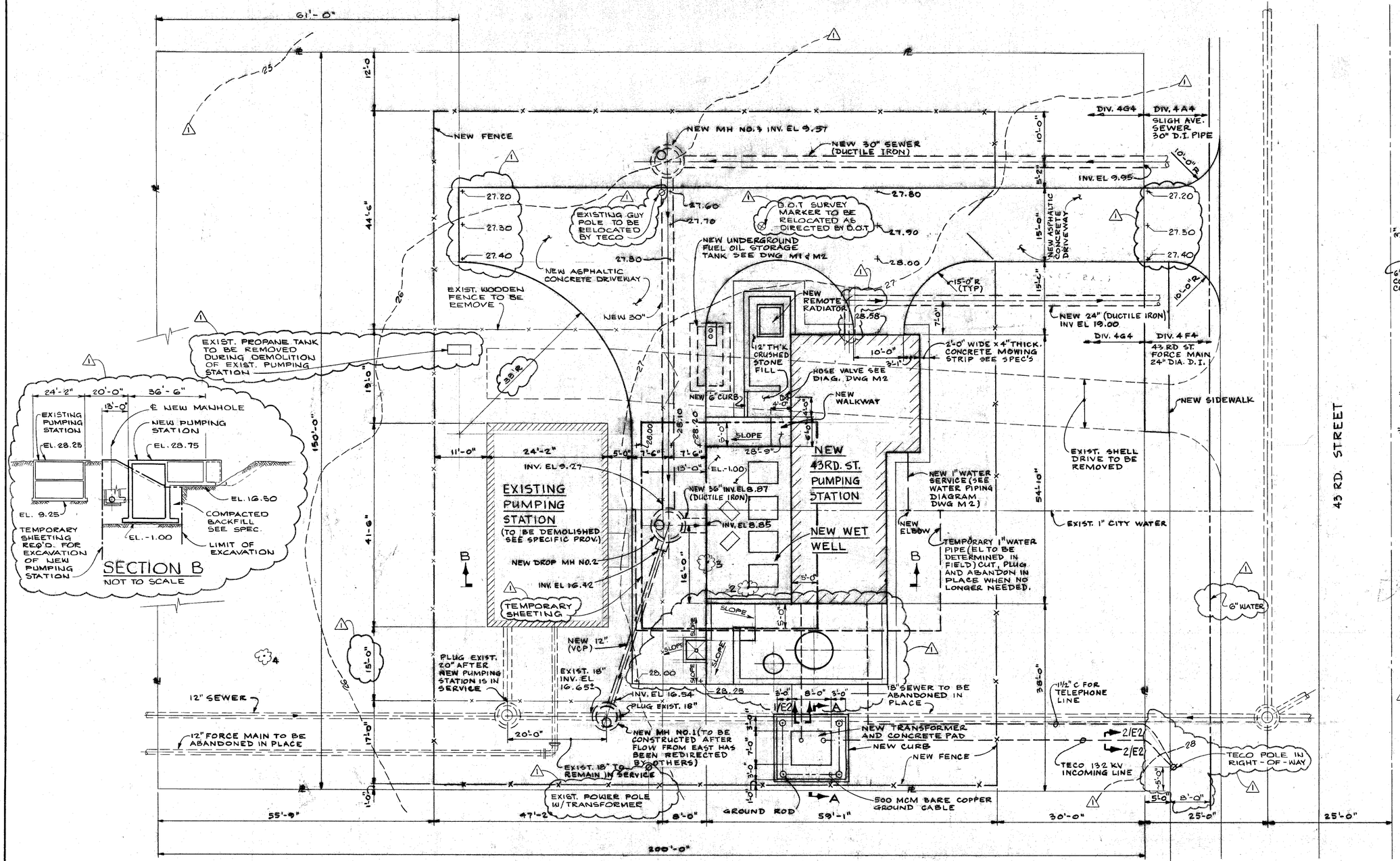
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED JRP DRAWN WRB CHECKED JRP	APPROVED SUPT., DEPT. OF SANITARY SEWERS DATE GREELEY AND HANSEN, ENGINEERS DATE 12-7-83	1	JAN 85	JRP	ADDED AIR INTAKE VENT	SCALE: 8,000 0 8,000 16,000 FT. 1" = 8,000 FT.; 400 0 400 800 FT. 1" = 400 FT.
			NO.	DATE	APP.	REVISION	

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

LOCATION MAP, AREA MAP AND INDEX

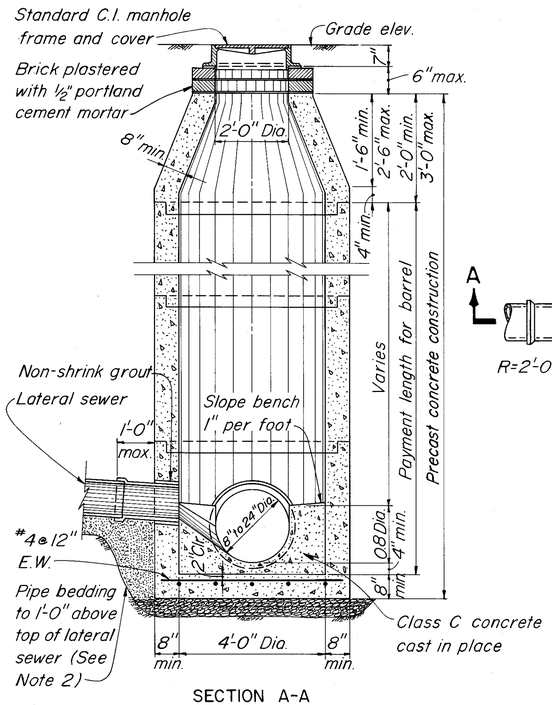
PROJ. NO.
DWG I1
SHEET 1 OF 17
DATE DEC 1983 REV. 1

87-269

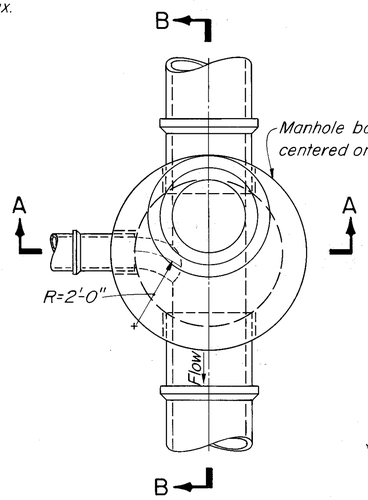


GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED DCH DRAWN JSL CHECKED JRP	APPROVED	1 JAN 85 JRP REVISED AS SHOWN NO. DATE. APP. REVISION
SCALE 10 0 10 20 FT 1"=10'	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 4G4 43RD. STREET PUMPING STATION	GENERAL SITE PLAN SECTIONS AND DETAILS	PROJ NO. DWG G1 SHEET 2 OF 17 DATE DEC 1983 REV. 1

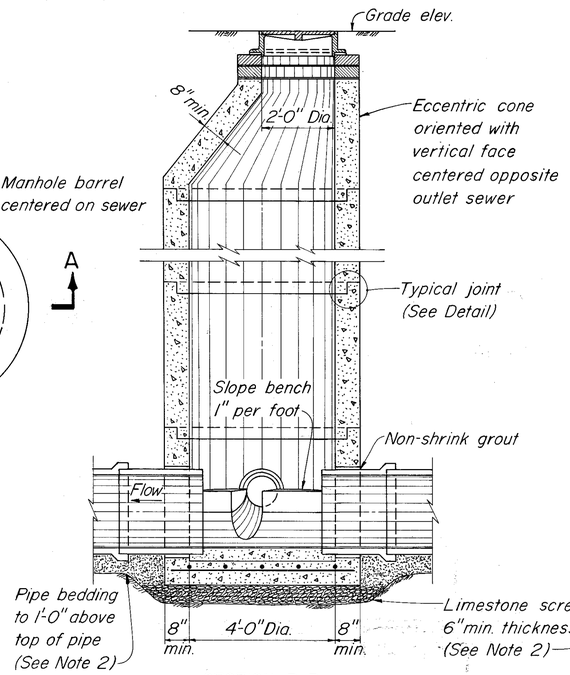
87-266



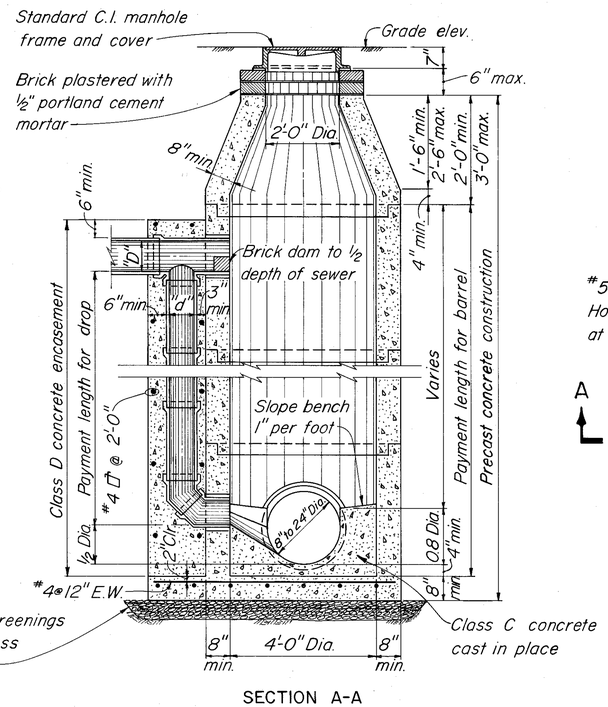
SECTION A-A



PLAN

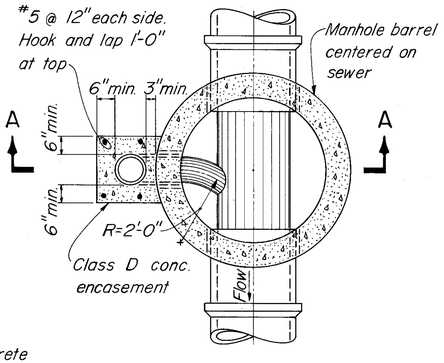


SECTION B-B



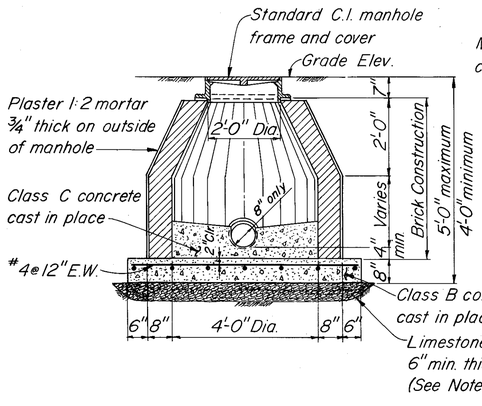
SECTION A-A

SCHEDULE FOR DROP MANHOLE	
INLET PIPE DIAMETER "D"	DROP PIPE DIAMETER "d"
8"	8"
10"	8"
12"	10"
15"	12"
18"	15"
21"	18"
24"	18"

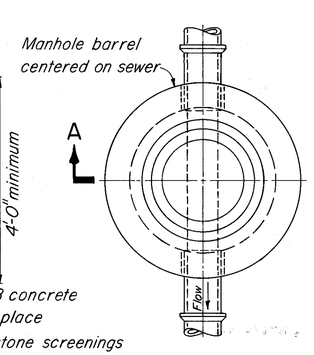


SECTIONAL PLAN

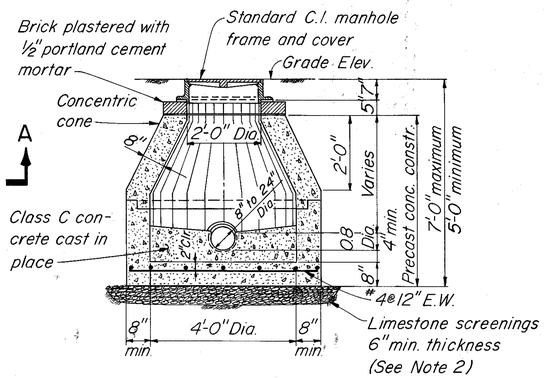
STANDARD MANHOLE-DEEP TYPE
FOR SEWERS 24" OR LESS IN DIAMETER



SECTION A-A



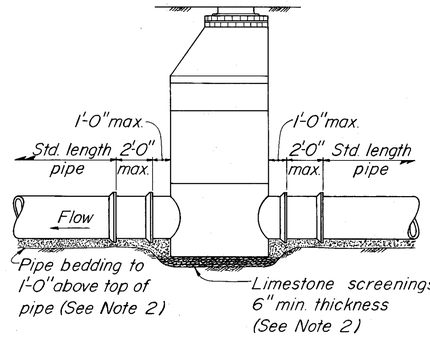
PLAN



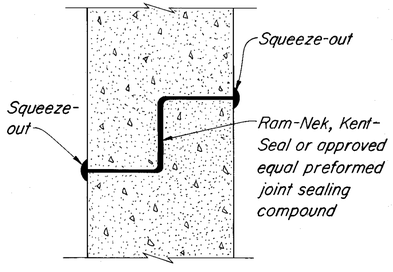
SECTION A-A

STANDARD MANHOLE-SHALLOW TYPE
FOR SEWERS 24" OR LESS IN DIAMETER

STANDARD DROP MANHOLE
FOR SEWERS 24" OR LESS IN DIAMETER



ELEVATION
FOR SEWERS 24" OR LESS IN DIAMETER
NOT TO SCALE



MANHOLE BARREL JOINT DETAIL
NOT TO SCALE

NOTES:
1. All pipe stubs from manholes for future connections or connections to other Contract Divisions shall be provided with water tight plugs placed from within the manhole.
2. See Specifications for materials requirements and placement and compaction of pipe bedding and limestone screenings.

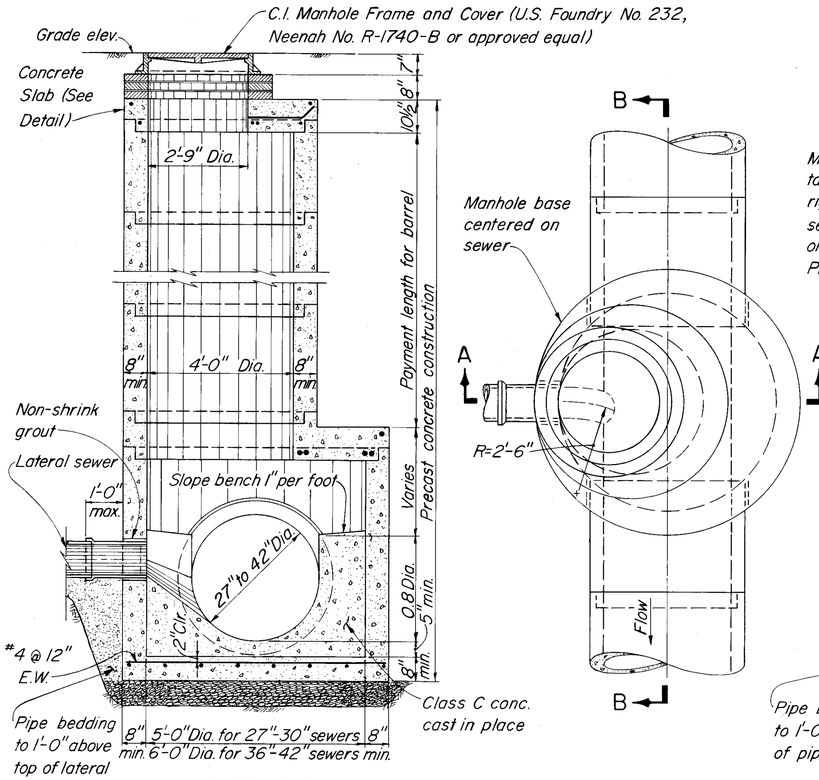
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED TLW DRAWN AA CHECKED TLW	APPROVED _____ DATE _____ SUPT., DEPT. OF SANITARY SEWERS _____ DATE _____ GREELEY AND HANSEN, ENGINEERS	NO.	DATE	APP.	REVISION	SCALE 1 0 1 2 3 4 5 FT 1/2"=1'-0"

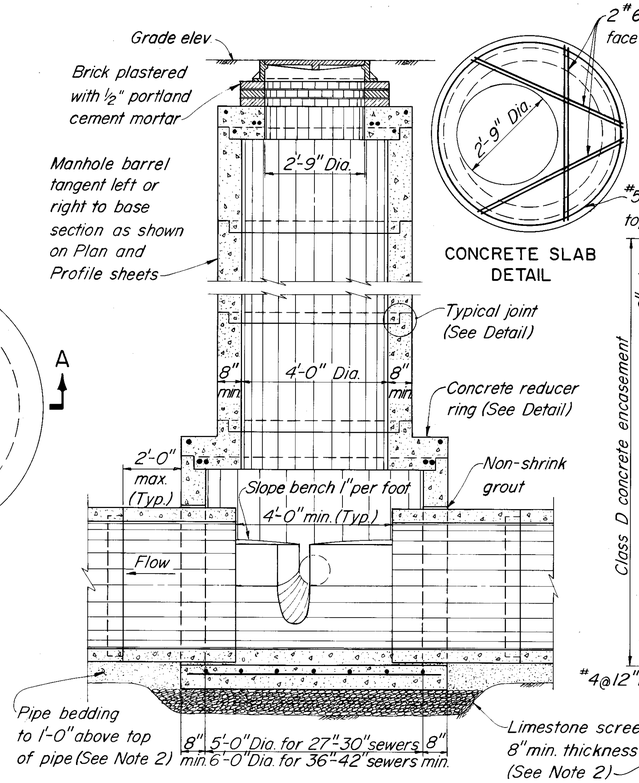
CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 464
43RD. STREET PUMPING STATION

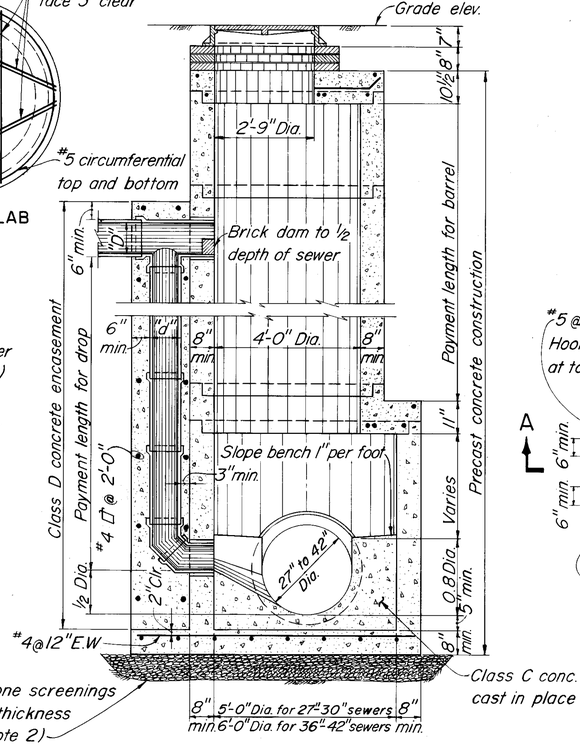
GENERAL
STANDARD MANHOLE DETAILS
FOR SEWERS 24" OR LESS IN DIAMETER

PROJ. NO.
DWG G2
SHEET 3 OF 17
DATE DEC 1983
REV. 0

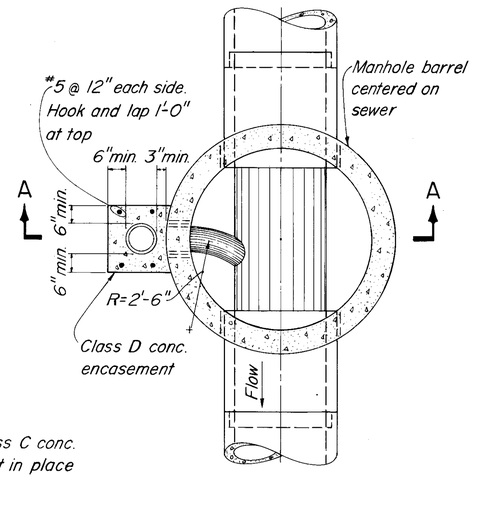
87-26C



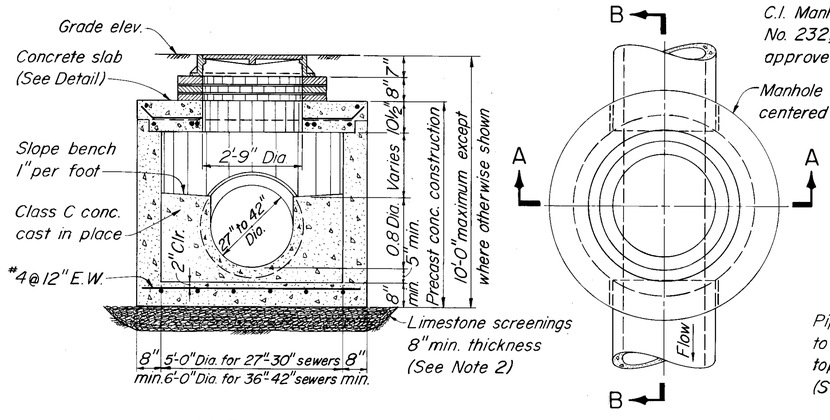


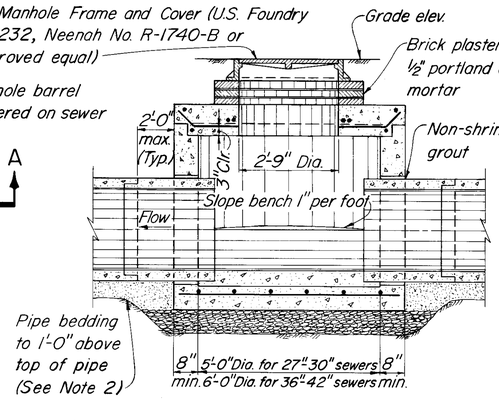


SCHEDULE FOR DROP MANHOLE	
INLET PIPE DIAMETER "D"	DROP PIPE DIAMETER "d"
8"	8"
10"	8"
12"	10"
15"	12"
18"	15"
21"	18"
24"	18"

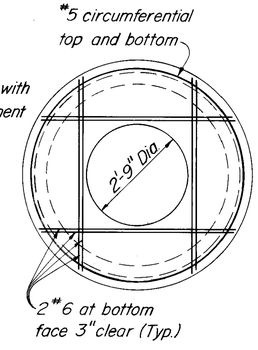


STANDARD MANHOLE-DEEP TYPE
FOR SEWERS 27" THROUGH 42" IN DIAMETER



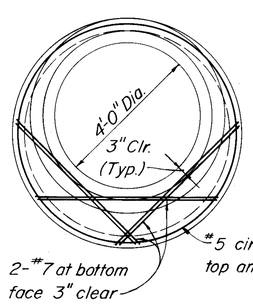


STANDARD MANHOLE-SHALLOW TYPE
FOR SEWERS 27" THROUGH 42" IN DIAMETER

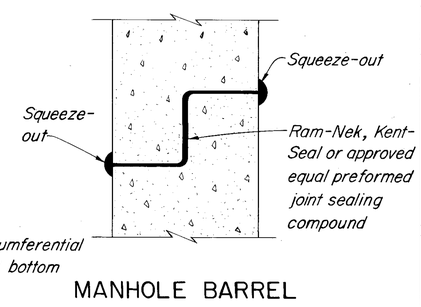


CONCRETE SLAB DETAIL
(SHALLOW TYPE MANHOLE)

STANDARD DROP MANHOLE
FOR SEWERS 27" THROUGH 42" IN DIAMETER



REDUCER RING DETAIL



MANHOLE BARREL JOINT DETAIL
NOT TO SCALE

NOTES:

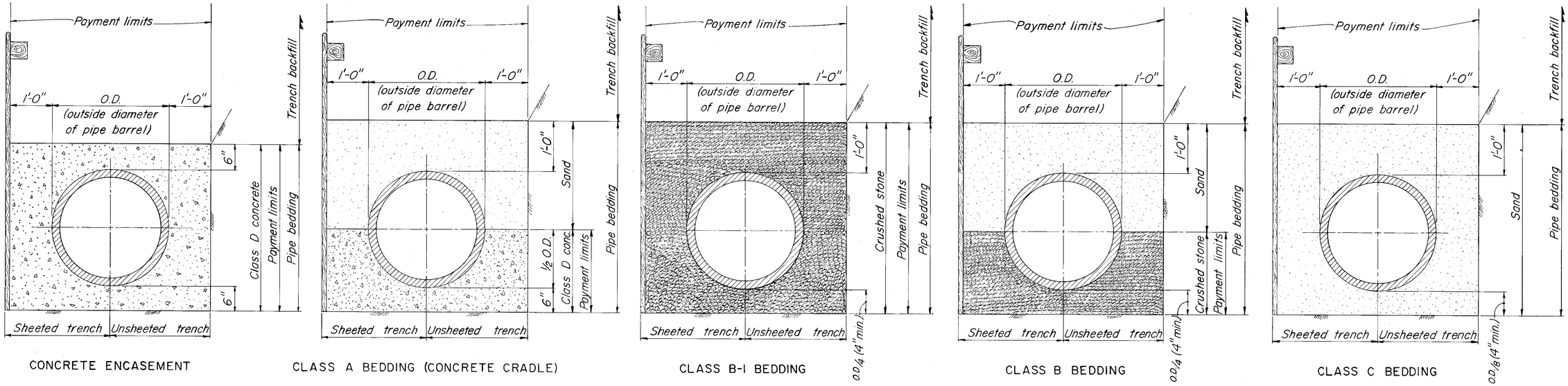
1. All pipe stubs from manholes for future connections or connections to other Contract Divisions shall be provided with water tight plugs placed from within the manhole.
2. See Specifications for materials requirements and placement and compaction of pipe bedding and limestone screenings.

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED TLW DRAWN AA CHECKED TLW	APPROVED DATE SUPT., DEPT. OF SANITARY SEWERS DATE GREELEY AND HANSEN, ENGINEERS	NO. DATE APP. REVISION	SCALE 1 0 1 2 3 4 5 FT. 1/2"=1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 4G4 43RD. STREET PUMPING STATION

GENERAL
STANDARD MANHOLE DETAILS
FOR SEWERS 27" THROUGH 42" IN DIAMETER

PROJ. NO.
DWG G3
SHEET 4 OF 17
DATE DEC 1983 REV. 0

87-266



CONCRETE ENCASEMENT

CLASS A BEDDING (CONCRETE CRADLE)

CLASS B-I BEDDING

CLASS B BEDDING

CLASS C BEDDING

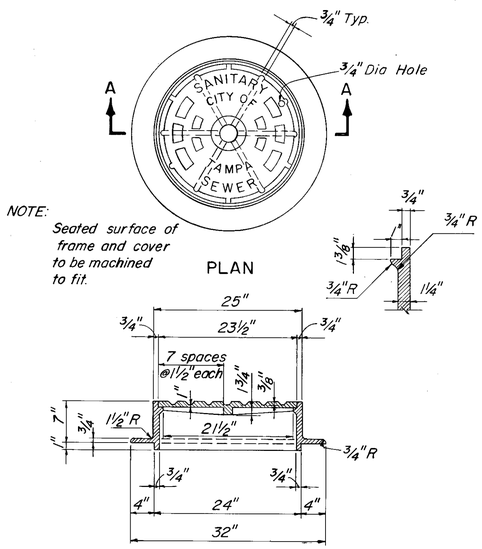
PIPE BEDDING DETAILS

NOT TO SCALE

NOTES: 1. All types of pipe bedding shall extend to undisturbed earth at the sides and bottom of the trench.
2. Sand and crushed stone pipe bedding shall be placed and compacted in accordance with Specifications.

QUANTITIES FOR PAYMENT FOR ADDITIONAL PIPE BEDDING MATERIALS ORDERED IN WRITING BY THE ENGINEER

NOMINAL INSIDE PIPE DIAMETER (INCHES)	6	8	10	12	14	15	16	18	20	21	24	27	30	36	42	48	54	60	66	72
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CONCRETE ENCASEMENT	0.141	0.167	0.191	0.216	0.229	0.256	0.252	0.299	0.300	0.340	0.383	0.427	0.472	0.588	0.690	0.797	0.909	1.027	1.150	1.279
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CLASS A BEDDING (CONCRETE CRADLE)	0.071	0.084	0.096	0.108	0.115	0.128	0.126	0.150	0.150	0.170	0.192	0.214	0.236	0.294	0.345	0.399	0.455	0.514	0.575	0.640
CUBIC YARDS OF CRUSHED STONE PER LINEAR FOOT OF PIPE IN CLASS B BEDDING	0.055	0.066	0.078	0.088	0.094	0.111	0.108	0.143	0.143	0.173	0.207	0.243	0.280	0.381	0.475	0.578	0.690	0.810	0.939	1.078
CUBIC YARDS OF CRUSHED STONE PER LINEAR FOOT OF PIPE IN CLASS B-I BEDDING	0.172	0.201	0.228	0.255	0.269	0.304	0.298	0.362	0.363	0.419	0.479	0.542	0.608	0.781	0.936	1.103	1.281	1.471	1.673	1.887

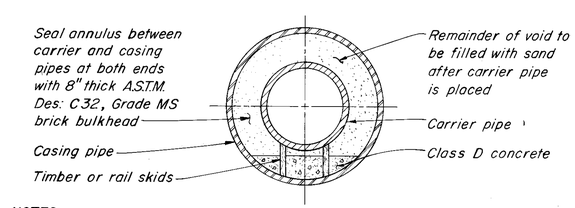


CAST IRON MANHOLE FRAME & COVER

FOR MANHOLES ON SEWERS 24" OR LESS IN DIAMETER

Approx. Wt = 380 #

SCALE: 1"=1'-0"



NOTES:
1. All casing pipes shall be welded steel pipe conforming to A.S.T.M. Des. A139 or tongue and groove reinforced concrete pipe conforming to A.S.T.M. Des. C76, class V.
2. Minimum diameter for manually excavated casing pipes shall be 36 inches.

CORRESPONDING CARRIER AND CASING PIPE SIZES

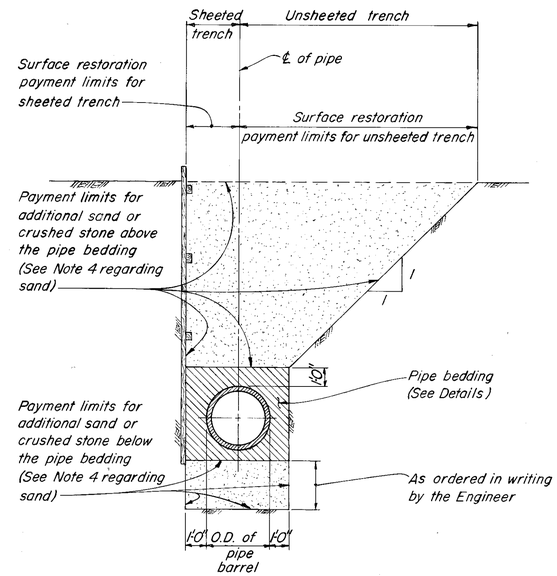
NOMINAL INSIDE DIAMETER OF CARRIER PIPE (INCHES)	6	8	10	12	14	15	16	18	20	21	24	27	30	36	42	48	54	60	66	72
MINIMUM INSIDE DIAMETER OF CASING PIPE (INCHES)	18	21	24	26	28	26	30	34	36	36	45	45	51	60	66	75	84	90	96	102

DETAIL OF JACKED CROSSINGS

NOT TO SCALE

NOTES FOR PAYMENT:

1. Payment for additional crushed stone or class D concrete pipe bedding materials will be made only for pipe bedding not shown on the Plans and ordered in writing by the Engineer.
2. Payment for surface restoration will be made for the actual quantities, as determined by the Engineer, of surface restored within the payment limits shown.
3. Payment for additional sand or crushed stone for trench stabilization, ordered in writing by the Engineer, will be made for the actual compacted volume, as determined by the Engineer, of sand or crushed stone placed within the payment limits shown.
4. Contractor shall use all surplus sand, approved as suitable, from excavations in this Contract prior to supplying sand from other sources. Payment for additional sand will be made only for sand supplied from sources other than excavations in this Contract. See Specifications for materials requirements.



PAYMENT LIMITS FOR SURFACE RESTORATION AND ADDITIONAL SAND OR CRUSHED STONE FOR TRENCH STABILIZATION

NOT TO SCALE

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED TLW DRAWN AA CHECKED TLW	APPROVED DATE SUPT., DEPT. OF SANITARY SEWERS DATE GREELEY AND HANSEN, ENGINEERS	NO. DATE APP. REVISION	SCALE 1" = 1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 464 43RD. STREET PUMPING STATION

GENERAL

MISCELLANEOUS STANDARD DETAILS

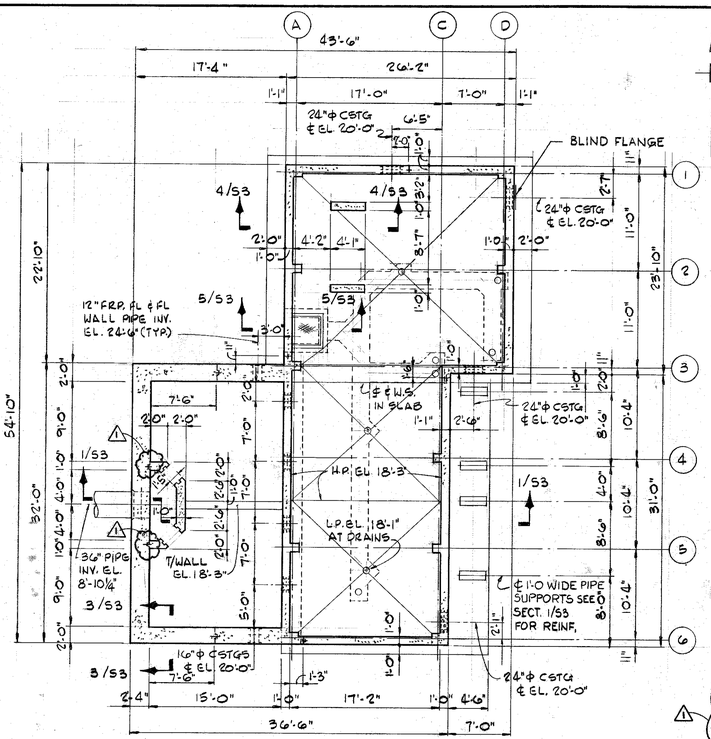
PROJ. NO.

DWG G4

SHEET 5 OF 17

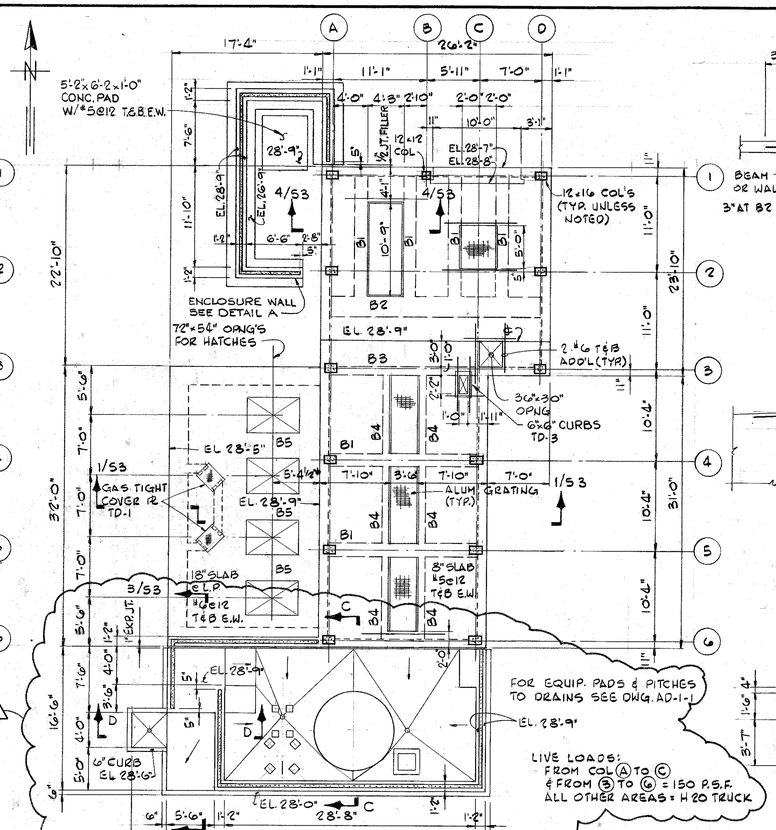
DATE DEC 1983 REV. 0

87-26e



BASEMENT PLAN

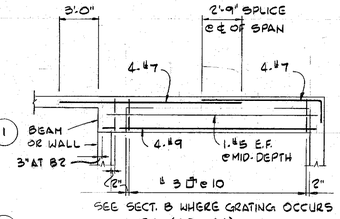
SCALE: 1/8" = 1'-0"



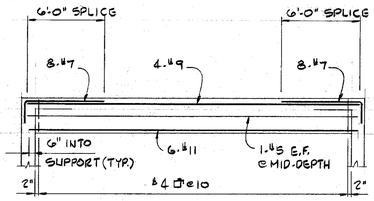
GROUND FLOOR PLAN

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

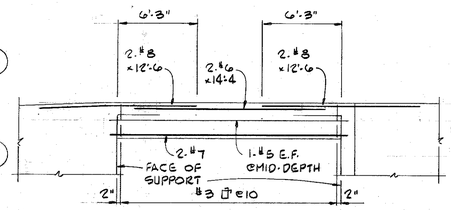
- PLACE EAST-WEST REINF. FIRST & LAST



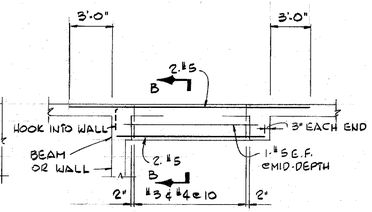
B1 (18 x 24)



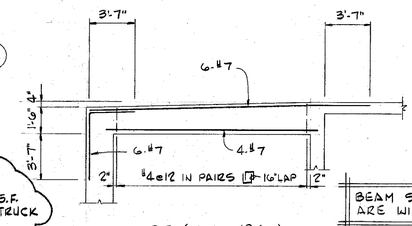
B2 (26 x 24)



B3 (12 x 24)

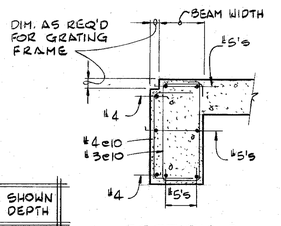


B4 (12 x 24)



B5 (30 x 18/22)
(IN SLAB BEAM)

BEAM SIZES SHOWN ARE WIDTH x DEPTH

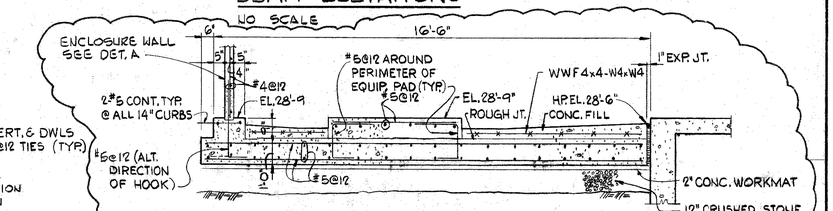


SECTION B

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

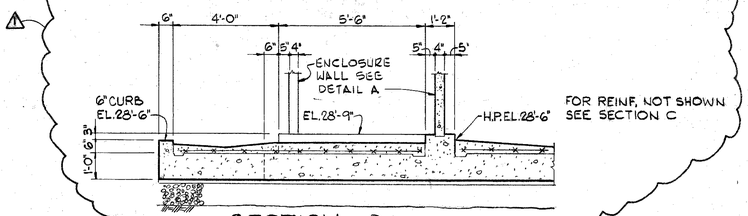
BEAM ELEVATIONS

NO SCALE



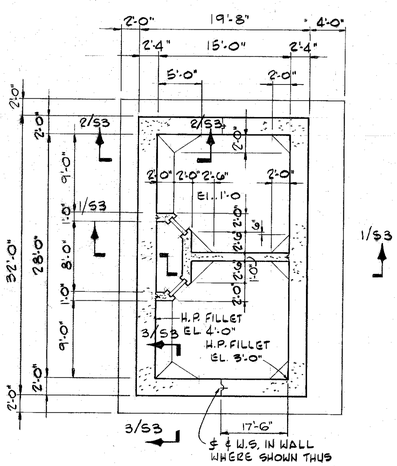
SECTION C

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



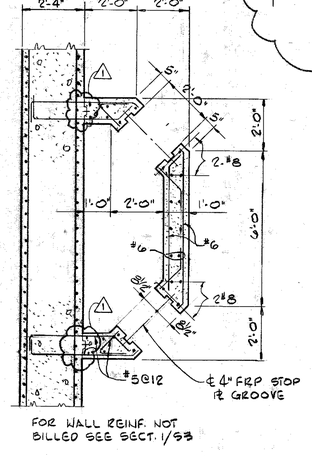
SECTION D

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



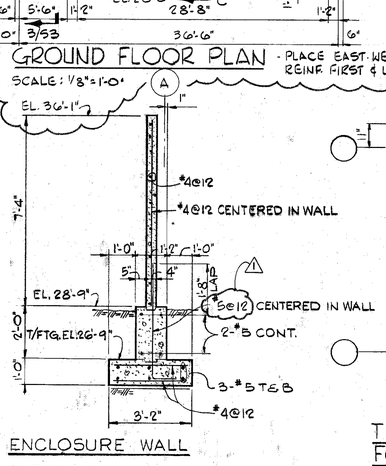
WET WELL PLAN

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



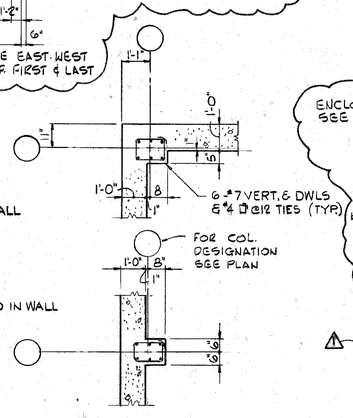
INLET CHAMBER

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



ENCLOSURE WALL DETAIL A

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



TIE DETAILS FOR 12x16 COLS.

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

NOTES:
1. FOR GENERAL NOTES AND TYPICAL DETAILS SEE DWG. S4
2. ¢ DENOTES CONSTRUCTION JOINT.
3. W.S. DENOTES WATERSTOP.
4. DIMENSIONS TO BE DETERMINED AFTER FINAL EQUIP. SELECTION.

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED AO	APPROVED	
	DRAWN JEB		
	CHECKED AO SKS		

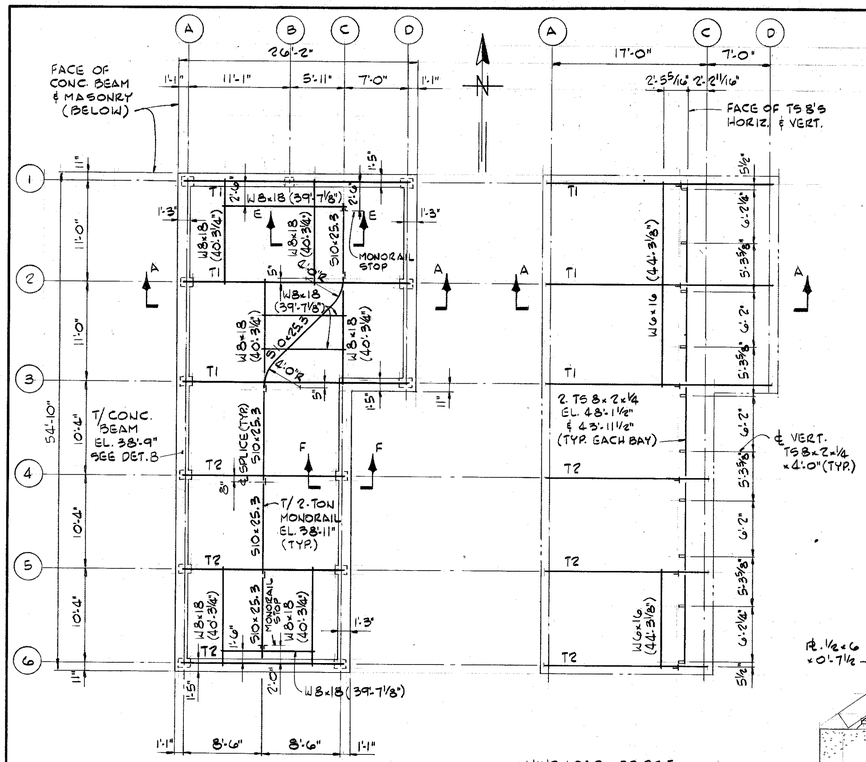
NO.	DATE	APP.	REVISION
1	JAN 86	JRP	ADDED ODOR CONTROL SLAB AND WATER STOPS

SCALE: 8 0 8 16 FT 1/8" = 1'-0"; 0 1 2 3 4 5 6 7 FT 3/8" = 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

STRUCTURAL
PLANS AND SECTIONS

PROJ NO.
DWG S1
SHEET 6 OF 17
DATE DEC 1983 REV. 1



MONORAIL STOPS BY HOIST MFGR.

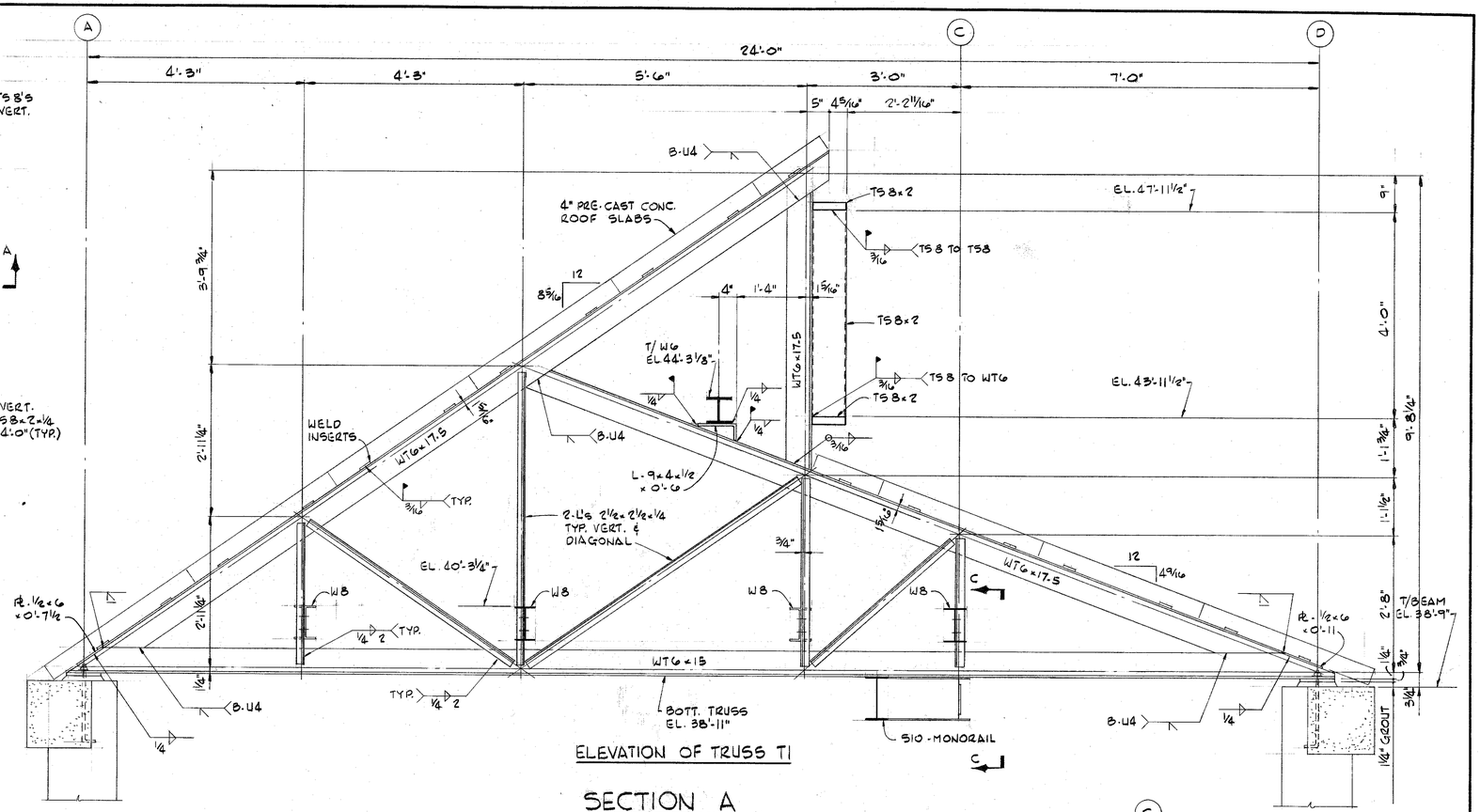
BOTTOM CHORD PLAN

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

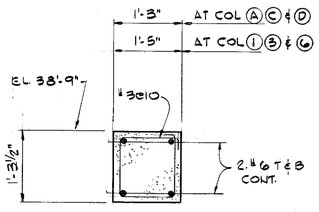
WIND LOAD = 33 P.S.F.
LIVE LOAD = 30 P.S.F.

TOP CHORD PLAN

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



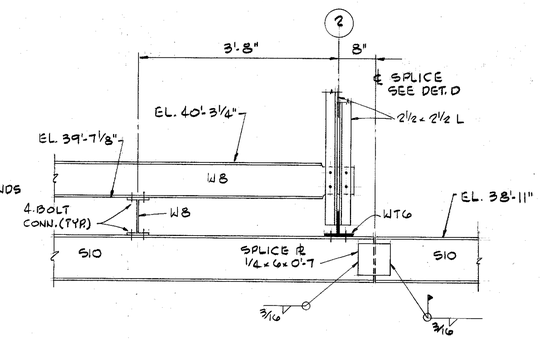
ELEVATION OF TRUSS T1



LAP TOP BARS AT ℄ OF SPANS } HOOK BARS (VERT)
LAP BOTT. BARS AT COL'S } AT DISCONTINUOUS ENDS
PROVIDE CORNER BARS AT OUT SIDE FACE ONLY

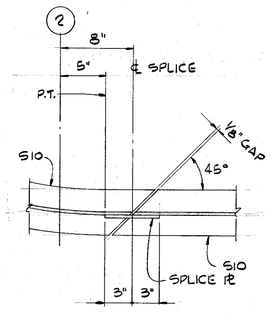
DETAIL B

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



SECTION C

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

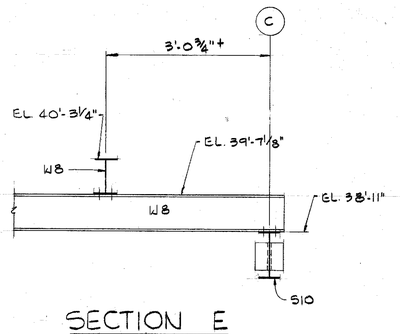


DETAIL D

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

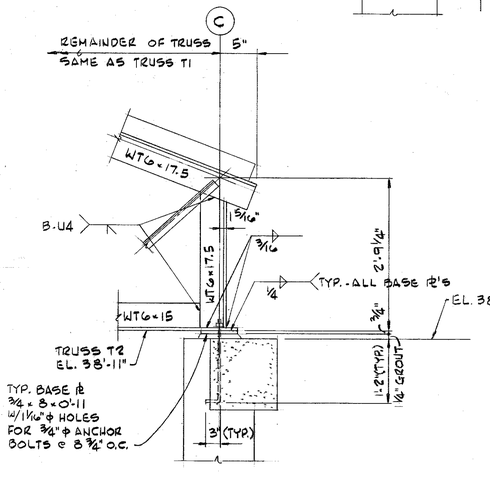
SECTION A

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



SECTION E

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

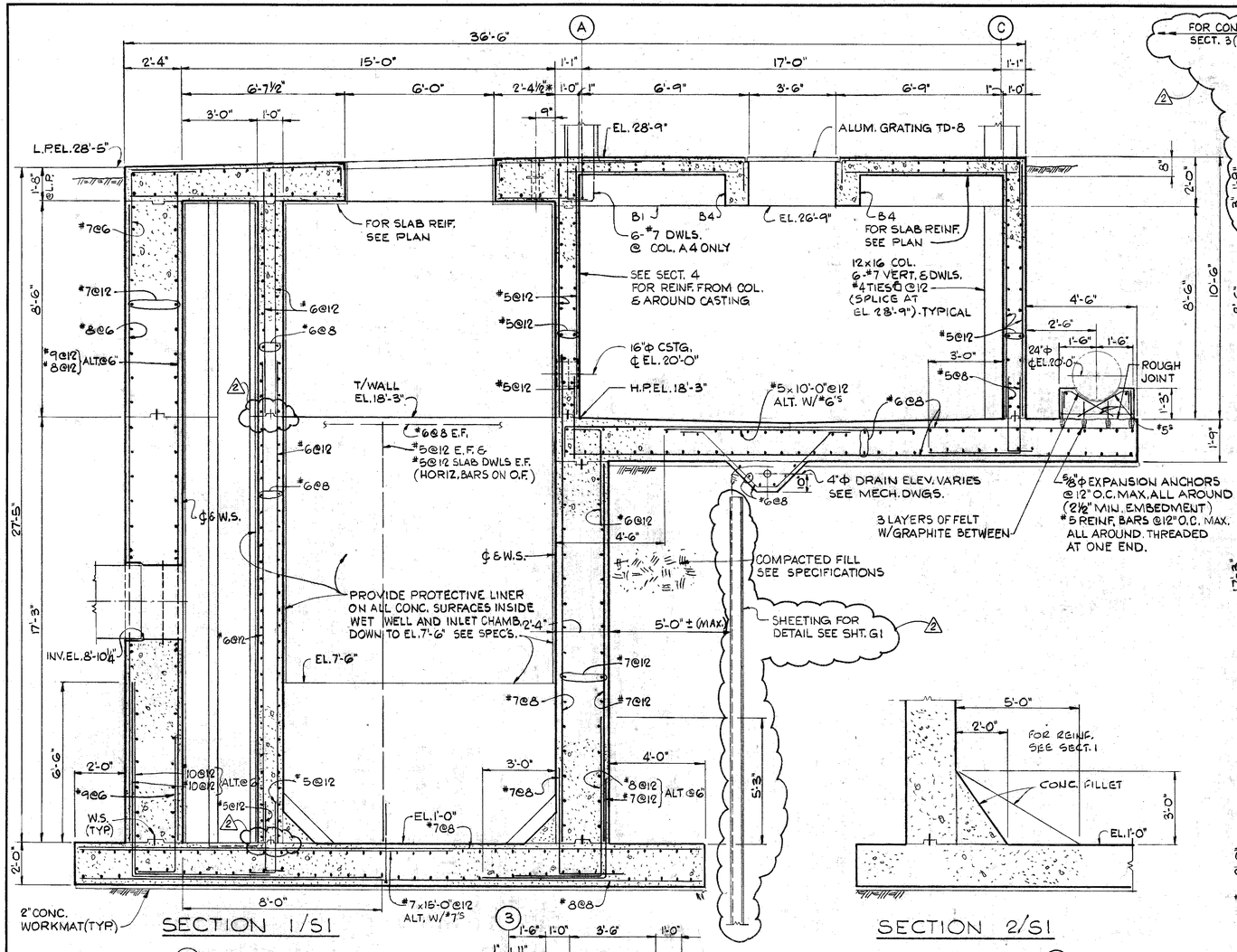


SECTION F

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

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED HT DRAWN JEB CHECKED HT SKS	APPROVED	NO.	DATE.	APP.	REVISION	SCALE 8 0 8 16 FT 1/8"=1'-0" 0 1 2 3 FT 3/4"=1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 4G4 43RD. STREET PUMPING STATION	STRUCTURAL PLANS AND SECTIONS	PROJ NO. DWG S2 SHEET 7 OF 17 DATE DEC 1983 REV. 0

87-26-9



GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED AO
DRAWN LT
CHECKED AO SKS

APPROVED

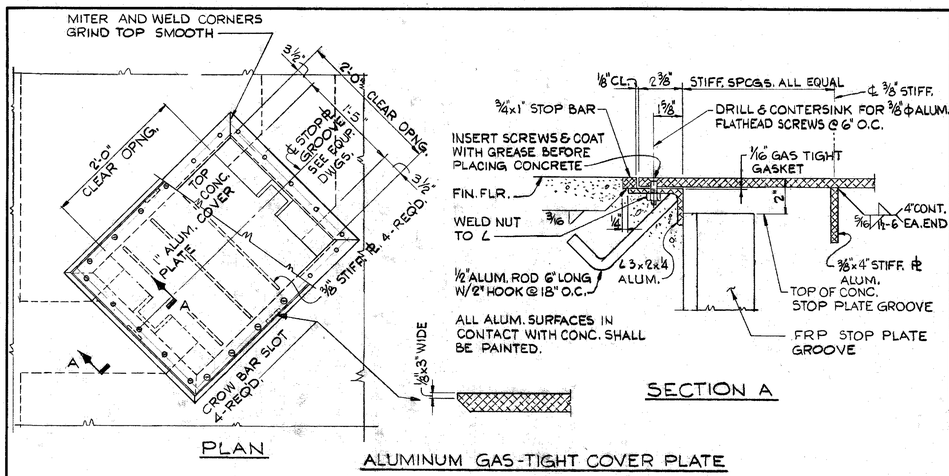
NO.	DATE	APP.	REVISION
2	JAN 85	JRP	ADDED SHEETING AND ODOR CONTROL SLAB
1	MAR. 84	JRP	REVISED DIMENSIONS

SCALE
0 1 2 3 4 5 6 7 FT
3/8" = 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

STRUCTURAL
SECTIONS

PROJ NO.
DWG S3
SHEET 8 OF 17
DATE DEC 1983 REV. 2



ALUMINUM GAS-TIGHT COVER PLATE

DETAIL TD-1

GRADE 60 REINFORCING BAR SPLICE TABLE

BAR SIZE			#3	#4	#5	#6	#7	#8	#9	#10	#11
TOP BARS	CLASS	B	13	17	22	26	33	44	55	70	86
		C	17	23	29	34	43	58	71	92	113
OTHER BARS	CLASS	B	12	12	16	19	24	31	39	50	62
		C	12	16	20	24	31	41	52	65	81

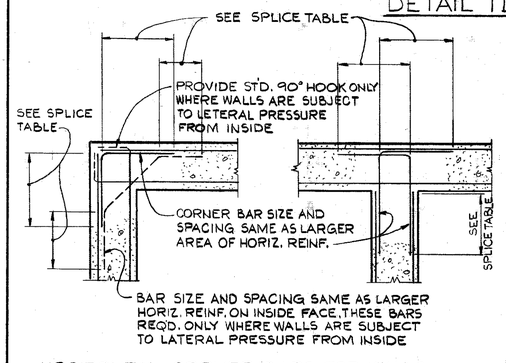
NOTES:

1. SPLICE LENGTH GIVEN IN INCHES.
2. UNLESS OTHERWISE SPECIFIED THE LENGTH OF LAP FOR SPLICES SHALL BE LENGTH "B" WHERE NO MORE THAN ½ THE BARS ARE LAP SPLICED & LENGTH "C" WHERE MORE THAN ½ THE BARS ARE LAP SPLICED.
3. TOP BARS ARE ALL HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR. THIS INCLUDES HORIZONTAL WALL REINFORCING.
4. WHERE BARS OF DIFFERENT SIZE ARE LAP SPLICED USE LAP LENGTH REQUIRED FOR LARGER BAR SIZE.
5. FOR BARS SPACED CLOSER THAN 6" INCREASE LAP LENGTH 25%

GENERAL STRUCTURAL NOTES

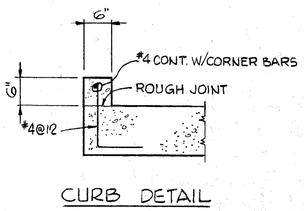
THE FOLLOWING GENERAL NOTES ARE SHOWN FOR CONVENIENCE AND ARE SUPPLEMENTAL TO THE SPECIFICATIONS.

1. TYPICAL SECTIONS AND DETAILS:
   ALL SECTIONS AND DETAILS SHOWN ARE INTENDED TO BE TYPICAL UNLESS OTHERWISE DETAILED. WORKING DRAWINGS PREPARED BY THE CONTRACTOR SHALL SHOW THE APPLICATION OF TYPICAL SECTIONS AND DETAILS FOR SIMILAR SITUATIONS.
2. EXPOSED CORNERS SHALL HAVE A ¾" CHAMFER AND RE-ENTRANT CORNERS SHALL HAVE A ¾" FLAT FILLET UNLESS NOTED.
3. THE USE OF CONSTRUCTION JOINTS AT LOCATIONS NOT SHOWN ON DRAWINGS SHALL REQUIRE APPROVAL BY THE ENGINEER.
4. OPENINGS AND EMBEDDED ITEMS:
   ALL CURBED AND OTHER OPENINGS, EQUIPMENT PADS, DEPRESSIONS, WALL CASTINGS, PIPE SLEEVES, INSERTS, ANCHOR BOLTS AND SIMILAR ITEMS SHALL BE PROVIDED AND LOCATED AS SHOWN ON THE APPROVED WORKING DRAWINGS FOR ARCHITECTURAL, EQUIPMENT, PLUMBING, ELECTRICAL AND HEATING-VENTILATING.
5. BACKFILLING:
   NO BACKFILL SHALL BE PLACED AGAINST STRUCTURE WALLS UNTILL ADJACENT FLOOR SLABS HAVE TAKEN THEIR FANAL SET, OR WALLS HAVE BEEN PROPERLY BRACED, AND IN NO CASE BEFORE CONCRETE HAS ATTAINED A COMPRESSIVE STRENGTH OF 3000 P.S.I. AS INDICATED BY CYLINDER TESTING. BACKFILL SHALL BE PLACED EVENLY AGAINST EACH SIDE OF SUB-STRUCTURE TO PRODUCE EQUAL AND OPPOSITE LATERAL PRESSURES. THE DIFFERENCE IN ELEVATION SHALL NOT EXCEED 1'-0".
6. CONCRETE:
   UNLESS OTHERWISE SHOWN OR SPECIFIED, THE MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH (f'c) SHALL BE 4000 P.S.I.
7. ALL REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60 AND SHALL BE DETAILED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," (A.C.I. STANDARD 315-80)
8. CONCRETE PROTECTION FOR REINFORCEMET SHALL BE AS FOLLOWS UNLESS SHOWN ON DRAWINGS OR ORDERED BY THE ENGINEER:
   A. SLABS
      1) FOR TOP & BOT. BARS FOR DRY CONDITIONS, ALL BARS - 1"
      2) EXPOSED TO EARTH, WATER & WEATHER AND OVER OR IN CONTACT WITH WATER AND FOR BOTTOM BEARING ON WORKMAT,
         a) #5 BARS AND SMALLER - 1½" b) #6 THROUGH #18 — 2"
   B. BEAMS AND COLUMNS
      1) FOR DRY CONDITION
         a) STIRRUPS AND TIES — 1½"
         b) PRINCIPAL REINFORCEMENT - 2"
      2) EXPOSED TO WATER OR WEATHER
         a) STIRRUPS AND TIES — 2"
         b) PRINCIPAL REINFORCEMENT - 2½"
   C. WALLS:
      1) EXPOSED TO DRY CONDITION
         a) LESS THAN 12" THICK — 1"
         b) 12" OR THICKER — 1½"
      2) EXPOSED TO WATER, WEATHER OR IN CONTACT WITH GROUND
   D. FOOTINGS AND BASE SLABS AT UNFORMED SIDES AND ENDS AND BOTTOM IN CONTACT W/EARTH - 3"
9. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS AND SHALL CONFORM TO ASTM A36. BOLTS SHALL BE ¾" ¢ HIGH STRENGTH BOLTS CONFORMING TO ASTM A325 IN FRICTION TYPE CONNECTIONS. ELECTRODES FOR WELDING SHALL BE E70XX.



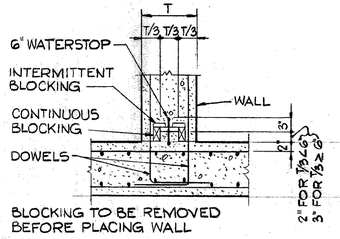
HORIZONTAL CORNER BARS FOR WALLS

DETAIL TD-2



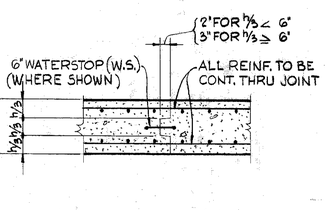
CURB DETAIL

DETAIL TD-3



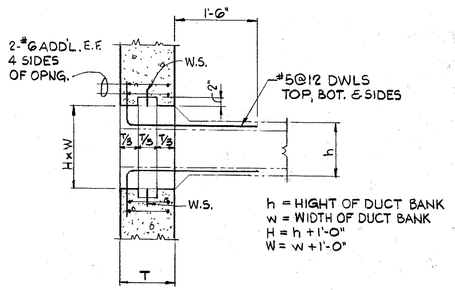
WATERSTOP IN CONSTRUCTION JOINT AT WALL

DETAIL TD-4



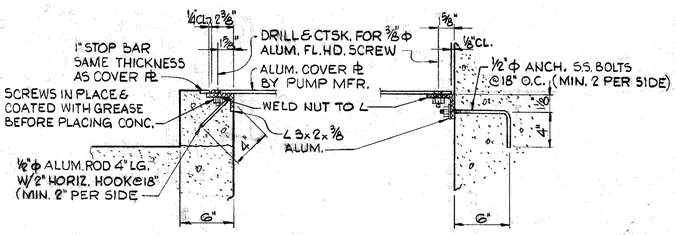
WALL AND SLAB CONSTRUCTION JOINT

DETAIL TD-5



ELECTRICAL DUCT OPENING

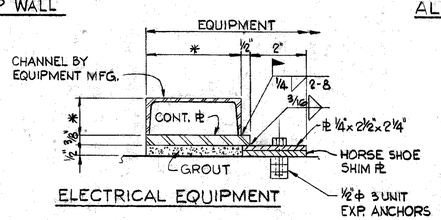
DETAIL TD-9



AT SUMP CURB AT SUMP WALL

SUMP COVER PLATE DETAIL

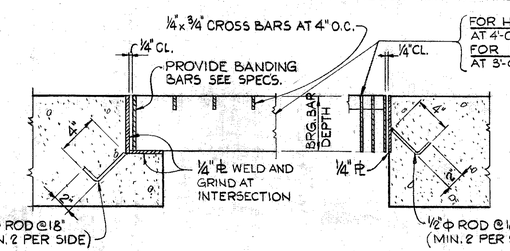
DETAIL TD-6



ELECTRICAL EQUIPMENT

DETAIL TD-7

* DENOTES SIZE AND LOCATION TO BE DETERMINED AFTER FINAL EQUIPMENT SELECTION



BEARING EDGE NON BEARING EDGE

ALUMINUM GRATING DETAILS

DETAIL TD-8

NOTES:
1. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE TO BE PAINTED
2. ALL ANGLES, BARS AND ANCHOR BOLTS TO BE THE SAME MATERIAL AS GRATING

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED AO HT DRAWN LT CHECKED AO SKS	APPROVED	NO. DATE. APP. REVISION

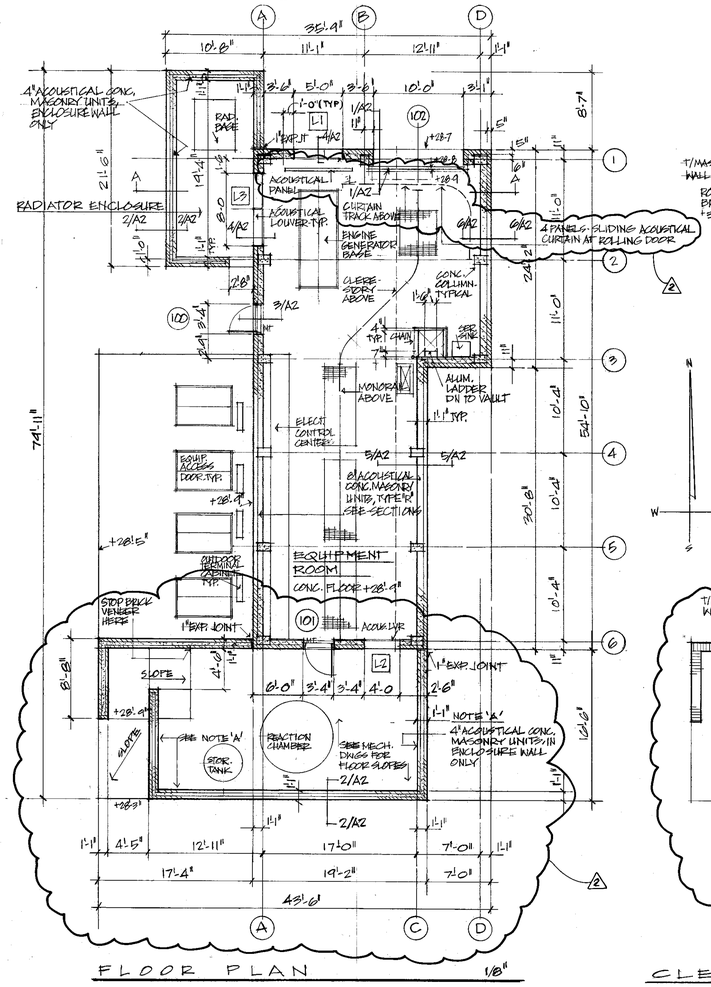
SCALE
1 0 1 2 3 4 5 6 7 FT 3/8"=1'-0"
1 0 1 2 3 FT 3/4"=1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

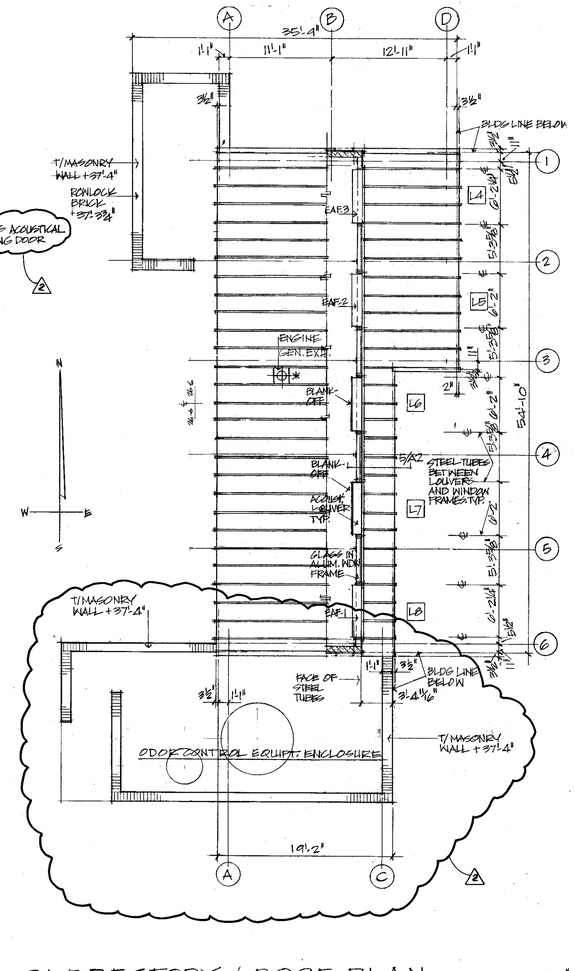
STRUCTURAL
SECTIONS, DETAILS, GENERAL NOTES

PROJ NO.
DWG S4
SHEET 9 OF 17
DATE DEC 1983 REV. 0

87-261

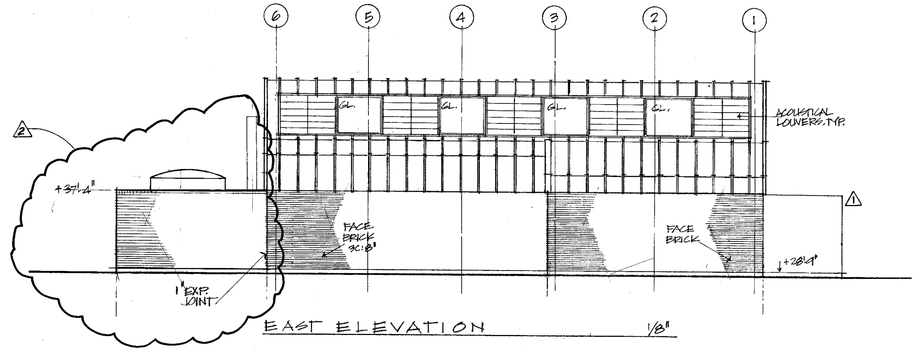


FLOOR PLAN 1/8"

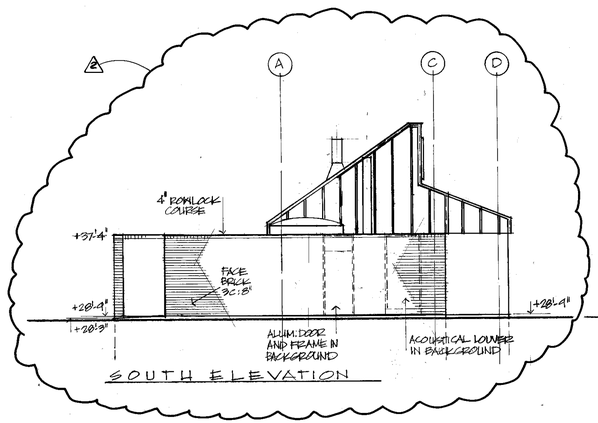


CLERESTORY / ROOF PLAN 1/8"

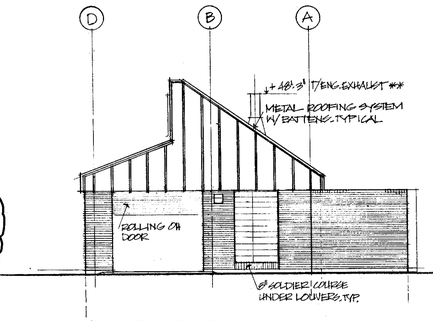
* FINAL DIMENSION TO BE DETERMINED IN THE FIELD AFTER SELECTION OF EQUIP.



EAST ELEVATION 1/8"



SOUTH ELEVATION



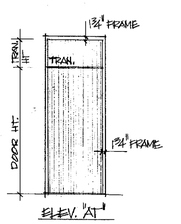
NORTH ELEVATION

** MINIMUM HEIGHT, FINAL DIMENSION TO BE DETERMINED AFTER SELECTION OF ENGINE GENERATOR

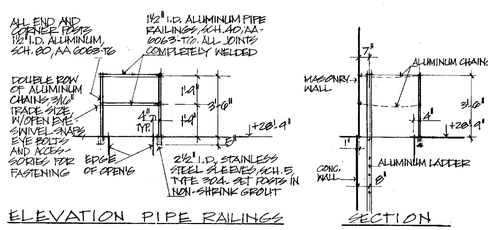
DOOR SCHEDULE

DOOR OPENING NO.	DOOR ELEV.	DOOR SIZE WIDTH	DOOR SIZE HT.	DOOR SIZE T.	TRANSOM HT.	MATERIAL DR	MATERIAL FR.	MATERIAL TRANS.	THRESHOLD MAT'L TYPE	REMARKS
100	AT	3'-0	7'-0	1 3/4"	1'-6"	AL.	AL.	AL.	ACA TYPE	
101	-	10'-0	8'-0	-	-	GT.	GAT.	-	-	ROLLING OH. DOOR
102	AT	3'-0	7'-0	1 3/4"	1'-6"	AL.	AL.	AL.	ACA TYPE	

ACA: ABERDEEN CAST ALUMINUM THRESHOLDS, 'WOOSTER' OR EQUAL

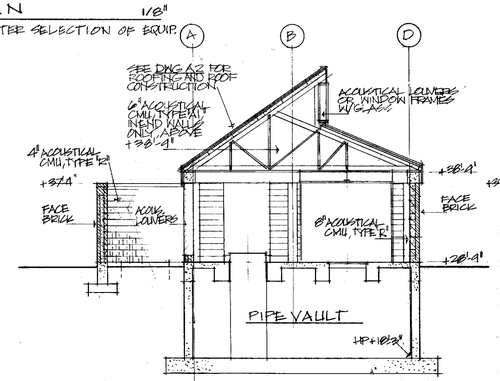


ELEV. 'AT'

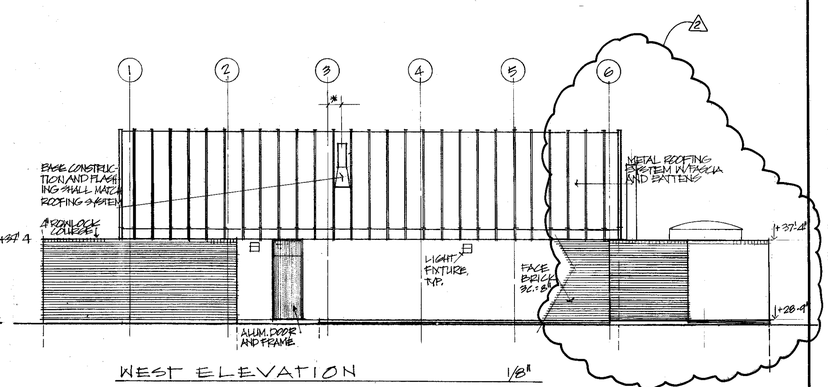


ELEVATION PIPE RAILINGS AT LADDER TO PIPE VAULT
1/4"=1'-0

SECTION



SECTION A 1/8"



WEST ELEVATION 1/8"

* FINAL LOCATION TO BE DETERMINED IN THE FIELD AFTER SELECTION OF ENGINE GENERATOR

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED CDS/JAL	APPROVED	
	DRAWN JAL		
	CHECKED JAL		

NO.	DATE.	APP.	REVISION
2	JAN. 85	JRP	ADD ODOR CONTROL EQUIP. AND REVISED ELEVATIONS
1	MAR. 84	JRP	ADD RAD. ENCL. TO EAST EL.

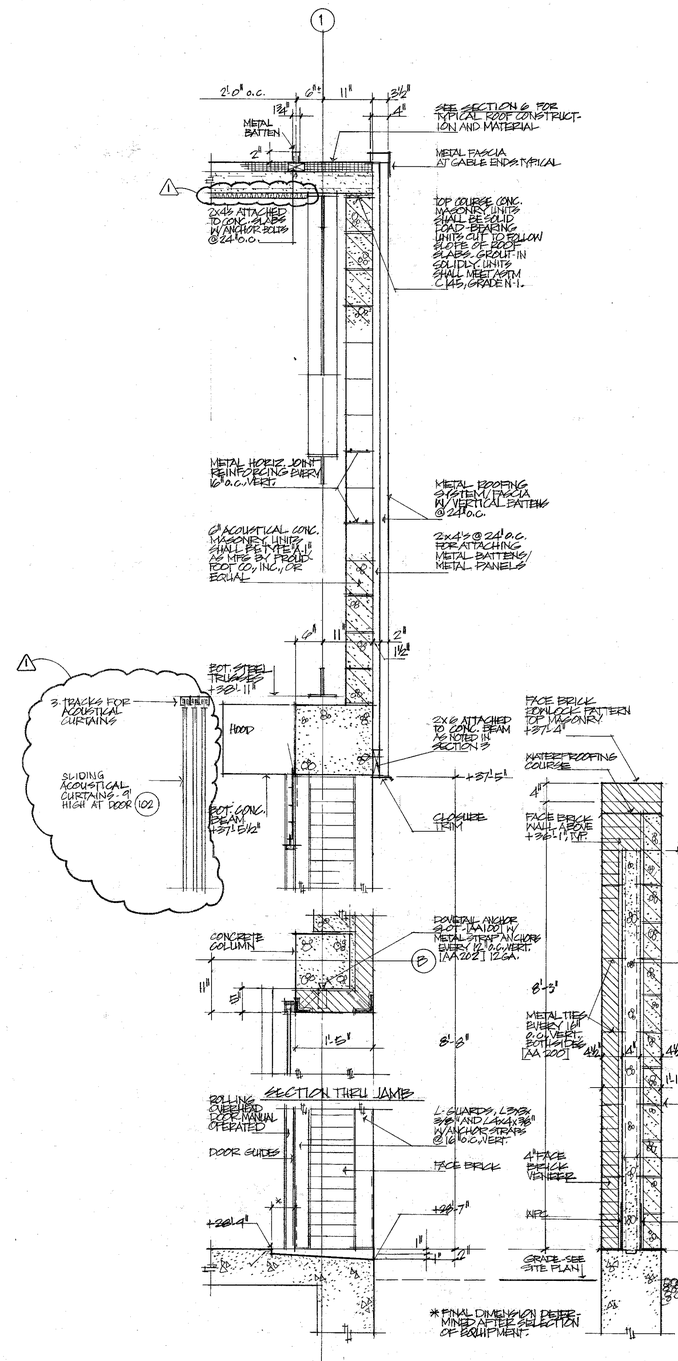
SCALE 8 0 8 16 FT 1/8"=1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4&4
43RD. STREET PUMPING STATION

ARCHITECTURAL
PLANS, ELEVATIONS AND SECTION

PROJ NO.
DWG A1
SHEET 10 OF 17
DATE DEC 1983 REV. 2

87-26j



GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED JAL DRAWN JAL CHECKED JAL	APPROVED	NO. 1 DATE JAN 85 APP. JRP — ADDED ACOUSTICAL MATERIAL — REVISION

SCALE: 1 0 1 2 3 FT — 3/4" = 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

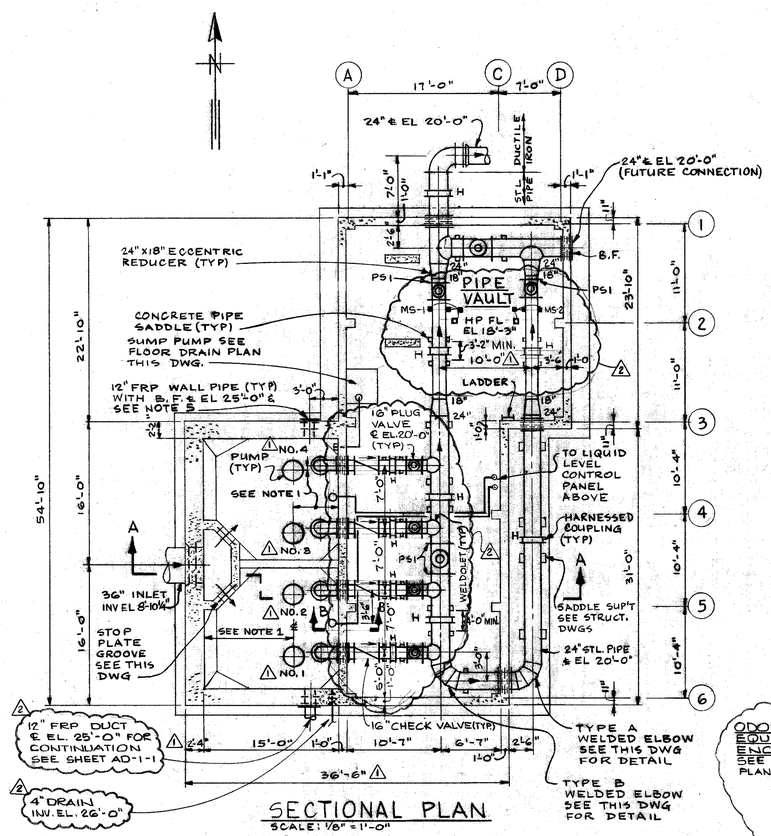
ARCHITECTURAL
SECTIONS AND DETAILS

PROJ NO.
DWG A2
SHEET 11 OF 17
DATE DEC 1983 REV. 1

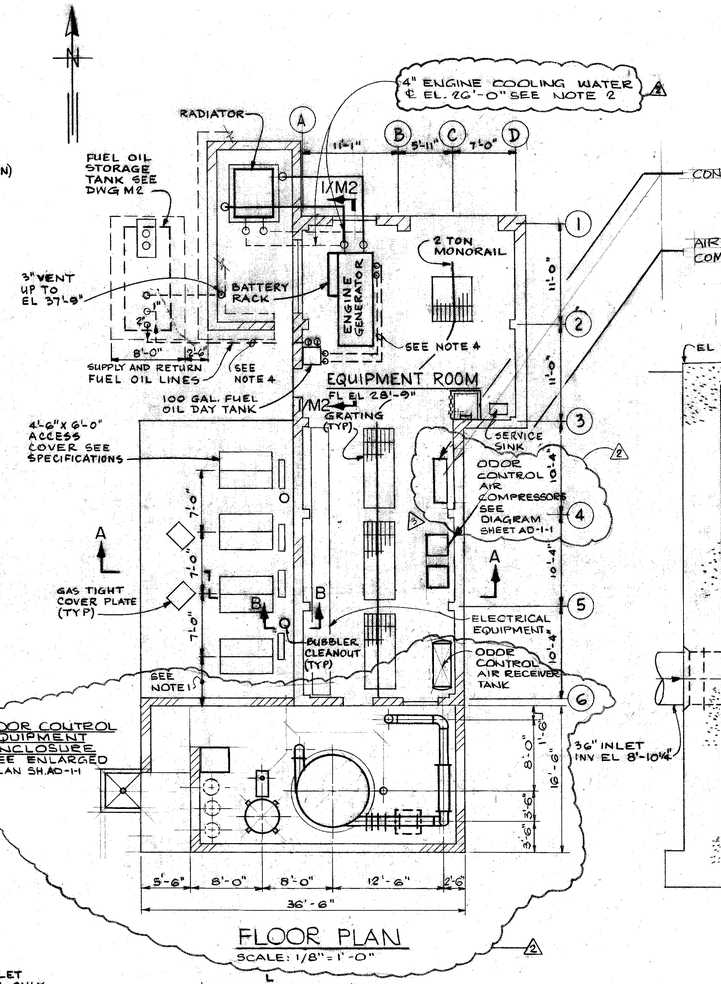
8726k

AS-BUILT

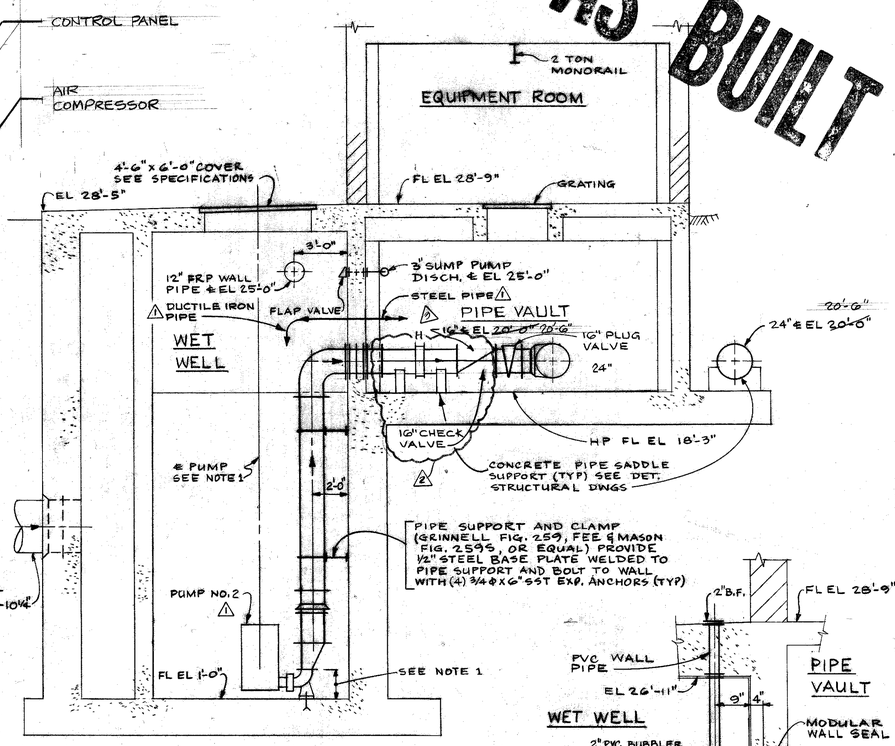
⚠2 AS-BUILT NOTE
CHANGED/ADDED
MCC AND COMPRESSOR LOCATION
CHECK VALVE LOCATION AND ELEVATION



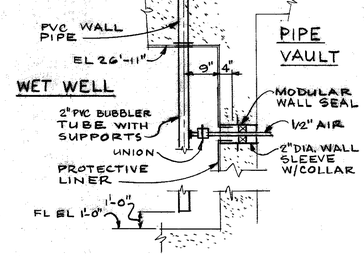
SECTIONAL PLAN
SCALE: 1/8" = 1'-0"



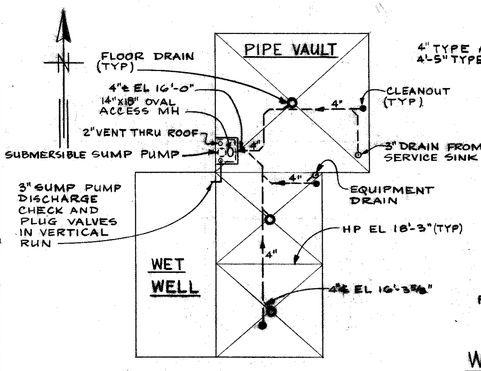
FLOOR PLAN
SCALE: 1/8" = 1'-0"



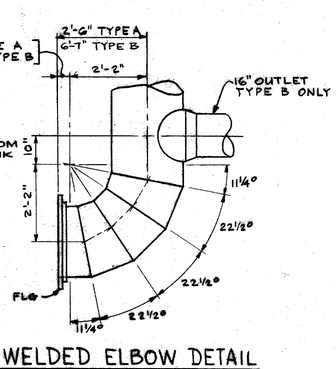
SECTION A
SCALE: 1/4" = 1'-0"



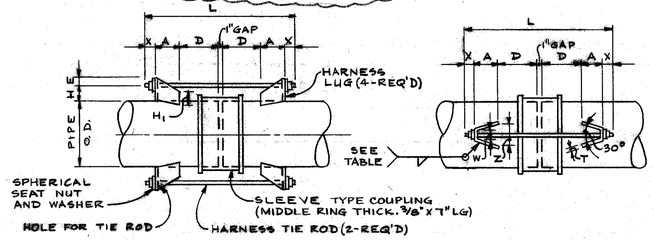
SECTION B
NOT TO SCALE



FLOOR DRAIN PLAN
NOT TO SCALE

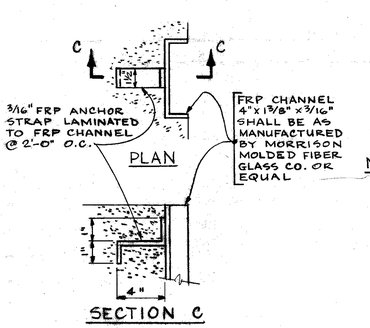


WELDED ELBOW DETAIL
NOT TO SCALE



HARNESSED SLEEVE TYPE COUPLING - SCHEDULE

PIPE SIZE	WALL THICK'S	PIPE O.D.	HARNESS TIE ROD			HARNESS LUG MIN. DIMENSION									TEST PRESS. P.S.I.G.
			DIA.	X	L	A	W	Z	T	E	H	H_1	D	HOLE	WELD	
16	.375	16.00	1	1½	31¼	5⅛	2⅛	4 11/16	⅜	3¼	4½	2	8½	1⅛	¼	100
18	.438	18.00	1⅛	1⅝	33½	6⅛	2⅜	5 11/16	½	3⅝	4⅜	2½	8½	1¼	¼	100
24	.375	24.00	1½	2	39½	8¾	3	7½	½	3⅞	5½	2½	8½	1⅝	⅜	100



SECTION C

STOP PLATE GROOVE DETAIL
NOT TO SCALE

NOTES:

1 LOCATION DIMENSIONS OF PUMPING EQUIP. AND PIPING NOT SHOWN SHALL BE DETERMINED AFTER FINAL SELECTION OF PUMPING EQUIP.

2 2" LOW POINT DRAIN VALVES TO BE LOCATED IN PIPE VAULT ON COOLING WATER LINES

3 ACCESS COVERS SHALL BE LOCATED AS REQ'D FOR PUMPING EQUIP.

4 PROVIDE FULL SIZE LOW POINT DRAIN VALVES ON ALL FUEL LINES IN PIPE VAULT.

5 FIBERGLAS REINFORCED PLASTIC FRP WALL PIPE SHALL CONFORM TO NATIONAL BUREAU OF STANDARDS VOLUNTARY PRODUCTS STANDARD PS15-69. BOLT CIRCLES, BOLT HOLES, AND NUMBER OF BOLTS SHALL CONFORM TO ANSI CLASS 150.

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED DCH	APPROVED	
	DRAWN JAL		
	CHECKED JRP		

NO.	DATE.	APP.	REVISION
⚠3	AUG 87	CR	AS-BUILT PER INSP'T PRINTS
⚠2	JAN. 85	JRP	REVISED AS SHOWN
⚠1	MAR. 84	JRP	REVISED NOTES

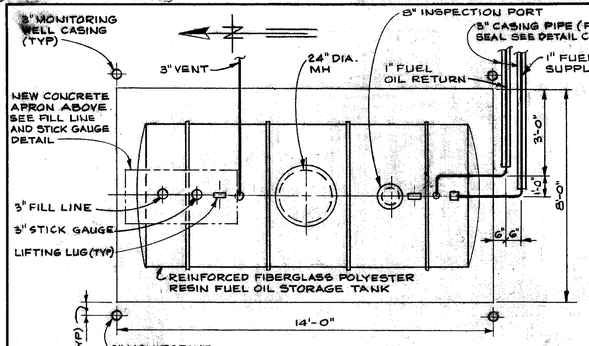
SCALE
8 0 8 16 FT 1/8" = 1'-0"
4 0 4 8 FT 1/4" = 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

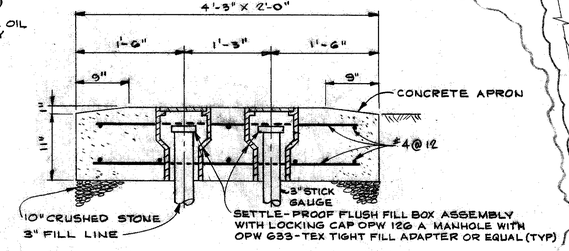
MECHANICAL
PLANS, SECTIONS AND DETAILS

PROJ NO.
DWG M1
SHEET 12 OF 17
DATE DEC 1983 REV. 2

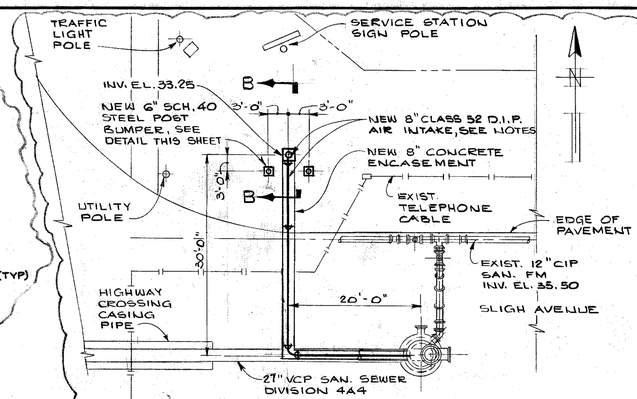
87-261



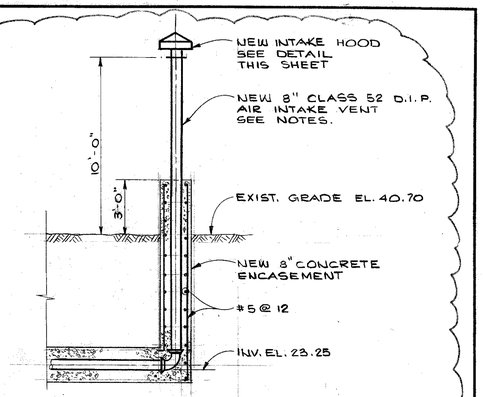
PLAN



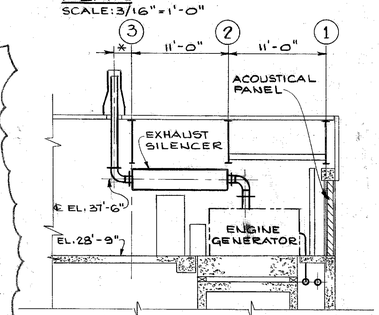
FILL LINE AND STICK GAUGE DETAIL
SCALE: 1" = 1'-0"



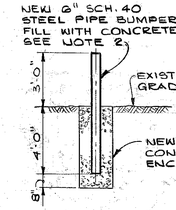
SLIGH AVE. INTERCEPTING SEWER AIR INTAKE VENT



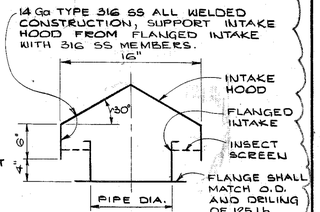
SECTION B
SCALE: 1/4" = 1'-0"



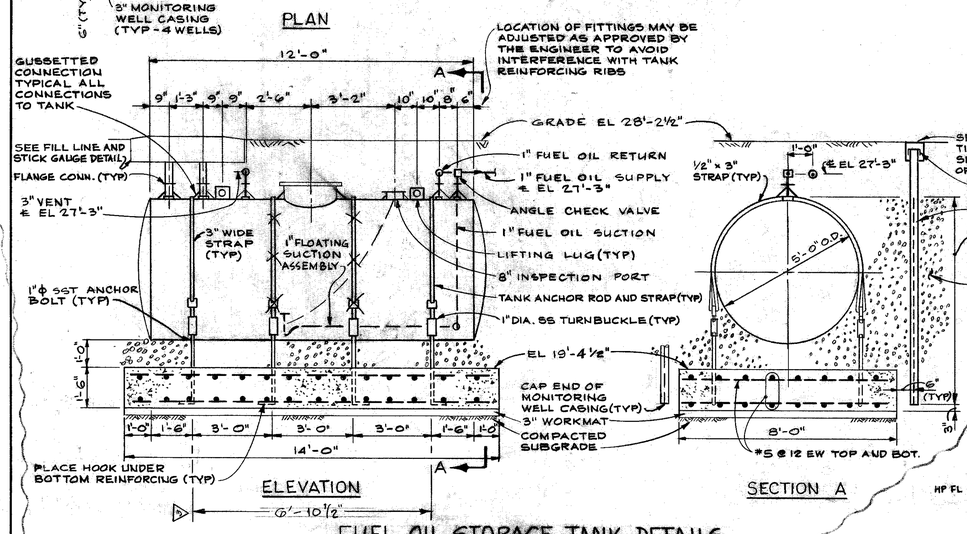
PLAN
SCALE: 3/16" = 1'-0"



BUMPER DETAIL
SCALE: 1/4" = 1'-0"

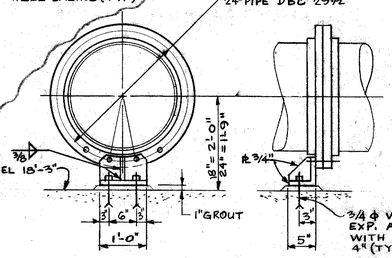


INTAKE HOOD DETAIL
SCALE: 1" = 1'-0"



ELEVATION

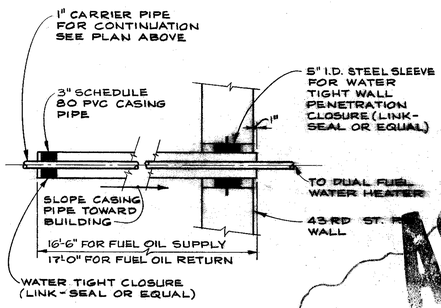
SECTION A



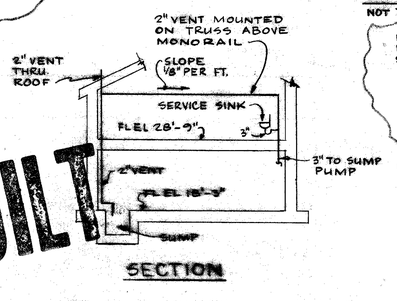
SECTION 1/M1
SCALE: 1/8" = 1'-0"

FUEL OIL STORAGE TANK DETAILS
SCALE: 3/8" = 1'-0"

TYPICAL PIPE SUPPORT DETAIL - PS1
NOT TO SCALE

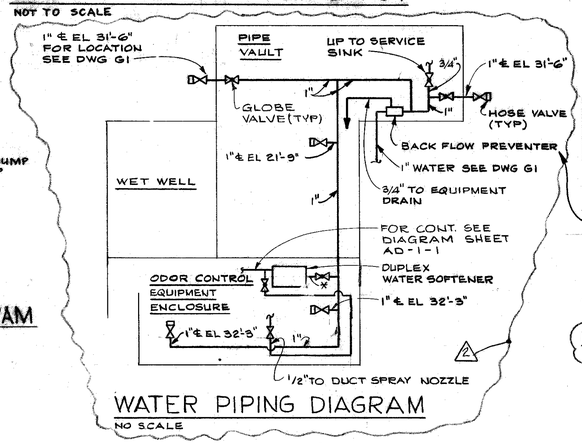


DETAIL C
NOT TO SCALE

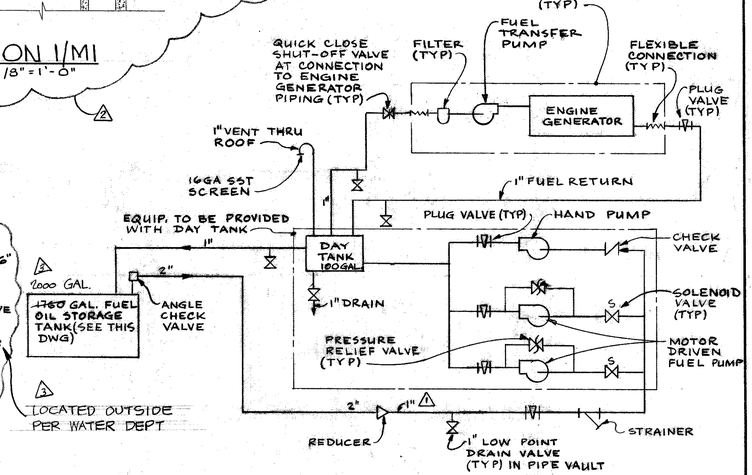


SECTION

WASTE AND VENT PIPE DIAGRAM
NO SCALE



WATER PIPING DIAGRAM
NO SCALE



ENGINE GENERATOR FUEL SYSTEM DIAGRAM
NO SCALE

NOTES:
1. NEW CLASS 52 D.I. AIR INTAKE PIPE SHALL BE ENCASED IN CONCRETE AS SHOWN.
2. NEW CLASS 52 D.I. AIR INTAKE PIPE SHALL BE PROVIDED WITH POLYETHYLENE LINING HEAT BONDED TO INTERIOR OF PIPE, SEE SPECIFICATIONS.
3. THE CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING BITUMINOUS PAVEMENT AND SHALL BACKFILL AND REPLACE SOD OVER TRENCH AS DIRECTED.
4. ALL EXISTING UTILITIES, DIMENSIONS AND ELEVATIONS TO BE FIELD VERIFIED.

AS BUILT

△3 AS-BUILT NOTE
CHANGED/ADDED:
3" WIDE STRAP
BACKFLOW PREVENTER
TANK CAPACITY

NO.	DATE.	APP.	REVISION
△3	AUG 87	CR	AS-BUILT PER INSP'T PRINTS
△2	JAN 85	JRP	REVISED FUEL OIL STORAGE DETAILS AND WATER PIPING AND ADDED AIR INTAKE DETAILS
△1	MAR 84	JRP	ADDED LINE SIZE

SCALE
4 0 4 8 12 FT — 3/16" = 1'-0"
4 0 4 8 FT — 1/4" = 1'-0"
0 1 2 3 4 5 6 7 FT — 3/8" = 1'-0"

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

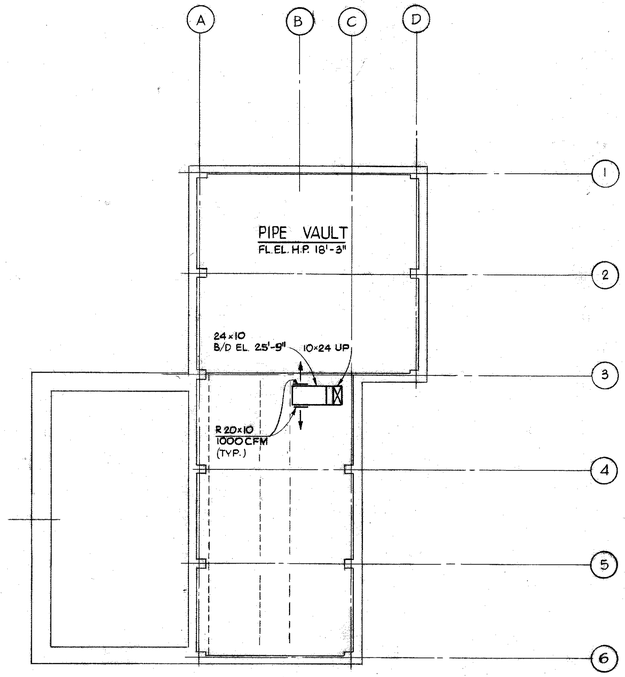
DESIGNED DCH
DRAWN JAL
CHECKED JRP
APPROVED

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

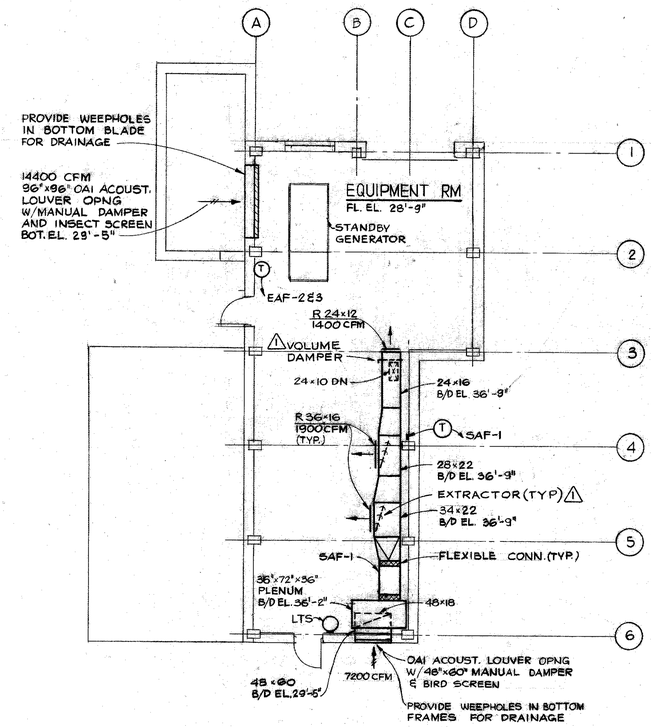
MECHANICAL
SECTIONS, DETAILS AND DIAGRAMS

PROJ NO.
DWG M2
SHEET 13 OF 17
DATE DEC 1983
REV. 2

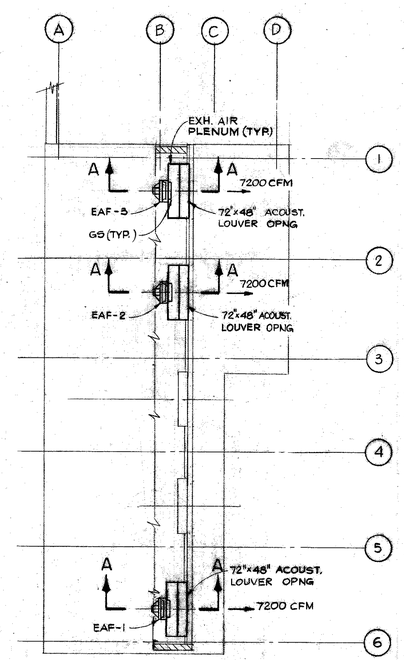
87-26 M



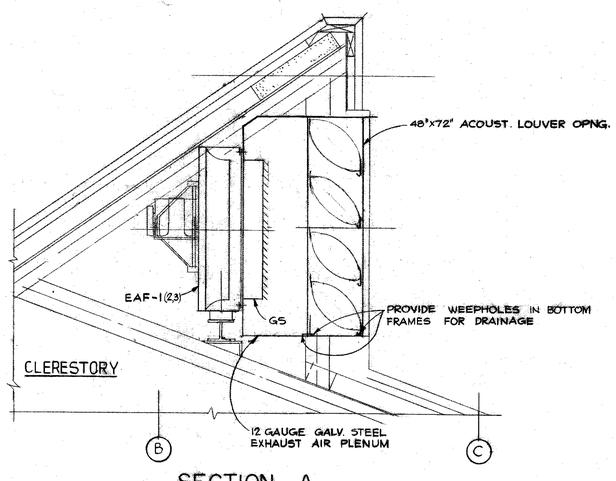
BASEMENT PLAN
SCALE 1/8"=1'-0"



FLOOR PLAN
SCALE 1/8"=1'-0"



CLERESTORY/ROOF PLAN
SCALE 1/8"= 1'-0"



SECTION A
SCALA 3/4"=1'-0"

LEGEND

REGISTER	R
OUTSIDE AIR INTAKE	OAI
LOW TEMPERATURE STAT	LTS
ROOM THERMOSTAT	(T)
GRAVITY SHUTTER	GS
BOTTOM OF DUCT ELEVATION	B/D EL.

GREELEY AND HANSEN
ENGINEERS
222 S. RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

DESIGNED FSS
DRAWN MN
CHECKED FSS

APPROVED

NO.	DATE	APP.	REVISION
1	MAR 84	JRP	ADDED NOTES

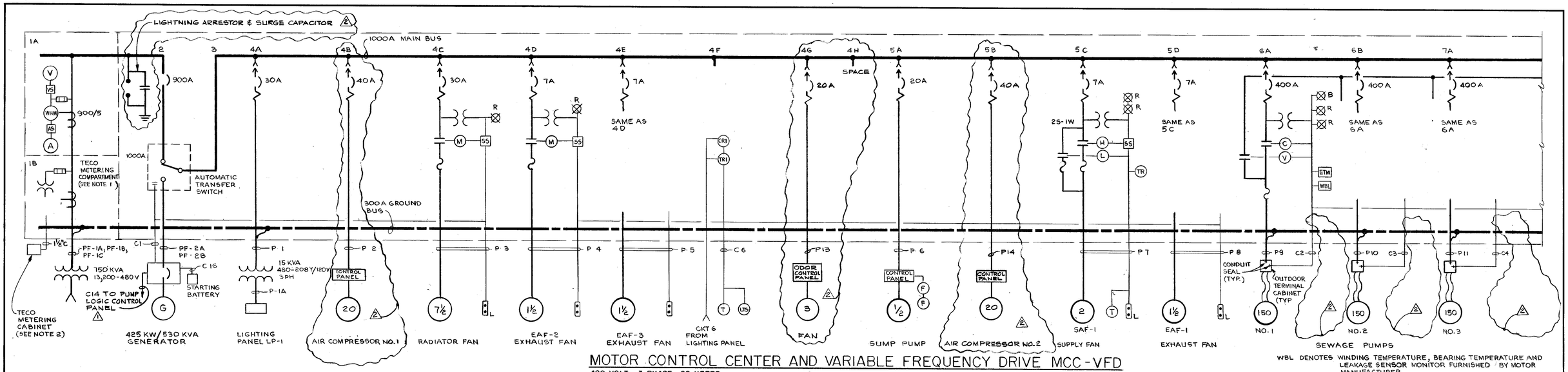
SCALE
8 0 8 16 FT 1/8"=1'-0"
1 0 1 2 3 FT 3/4"=1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 464
43RD. STREET PUMPING STATION

VENTILATING
PLANS AND DETAIL

PROJ NO.
DWG VI
SHEET 14 OF 17
DATE DEC 1983 REV. 1

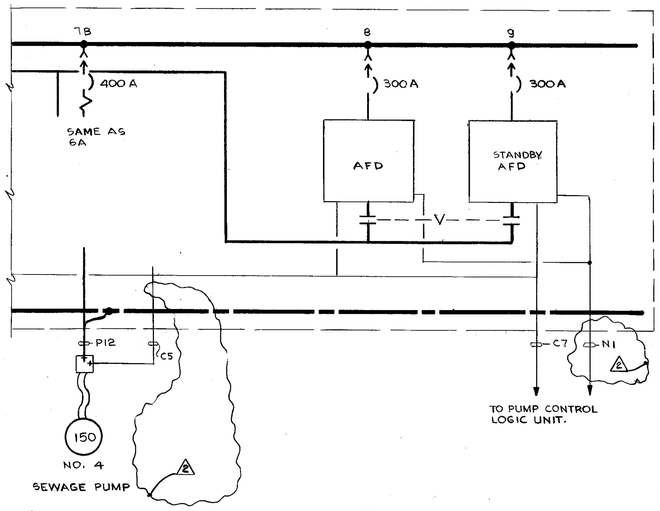
87-26n

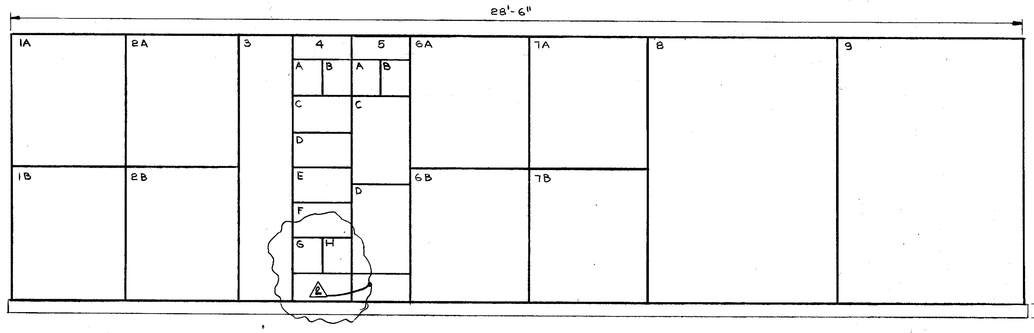


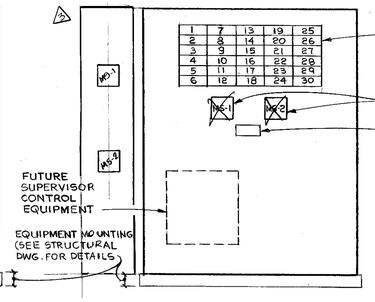
WBL DENOTES WINDING TEMPERATURE, BEARING TEMPERATURE AND LEAKAGE SENSOR MONITOR FURNISHED BY MOTOR MANUFACTURER.

MOTOR CONTROL CENTER AND VARIABLE FREQUENCY DRIVE MCC-VFD

480 VOLT, 3 PHASE, 60 HERTZ





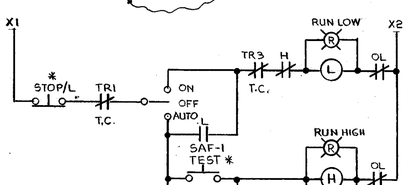


MOTOR CONTROL CENTER AND VARIABLE FREQUENCY DRIVE MCC-VFD - FRONT ELEVATION

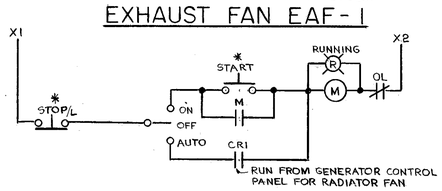
NOT TO SCALE

PUMP CONTROL LOGIC UNIT

NOT TO SCALE

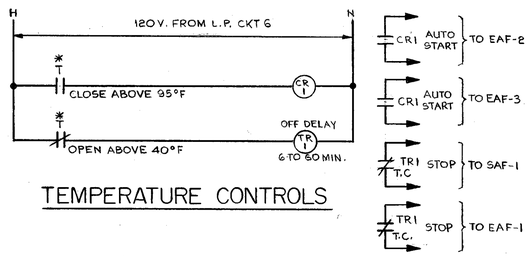


EXHAUST FAN EAF-1

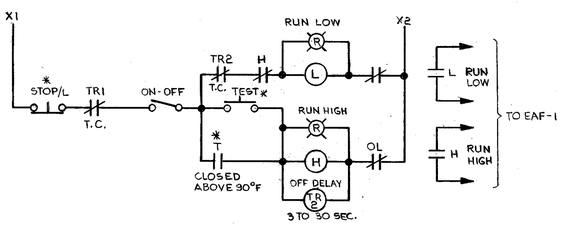


EXHAUST FAN EAF-2

SIMILAR FOR EAF-3 AND RADIATOR FAN



TEMPERATURE CONTROLS



SUPPLY FAN SAF-1

△ AS-BUILT NOTE
MS-1 & MS-2 RELOCATED

AS BUILT

1. METERING COMPARTMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TECO. METERING INSTRUMENTS SHALL BE FURNISHED BY TECO FOR SHOP INSTALLATION.
2. METERING CABINET FURNISHED BY TECO SHALL BE INSTALLED ON EXTERIOR WALL AS REQUIRED BY TECO.
3. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC UNITS WITH TRIP RATINGS AS SHOWN AND SHALL BE RATED FOR 600 VOLTS, 18,000 SYMMETRICAL AMPERES INTERRUPTING CAPACITY.
4. ELECTRICAL EQUIPMENT AND WIRING FOR THE PUMPS HAS BEEN BASED ON 150 HORSEPOWER MOTORS. IF EQUIPMENT IS PROPOSED WHICH INCLUDES MOTORS OF LARGER HORSEPOWER AS ALLOWED BY THE SPECIFICATIONS THE ELECTRICAL DESIGN (VFD & MOTOR CONTROL CENTER EQUIPMENT, DEVICES, WIRING, ETC.) REQUIRED FOR THE LARGER MOTORS SHALL BE SUBMITTED WITH THE PUMPING EQUIPMENT FOR APPROVAL AND SUCH SHALL BE PROVIDED AT NO ADDITIONAL COSTS.

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED BBK	APPROVED
	DRAWN KZK	
	CHECKED BBK	

NO.	DATE	APPD	REVISION
3	AUG 87	CB	AS-BUILT PER INSP'T PRINTS
2	JAN 85	JRP	REVISIONS AS SHOWN
1	MAR. 84	JRP	ADDED C 14

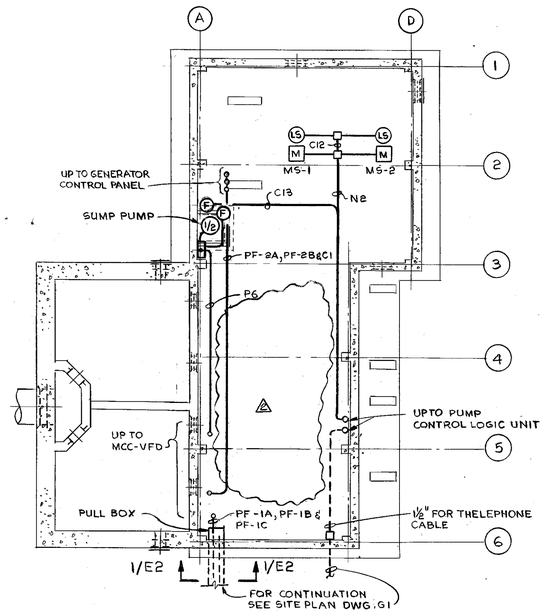
SCALE: NO SCALE

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

ELECTRICAL
MOTOR CONTROL CENTER
VARIABLE FREQUENCY DRIVE
ONE LINE DIAGRAM & ELEVATION

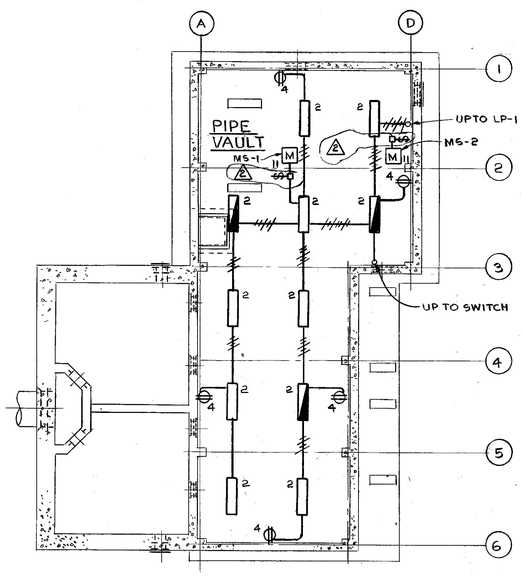
PROJ NO.
DWG E1
SHEET 15 OF 17
DATE DEC 1983 REV 2

87-260



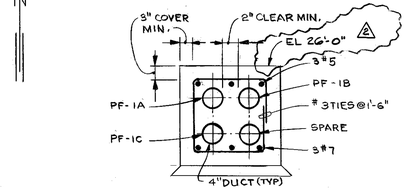
BASEMENT POWER PLAN

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



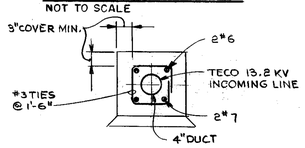
BASEMENT LIGHTING PLAN

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



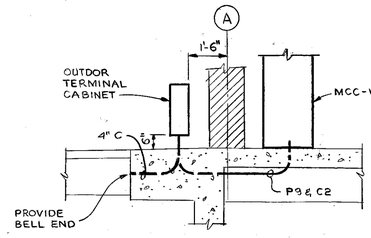
SECTION 1/G1 & E2

NOT TO SCALE



SECTION 2/G1

NOT TO SCALE

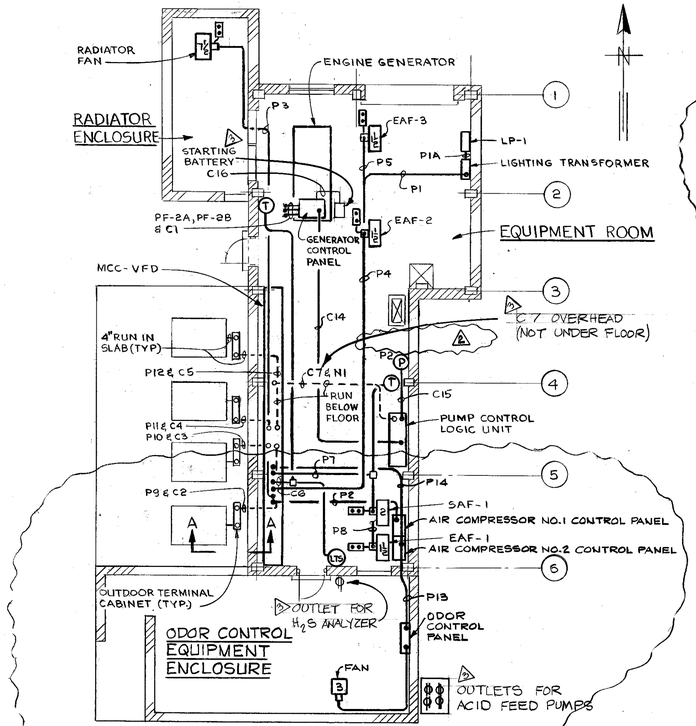


SECTION A

NOT TO SCALE

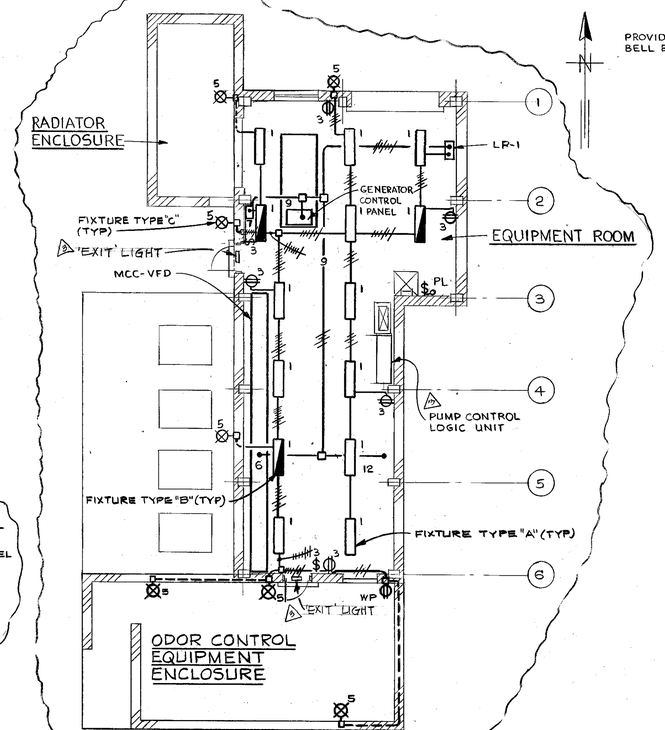
LEGEND

- 20A — CIRCUIT BREAKER WITH THERMAL MAGNETIC TRIP RATED 20A.
- M — FULL VOLTAGE MOTOR CIRCUIT PROTECTOR COMBINATION STARTER WITH CONTROL TRANSFORMER (M= OPERATING COIL)
- H, L — TWO SPEED COMBINATION STARTER
- R, B — INDICATING LIGHT (R-RED, B-BLUE)
- A — METER (A-AMMETER, V-VOLTMETER, WHM - WATTHOUR METER)
- SES — SELECTOR SWITCH
- AS — METER SWITCH (AS-AMMETER, VS - VOLTMETER)
- LS — CONTROL DEVICES:
  LS - LIMIT SWITCH
  DPP - DIFFERENTIAL PRESSURE
  F - FLOAT SWITCH
  P - PRESSURE SWITCH
  T - THERMOSTAT
  S - SOLENOID VALVE
  LTS - LOW TEMP. SWITCH
- TRANSFORMER
- CURRENT TRANSFORMER
- DUPLEX RECEPTACLE
- PL — SINGLE POLE SWITCH WITH PILOT LIGHT
- 3 — THREE WAY SWITCH
- L — START-STOP PUSHBUTTON
  L- DENOTES LOCK ATTACHMENT ON STOP
- INDICATES DEVICE LOCATED REMOTE FROM MCC-AFD



FLOOR POWER PLAN

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



FLOOR LIGHTING PLAN

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

AS-BUILT NOTE
CHANGED/ADDED:
STARTING BATTERY LOCATION
C7 OVERHEAD
H_2S ANALYZER OUTLET
ACID FEED PUMP OUTLET
'EXIT' LIGHT (2)
PUMP CONTROL LOGIC UNIT

AS BUILT

GREELEY AND HANSEN ENGINEERS, 222 S. RIVERSIDE PLAZA, CHICAGO, ILLINOIS 60606	DESIGNED BBK	APPROVED	
	DRAWN KZK		
	CHECKED BBK		

NO.	DATE	APPD	REVISION
3	AUG 87	CB	AS-BUILT PER INSP'T PRINTS
2	JAN 85	JRP	REVISIONS AS SHOWN
1	MAR. 84	JRP	ADDED LEGEND AND NOTES

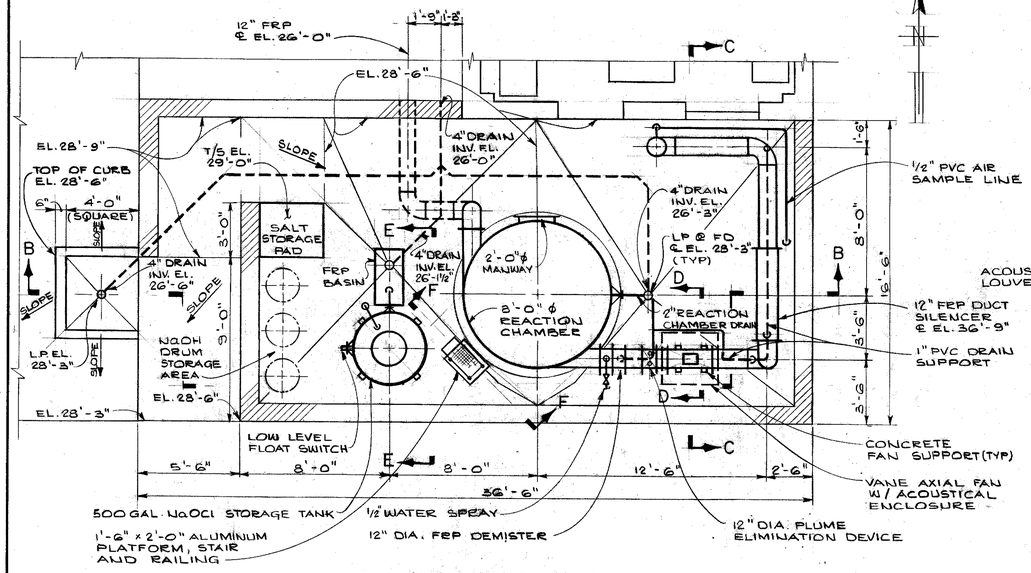
SCALE: 8 0 8 16 FT — 1/8" = 1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 4G4
43RD. STREET PUMPING STATION

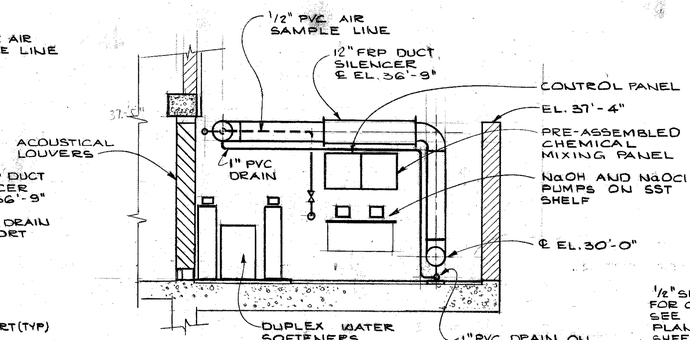
ELECTRICAL
POWER AND LIGHTING PLANS

PROJ NO.
DWG E2
SHEET 16 OF 17
DATE DEC 1983
REV 2

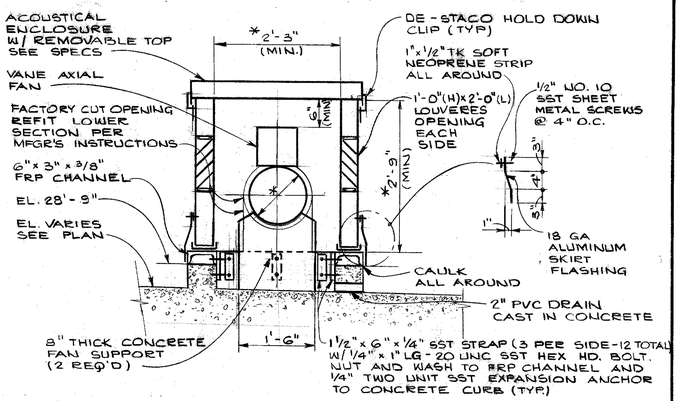
34789



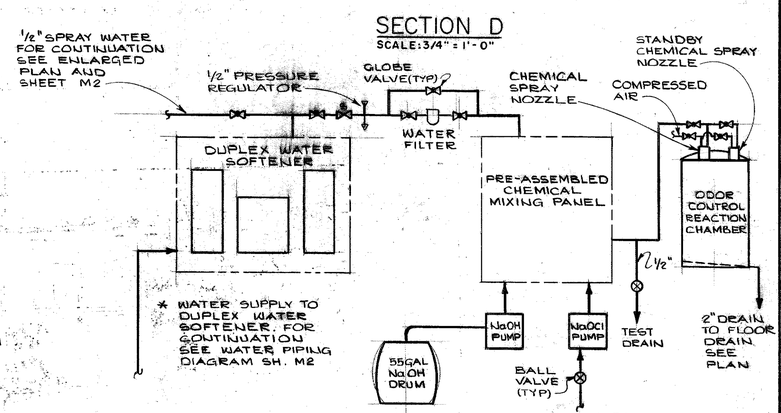
ENLARGED PLAN
SCALE: 1/4" = 1'-0"



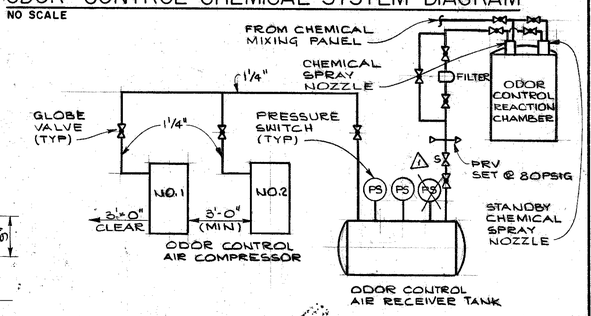
SECTION C
SCALE: 1/4" = 1'-0"



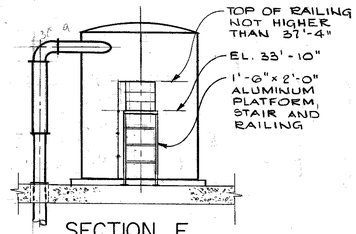
SECTION D
SCALE: 3/4" = 1'-0"



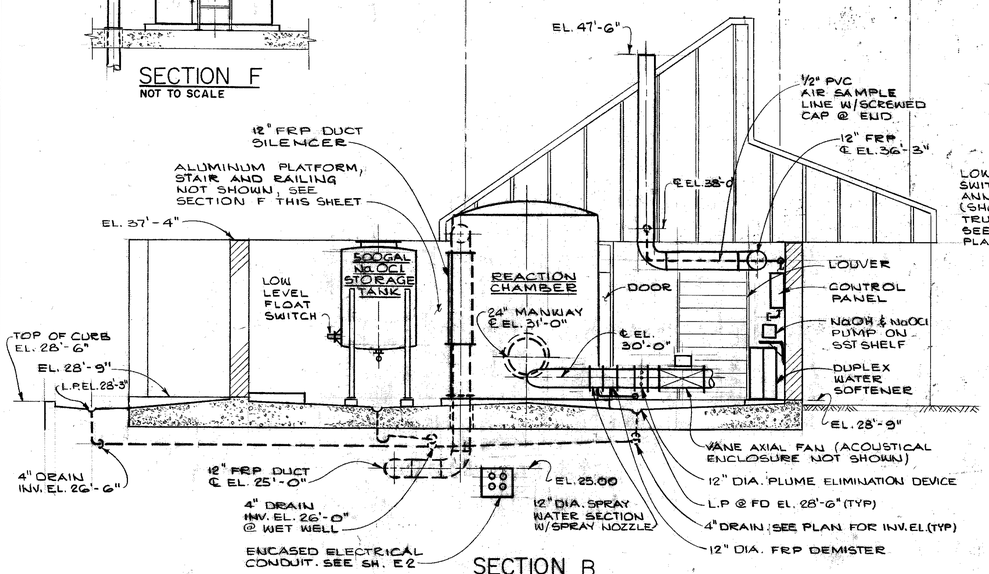
ODOR CONTROL CHEMICAL SYSTEM DIAGRAM
NO SCALE



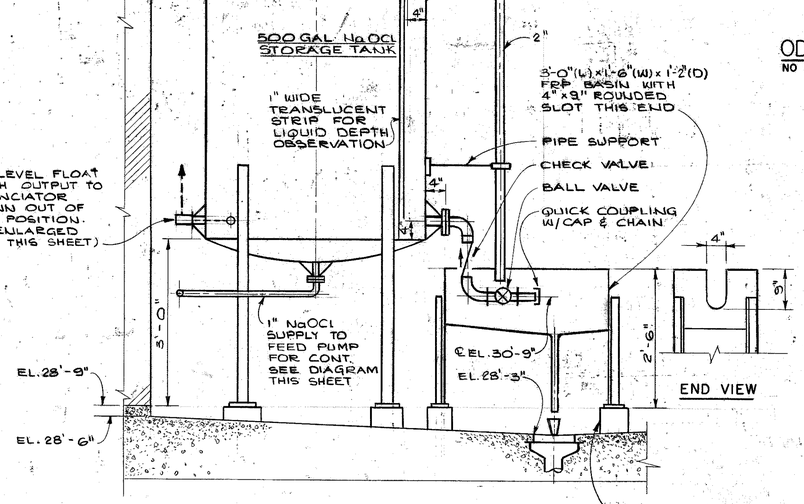
ODOR CONTROL COMPRESSED AIR DIAGRAM
NO SCALE



SECTION F
NOT TO SCALE



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



NaOCl STORAGE TANK DETAIL
SECTION E
SCALE: 3/4" = 1'-0"

END VIEW

NOTE:
* DESIGNATES DIMENSION OR ELEVATION TO BE DETERMINED AFTER SELECTION OF EQUIPMENT

⚠ AS-BUILT NOTE
ELIMINATED PRESSURE SWITCH

AS BUILT

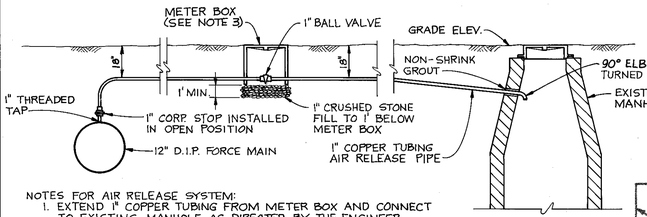
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED JRP DRAWN ATK CHECKED JRP	APPROVED	⚠ AUG 87 CR AS-BUILT PER INSP'T PRINTS NO. DATE. APP. REVISION	SCALE 4 0 4 8 FT 1/4"=1'-0"; 1 0 1 2 3 FT 3/4"=1'-0"

CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
DIVISION 464
43RD. STREET PUMPING STATION

MECHANICAL
PLAN, SECTIONS AND DIAGRAMS

PROJ NO.
DWG AD-1-1
SHEET OF
DATE JAN 1985 REV. 0

87844

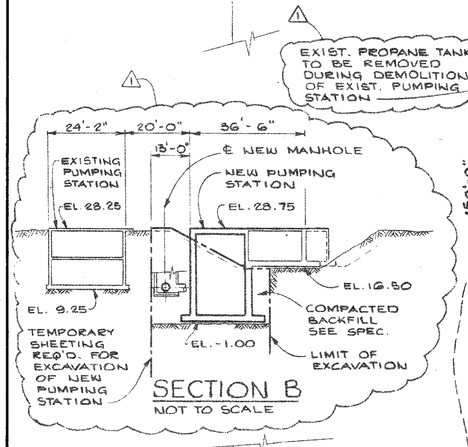


NOTES FOR AIR RELEASE SYSTEM:

1. EXTEND 1" COPPER TUBING FROM METER BOX AND CONNECT TO EXISTING MANHOLE AS DIRECTED BY THE ENGINEER.
2. CORP. STOP SHALL BE BRASS MODEL NO. 1" F600 AS MANUFACTURED BY FORD METER BOX COMPANY OR EQUAL.
3. METER BOX SHALL BE TYPE 36T AS MANUFACTURED BY BROOKS PRODUCTS, NO. 1 BOX AS MANUFACTURED BY SUNSHINE INDUSTRIES OR EQUAL. METER BOX COVER SHALL BE MARKED "DSS". LOCATE AS DIRECTED BY THE ENGINEER.

AIR RELEASE SYSTEM

NOT TO SCALE



SECTION B

NOT TO SCALE

THRUST BLOCK DETAIL

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

NOTES:

1. ALL DUCTILE IRON PIPE SHALL BE RESTRAINED. NO RETAINER GLANDS SHALL BE INSTALLED ON THE EXISTING CAST-IRON PIPE.
2. IF AT THE TIME OF CONSTRUCTION, THE CONNECTION BETWEEN DIVISION 4G4 AND DIVISION 4F4 HAS BEEN COMPLETED, A 24" SOLID SLEEVE MAY BE REQUIRED TO ALLOW INSTALLATION OF THE 24" X 12" TEE AND THE 24" PLUG VALVE.
3. THE CONNECTION TO THE EXISTING 12" C.I.P. FORCE MAIN SHALL BE COMPLETED AFTER THE NEW 43RD STREET PUMPING STATION HAS BEEN PERFORMANCE TESTED AND PLACED ON LINE.
4. ALL DUCTILE IRON PIPE SHALL BE CLASS 52. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED IN POLY-ETHYLENE IN ACCORDANCE WITH AWWA C105.

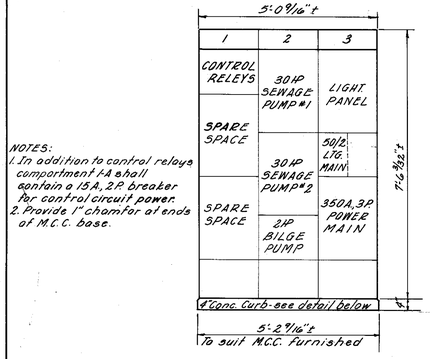
AS BUILT

NOTE:

FINISH GRADE SHALL BE AT EL. 28.00 ALL AROUND NEW PUMPING STATION AND SHALL BE SLOPED TO MEET EXISTING CONTOURS AS DIRECTED BY THE ENGINEER.

GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED TYW DRAWN DSB CHECKED TLW	APPROVED	NO. 1 DATE AUG 87 APP. CJ REVISION: AS-BUILT PER INSP'T PRINTS
SCALE 10 0 10 20 FT 1"=10'	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM DIVISION 4G4 43RD. STREET PUMPING STATION	SUPPLEMENTARY DRAWING NO. 1 BYPASS FORCE MAIN	PROJ NO. 2020-112-01-23 DWG SD-1 SHEET OF DATE JUNE 1986 REV. 0

87-265



NOTES:
1. In addition to control relays compartment 1-A shall contain a 15 A., 2 P. breaker for control circuit power.
2. Provide 1" chamfer at ends of M.C.C. base.

ELEVATION OF MOTOR CONTROL CENTER

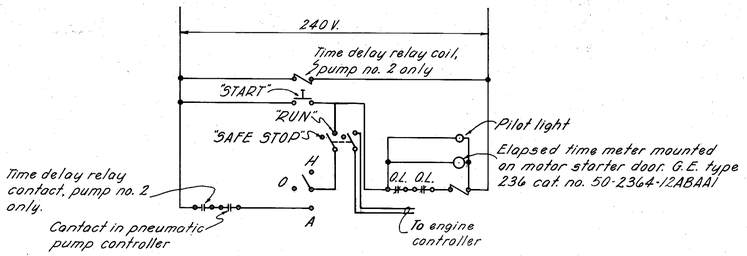
N.T.S.

LIGHTING PANEL SCHEDULE

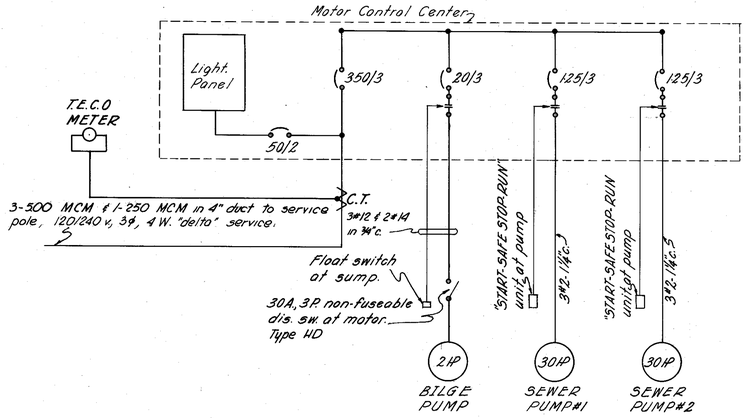
CCT. No.	BREAKER 1P.	BREAKER 2P.	USE	CONNECTED WATTS
1	20A.		Lights - Motor room	1150
2	20A.		Lights - Pump room	950
3	20A.		Lights & fan - Screen room	1250
4	20A.		Recept. - Motor & Pump rooms	750
5	15A.		Pneumatic pump controller	200
6	20A.		Engine controller no. 1	1000
7	20A		Engine controller no. 2	1000
8	20A.		Engine controller no. 3 (future)	1000
9	20A		Spare	
10	20A.		Spare	
11	20A.		Spare	
12	20A.		Spare	
13		20A.	Receptacle (Compressor) - Motor room	500
14		20A.		

LIGHTING FIXTURE SCHEDULE

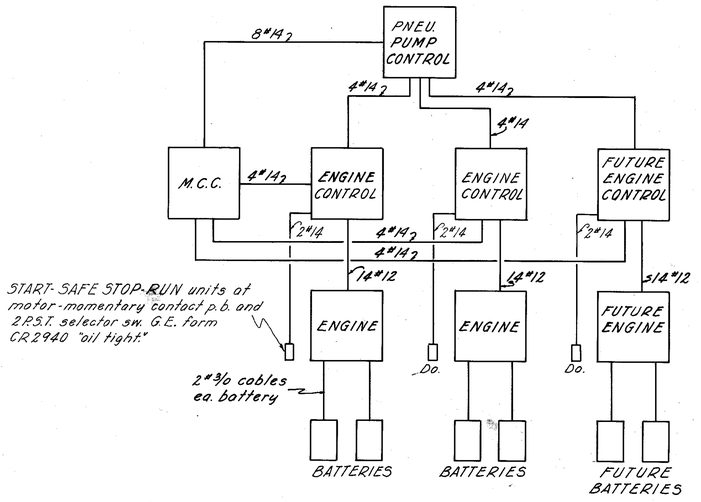
MARK	MOUNTING	DESCRIPTION	LAMP
A	Ceiling	Benjamin cat. no. FL-1024-4	2-F40 CW
B	Wall	Holophane cat. no. 415	1-150 A
C	Ceiling	Benjamin cat. no. 713-CX	1-200 A



ELEMENTARY CONTROL DIAGRAM SHOWING CONNECTION OF H-O-A AND S-SS-R UNITS



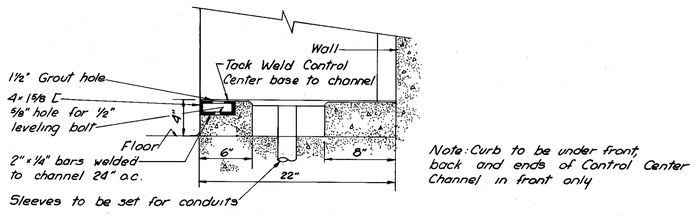
SINGLE LINE DIAGRAM



SINGLE LINE DIAGRAM OF CONTROL CONDUCTORS

LEGEND

- Ceiling outlet for incandescent fixture
- Bracket outlet for incandescent fixture
- Ceiling outlet for fluorescent fixture
- Duplex Receptacle Hubbell Cat No. 5262
- 20 A, 3 P, 2 W grounded receptacle - Hubbell cat No. 7310-G ¼ cat No. 9965-G cap.
- S — Single pole Toggle switch. Hubbell Cat. No. 1221
- Sx — Explosion-proof single pole Toggle switch Crouse-Hinds "EFS" Series
- S3 — Explosion-proof three-way Toggle switch Crouse-Hinds "EFS" Series
- "Start-safe stop-run" p.b. station
- Conduit run exposed
- Conduit run concealed
- Motor location
- W.P. — Indicates Weatherproof



CONTROL CENTER BASE DETAIL

N.T.S.

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

J. E. DRUMMOND, JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

43RD. STREET PUMPING STATION
ELECTRICAL DETAILS

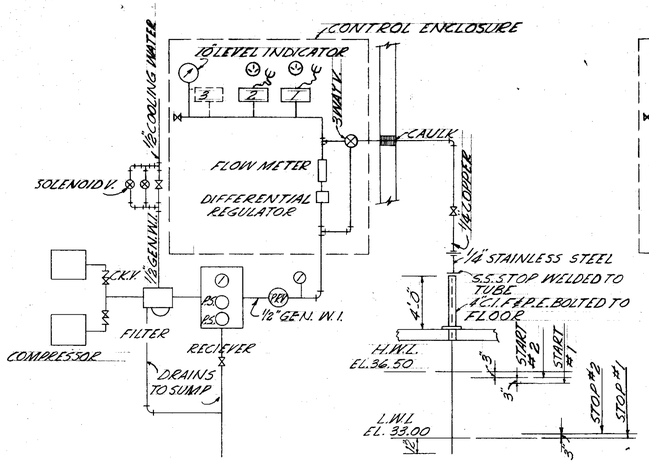
J. E. GREINER COMPANY — CONSULTING ENGINEERS, TAMPA, FLORIDA
WIEDEMAN & SINGLETON, ENGINEERS — ASSOCIATE ENGINEERS, ATLANTA, GEORGIA

DES. E.C.L.
DRN. E.C.L.
CHK. E.C.L.
SCALE Noted
DATE

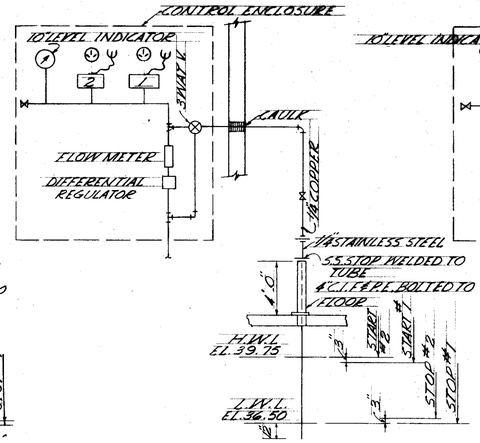
PROJECT 3
DIVISION D
SUBDISTRICT A-10

SHEET 26 OF 29

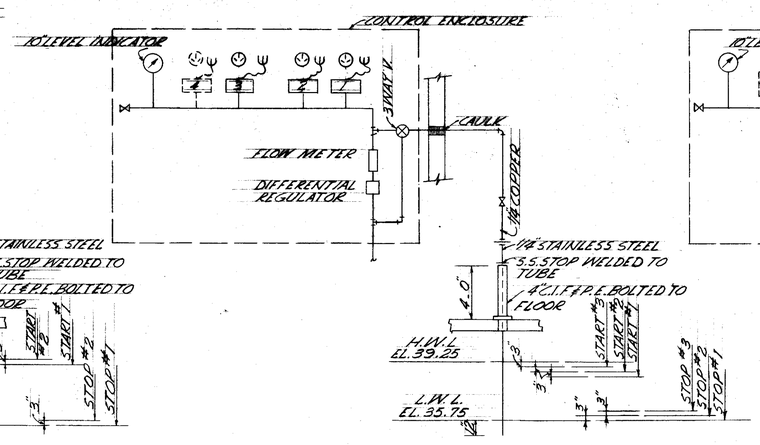
87-26



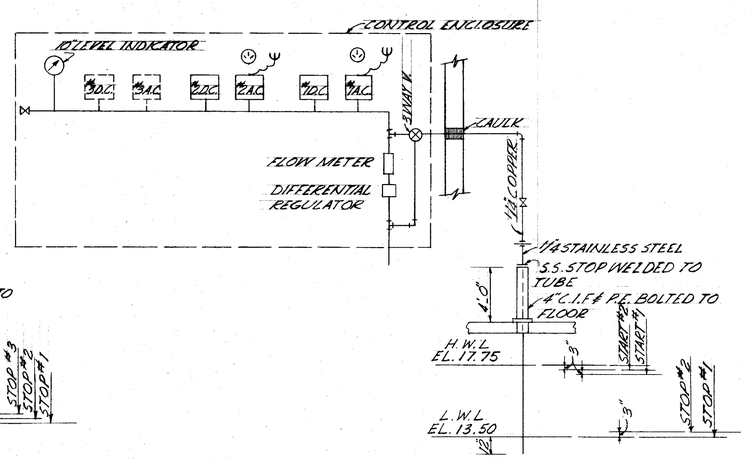
DELEUIL AVE.



McBERRY AVE.

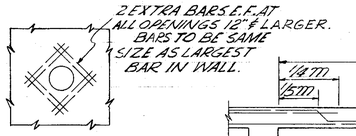


42ND ST.

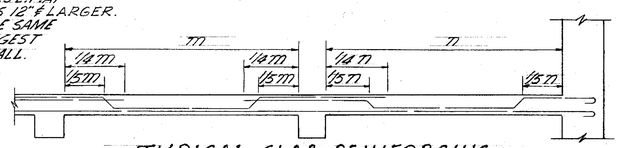


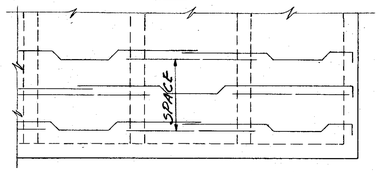
43RD ST.

DIAGRAMS OF PUMP CONTROL PIPING

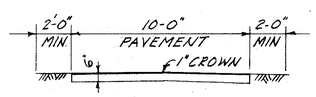


OPENING IN WALLS

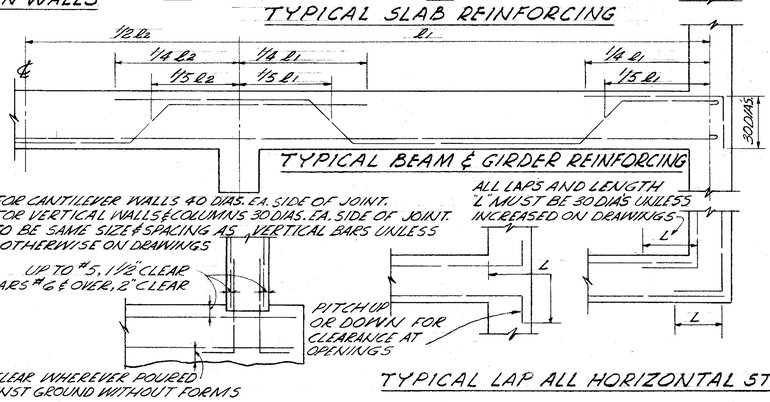




TYPICAL REINFORCING CONTINUOUS SLABS

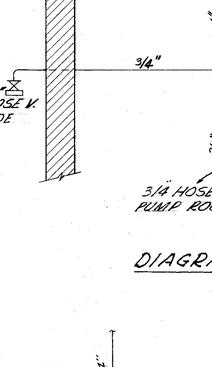


TYPICAL DRIVE SECTION



TYPICAL SECTION OF STRUCTURE WALLS
(USE SAME CLEARANCES FOR ALL STRUCTURES)

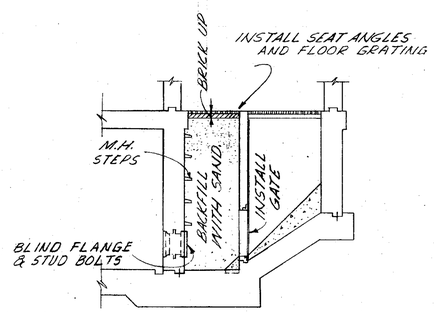
BENDING & PLACING REINFORCING ALL STRUCTURES



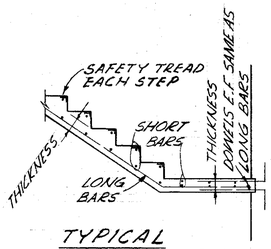
FLOOR GRATING DETAIL

DIAGRAM OF WATER AND WASTE PIPING

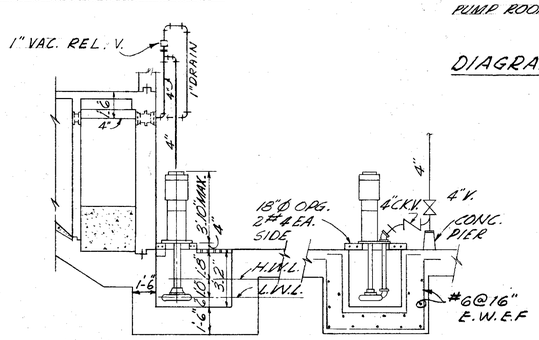
I BEAM DETAIL
NO SCALE



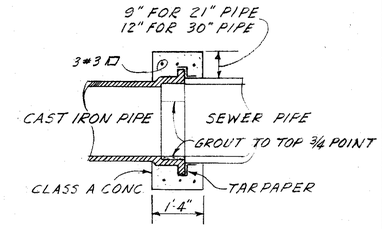
SUCTION WELL FOR FUTURE PUMP



TYPICAL STAIR REINFORCING



BILGE SUMP PUMP
SCALE: 1/4" = 1'-0"



TYPICAL DETAIL

SQ. CONC. COLLAR FOR JOINING C.I. PIPE TO V.C. OR CONC. PIPE

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

MISCELLANEOUS DETAILS

J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS — ASSOCIATE ENGINEERS
TAMPA, FLORIDA — ATLANTA, GEORGIA

DES. H.N.P.
DRN. R.N.C.
CKD. H.N.P.
SCALE AS SHOWN
DATE JAN. 1962

PROJECT 3
DIVISIONS A, B, C & D
SUBDISTRICT A-10

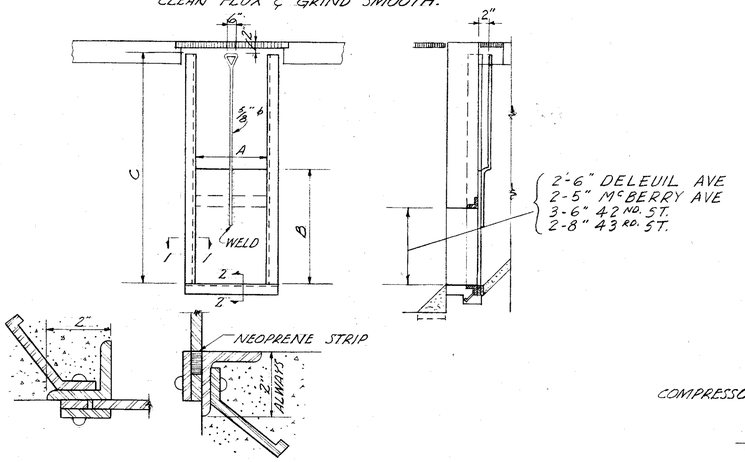
SHEET 27 OF 29

87-27

LOCATION	GATE # REQ'D	GATE FRAME REQ'D	A	B	C
43RD ST.	2	3	1'-0"	3'-6"	7'-11"
42ND ST.	2	4	1'-4"	4'-6"	8'-6½"
DELEUIL AVE.	2	3	1'-0"	3'-6"	6'-10"
McBERRY AVE.	1	2	1'-0"	3'-6"	6'-10"

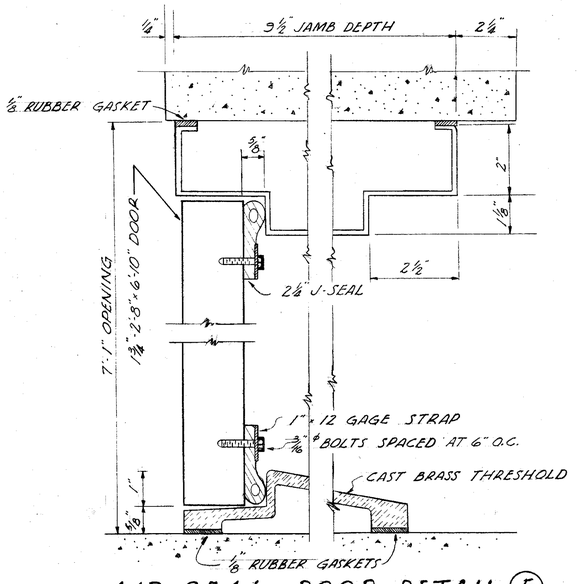
6061 ANGLES	2"-1½"-⅛"
6053-T61 RIVETS	⅜" ø @ 4"
6061-FILLER PLATE	⅜" x 1"
6061-COVER PLATE	⅜" x 1⅛"
3003-GATE	⅛"

NOTE: WELD JAMB ANGLES TO SILL & HEAD. CLEAN FLUX & GRIND SMOOTH.



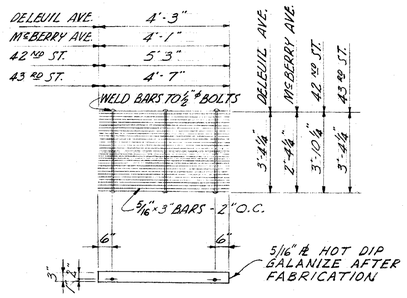
SECTION 1-1 SECTION 2-2

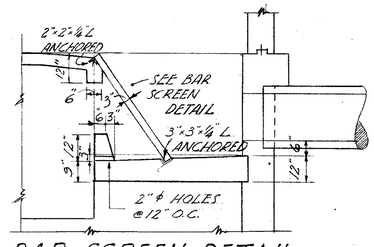
ALUMINUM FABRICATED GATE DETAILS



AIR SEAL DOOR DETAIL (E)

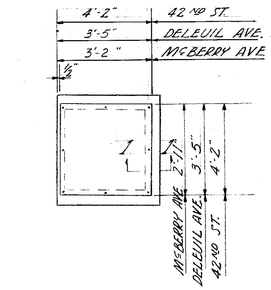
SCALE: 6" = 1'-0"

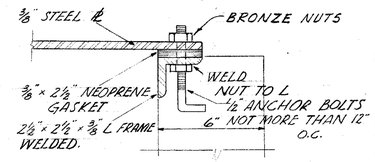




BAR SCREEN DETAIL

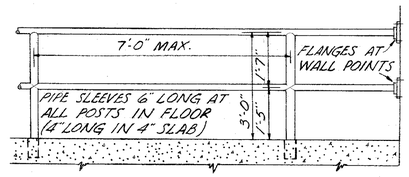
SCALE: ⅜" = 1'-0"



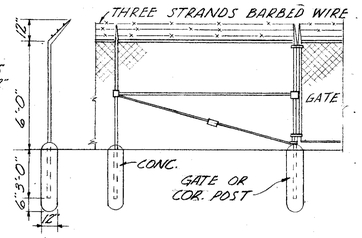


SECTION 1-1

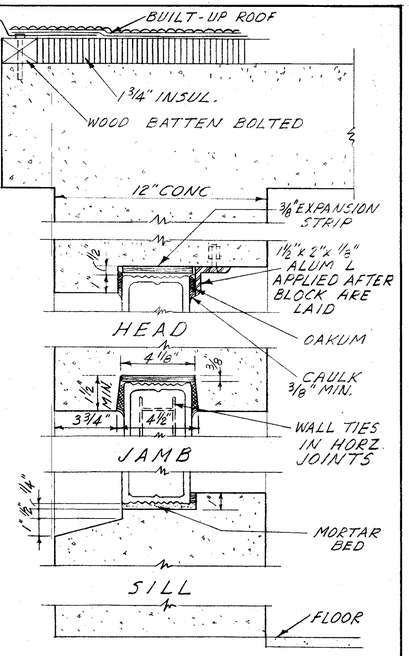
HATCH COVER DETAILS



1½" PIPE HANDRAIL

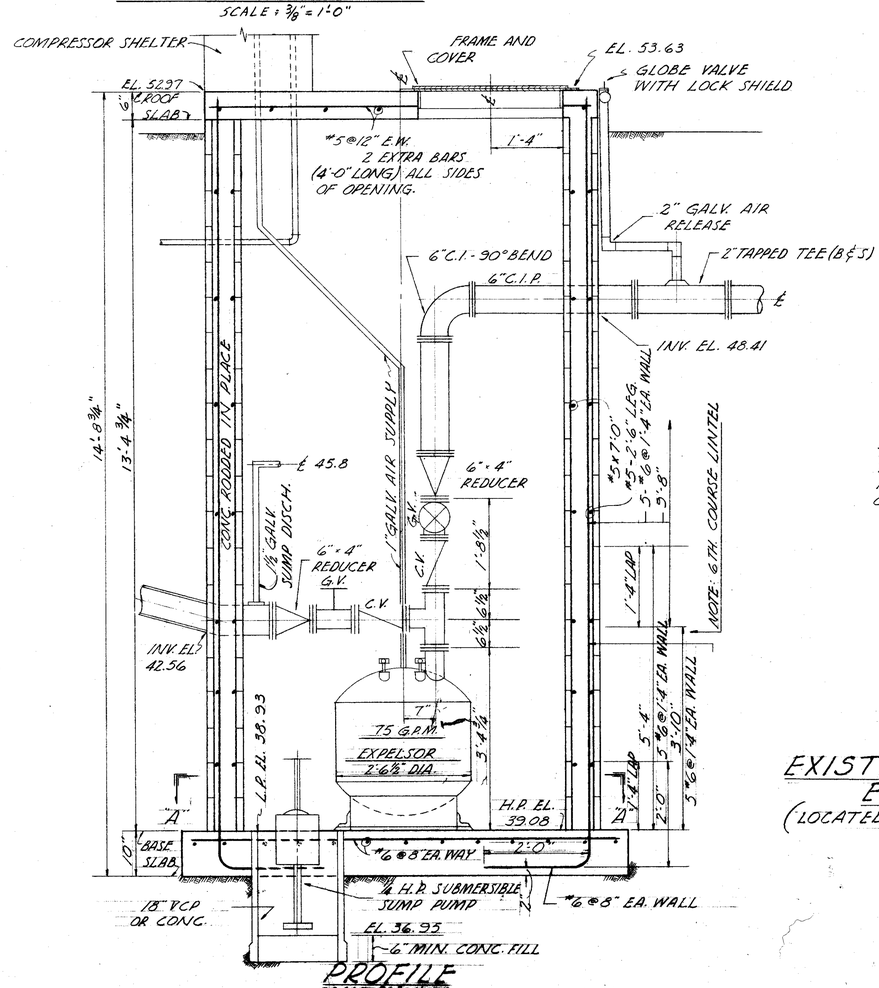


FENCE DETAIL



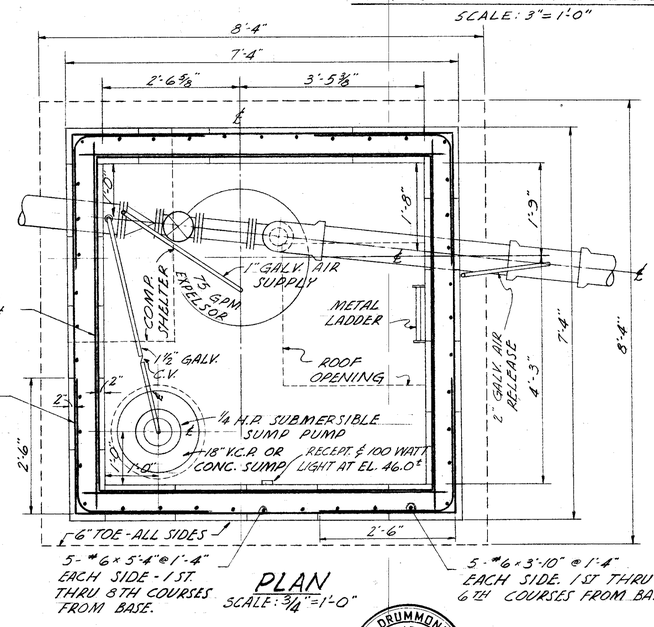
TYPICAL WALL SECTION THROUGH GLASS BLOCK

SCALE: 3" = 1'-0"



PROFILE

SCALE: ¾" = 1'-0"



PLAN

SCALE: ¾" = 1'-0"

EXISTING FARMER'S MARKET EJECTOR STATION

(LOCATED ON McBERRY AVE. PUMPING STATION SITE)

C. E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

GEORGE S. JENKINS CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

MISCELLANEOUS DETAILS

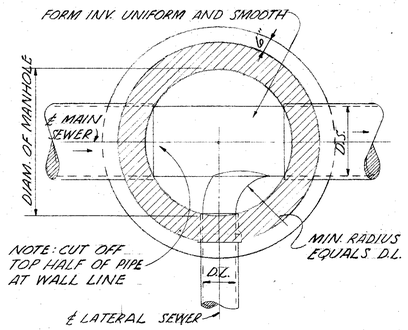
J. E. GREINER COMPANY — WIEDEMAN & SINGLETON, ENGINEERS
CONSULTING ENGINEERS TAMPA, FLORIDA
ASSOCIATE ENGINEERS ATLANTA, GEORGIA

DES.	H.N.P.
DRN.	R.N.S.
CKD.	H.N.P.
SCALE	AS SHOWN
DATE	JAN. 1962

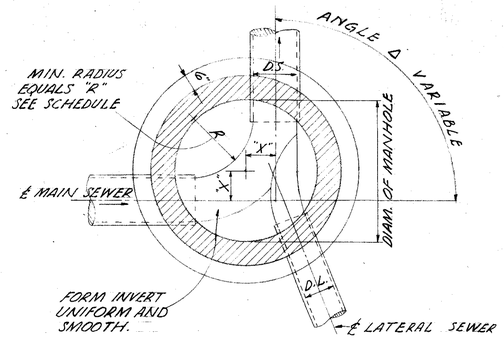
PROJECT 3
DIVISIONS A, B, C & D
SUBDISTRICT A-10

SHEET 28 OF 29

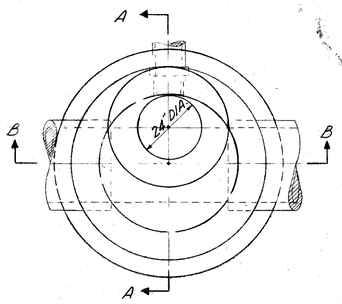
87-28



INVERT PLAN



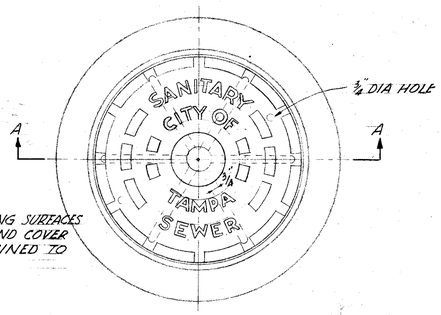
INVERT PLAN



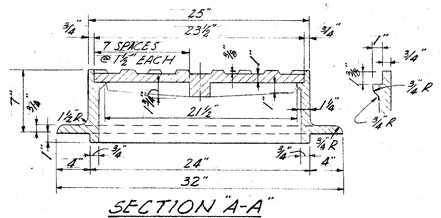
TOP PLAN

STANDARD BRICK MANHOLES
SCHEDULE OF GOVERNING DIMENSIONS

PIPE SIZE	ANGLE Δ	MH DIA.	R	X
8" TO 15"	0° TO 30°	4'-0"	1'-8"	0" TO 10"
18", 21" & 24"	0° TO 60°	4'-0"	2'-0"	0" TO 4"
18" & 21"	60° TO 90°	5'-0"	2'-0"	4" TO 12"



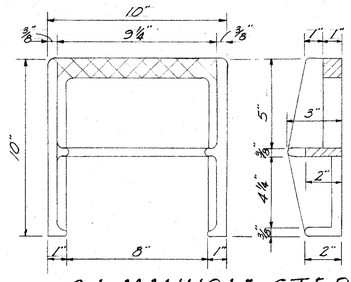
PLAN



SECTION "A-A"

STD. CAST IRON MANHOLE FRAME & COVER

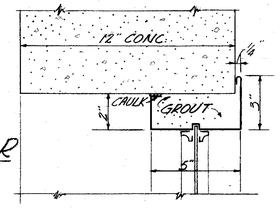
APPROX. WT 380#
SCALE: 1½" = 1'-0"



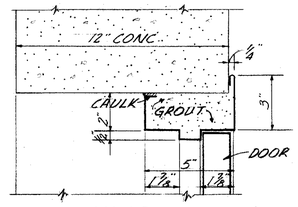
C.I. MANHOLE STEP

APPROX. WT 11#
SCALE: 3" = 1'-0"

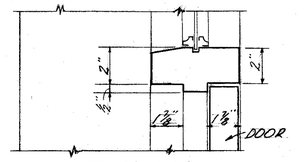
NOTE: C.I. MANHOLE STEPS TO BE INSTALLED IN SPECIAL STRUCTURES ONLY, EXCEPT AS OTHERWISE ORDERED BY THE ENGINEER.



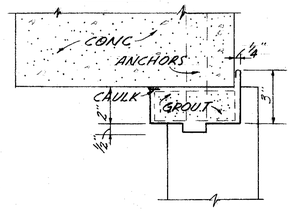
HEAD



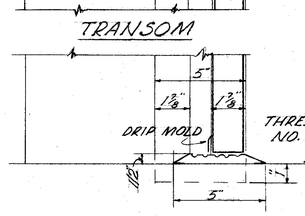
HEAD



TRANSOM

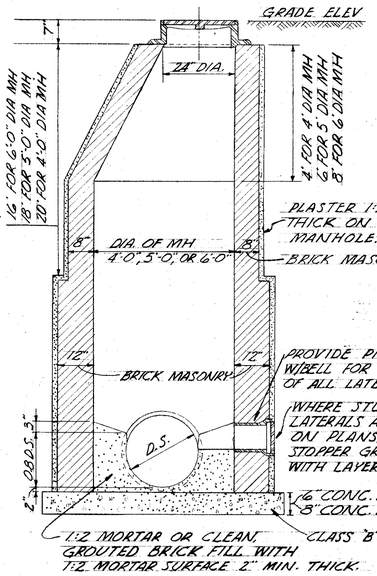


JAMB

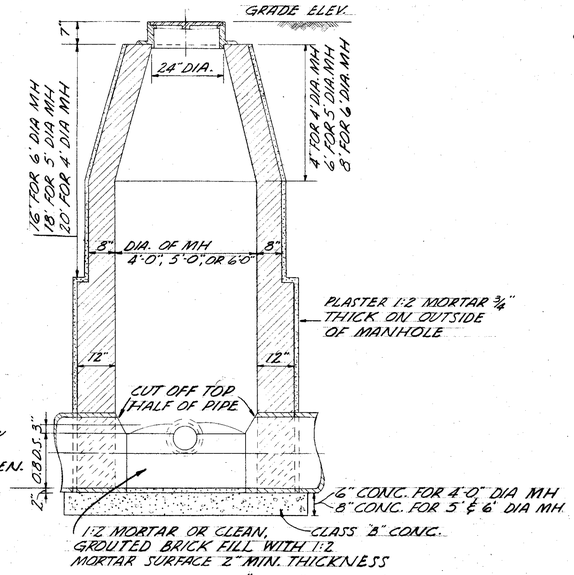


THRESHOLD - CHABERLAIN CO. NO. 912-AA OR EQUAL

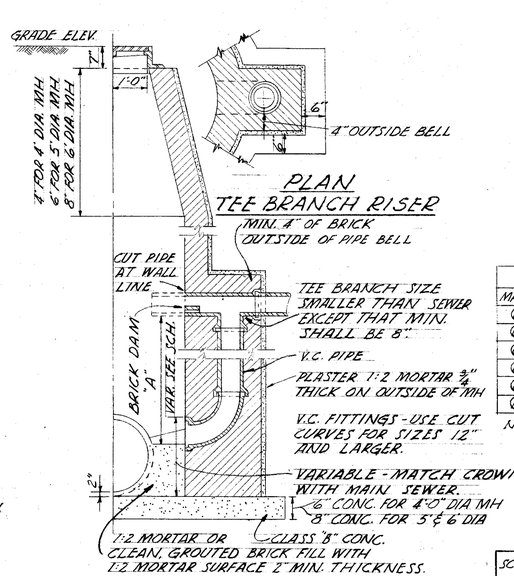
SILL



SECTION "A-A"



SECTION "B-B"



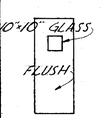
HALF SECTION

DROP MANHOLES

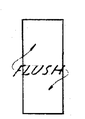
SCHEDULE FOR DROP MANHOLES		
SEWER SIZE	TEE BRANCH RISER SIZE	DIM "A" MINIMUM
8"	8"	19½"
10"	8"	19½"
12"	10"	22"
15"	12"	24½"
18"	15"	29"

DOOR SCHEDULE			
MARK	TYPE	NOM. SIZE	REMARKS
A	2	2'-3'0"x7'-2"	
B	2	1'-3'0"x7'-2"	
C	1	1'-3'0"x7'-2	
D	1	1'-3'0"x6'-10	
E	2	1'-3'0"x6'-10	SEE DETAIL SHEET NO. 28
F	3	1'-3'0"x7'-2"	

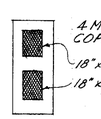
NOTE: SEE SPECIFICATIONS FOR DOOR CLOSERS AND LOCK SETS PERTAINING TO ALL DOORS.



TYPE 1



TYPE 2



TYPE 3

DOOR DETAILS

GEORGE S. JEYNES CERTIFICATE No. 6858 STATE OF FLORIDA REGISTERED ENGINEER

C.E. DRUMMOND JR. CERTIFICATE No. 8983 STATE OF FLORIDA REGISTERED ENGINEER

CITY OF TAMPA, FLORIDA
THIRD SEWER REVENUE BOND PROGRAM
SEWAGE DISPOSAL SYSTEM

MISCELLANEOUS DETAILS

J.E. GREINER COMPANY — CONSULTING ENGINEERS, TAMPA, FLORIDA
WIEDEMAN & SINGLETON, ENGINEERS — ASSOCIATE ENGINEERS, ATLANTA, GEORGIA

DES. H.N.R.
DRN. R.N.C.
CKD. H.N.R.
SCALE AS SHOWN
DATE JAN. 1962

PROJECT 3
DIVISIONS A, B, C & D
SUBDISTRICT A-10

SHEET 29 OF 29

187-29