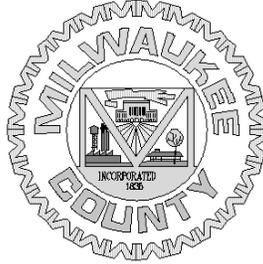


# *MILWAUKEE COUNTY*



## *Department of Administrative Services*

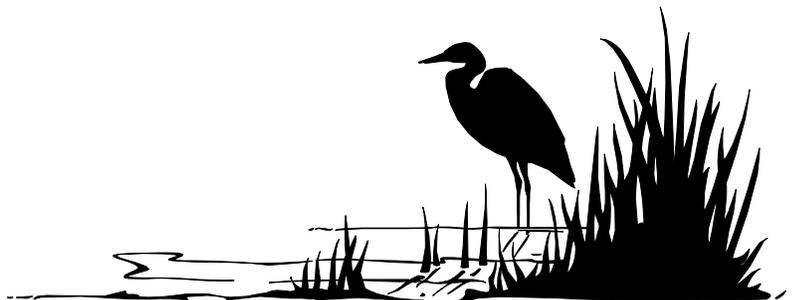
### *Environmental Services Unit*

**Milwaukee County City Campus  
2711 West Wells Street  
Milwaukee, Wisconsin 53208**

**REQUEST FOR PROPOSAL  
FOR  
Rawson Avenue Lift Station**

**PROJECT NO. V025-13807**

**June 2013**



DEPARTMENT OF ADMINISTRATIVE SERVICES

*Milwaukee County*



June 11, 2013

**To:** Interested Milwaukee County Annual Consultants

**Subject:** Request for Proposal (RFP) for Professional Services  
Rawson Avenue Lift Station

**Project Number:** V025-13807

**Contract Type:** Type B – Not-To-Exceed Fee - Annual

Dear Consultant:

Milwaukee County Department of Administrative Services is requesting proposals from qualified firms to provide engineering services related to a storm water lift station located on Rawson Avenue at the Amtrak tracks west of 6<sup>th</sup> Street in Oak Creek, WI. The project background and scope of work are attached.

Four (4) copies of the proposal are due by 4:00 p.m. on Thursday, June 27, 2013, at the offices of the Milwaukee County Department of Administrative Services, Environmental Services Unit, 2711 West Wells Street, Second Floor, Milwaukee, Wisconsin. We anticipate that the contract will be awarded in mid July and the selected firm shall initiate the work in late July.

There is a minimum 25% DBE requirement for this project. Proposals should describe how this requirement would be met.

MILWAUKEE COUNTY-CITY CAMPUS • 2711 WEST WELLS STREET • MILWAUKEE, WI 53208

PHONE NUMBER: - Architecture Engineering & Environmental Services 278-4861  
FAX NUMBER: - Architecture Engineering & Environmental Services 223-1366

Questions regarding this RFP should be sent in writing, by mail, fax or e-mail to:

Sean Hayes, PE.  
Environmental Engineer, Environmental Services Unit  
Milwaukee County Department of Administrative Services  
2711 W. Wells St., Room 211  
Milwaukee, WI 53208-3509  
Fax: 414-223-1853  
E-mail: sean.hayes@milwcnty.com

Sincerely,

A handwritten signature in black ink, appearing to read 'Sean Hayes', with a long horizontal flourish extending to the right.

Sean Hayes, PE

Attachments

cc: Greg High, AE&ES w/o attachments  
Stevan Keith, AE&E  
Mark Phillips, CBDP w/o attachments

MILWAUKEE COUNTY-CITY CAMPUS • 2711 WEST WELLS STREET • MILWAUKEE, WI 53208

PHONE NUMBER: - Architecture Engineering & Environmental Services 278-4861  
FAX NUMBER: - Architecture Engineering & Environmental Services 223-1366

6/11/13

To All Interested **Milwaukee County Annual** Consultants

**Project: Rawson Avenue Lift Station Repairs**

**Project No.: V025-13807**

**Subject: REQUEST FOR PROPOSAL (R.F.P.)**

Milwaukee County Department of Administrative Services is requesting proposals for professional consulting services to assess the condition of a storm water lift station, prepare design plans and specifications for the repair and replacement of deficient infrastructure at the station. The infrastructure includes pumps, controls, sewers, wet wells, pump house, other structures, etc. The site is located on Rawson Avenue at the Amtrak tracks west of 6<sup>th</sup> Street in Oak Creek, WI (See Attachment 1). Milwaukee County seeks to implement financially feasible, technologically sound strategies to conserve energy and surpass current norms for water conservation, waste management/recycling and the quality of indoor environment. The County will require that such strategies be explored in the design of this project.

There is a minimum 25% DBE requirement for this project.

## **I. BACKGROUND**

Milwaukee County operates a storm water lift station at Rawson Avenue at the Amtrak tracks west of 6<sup>th</sup> Street in Oak Creek, WI. Milwaukee County constructed the lift station as part of the West Rawson Avenue underpass project in 1967 (See Attachment 4 for plan set.).

The lift station consists of a redundant pumping system. Currently, one of the two pumps is inoperable. The other pump frequently fails, requiring maintenance staff to use portable pumps to dewater the railroad underpass on Rawson Avenue.

## **II. GENERAL PROJECT DESCRIPTION**

In June 2013 Milwaukee County declared an emergency to allocate funds to repair the lift station immediately.

The consultant will review prior design plans, reports, and other information as needed to become thoroughly familiarized with the existing lift station design and operational goals. The consultant will evaluate how the lift station should be repaired or reconstructed to provide a lift station anticipated to perform adequately over a 20-year lifespan with minimal operational and repair needs. The consultant will evaluate and suggest options for interim lift station operation prior to and while construction is underway.

## **III. SCOPE OF CONSULTANT SERVICES**

The successful consultant shall provide all services as specified per the standard terms and conditions of the Milwaukee County Department of Administrative Services Consultant Agreement for Professional Services (Type A, B, C, D or E) (copy will be emailed upon request).

### **1. GENERAL REQUIREMENTS**

The consultant shall become familiar with all aspects of the existing lift station.

The property is owned by the Milwaukee County Highway Department. The Milwaukee County Department of Administrative Services – Environmental Services Unit will coordinate and direct consultants.

Subject: Request for Proposal  
Project: **Rawson Avenue Lift Station**  
Project No.: **V025-13807**

## 2. BASIC SERVICES

### ○ **Task 1 – Existing System Assessment**

- a) Inspect existing storm water lift station, controls, wiring, pumps, building, associated force main, etc.
- b) Inspect existing lift station for regulated materials including lead paint and asbestos. Quantify inspection results.
- c) Meet with County staff to discuss past performance issues.
- d) Review plans and reports.
- e) Develop and provide recommendations as to what elements of the lift station need to be repaired or replaced for the long-term (20-year) operation. Include options for interim operation of the lift station prior to and while construction is underway.

### ○ **Task 2 - Design**

- a) Prepare detailed design plans and specifications for bidding and construction of repairs and upgrades to the lift station. Develop an engineer's cost estimate for the design. Provide review of shop drawings and submittals as well as on-site construction observation.
- b) Design shall incorporate into the project, to the best extent possible, Leadership in Environmental and Energy Design (LEED) standards as specified by the U.S. Green Building Council. Project specifications shall describe the sustainable design elements that are to be incorporated in the various sections of the project. Documentation requirements shall also be written into the contract documents where applicable.

## 3. QUALITY CONTROL

1. Milwaukee County reserves the right to request partial or full reimbursement from consultants for change orders resulting from errors and omissions in the services they are contracted to provide.

## 4. PROJECT TIMETABLE

- |    |          |   |
|----|----------|---|
| 1. | 6/11/13  | Issue Request for Proposal              |
| 2. | 6/27/13  | Proposals Due                           |
| 3. | 7/5/13   | Selection Committee selects consultant. |
| 4. | 7/19/13  | Consultant Notice to Proceed            |
| 5. | 9/18/13  | Bid Construction Work                   |
| 8. | 10/23/13 | Anticipated Construction Start          |
| 9. | 11/27/13 | Anticipated Construction Completion     |

## 5. PRE-PROPOSAL MEETING

None.

Subject: Request for Proposal  
Project: **Rawson Avenue Lift Station**  
Project No.: **V025-13807**

## V. PROPOSAL CONTENT

The proposal shall conform to Milwaukee County's Proposal Preparation, Submission and Evaluation Guidelines (see Attachment 2). The proposal shall include the Consultant Proposal Form (see Attachment 3) and the following information:

- A. **Cover:** Include project number and name, project location, consultant's name, address, telephone number, FAX number, e-mail address, proposal date, etc.
- B. **Table of Contents:** Include an identification of the material by section and page number.
- C. **Letter or Transmittal:** The name and description of the organization submitting the proposal briefly stating the proposer's understanding of the service to be provided.
- D. **Organization's Experience:** Include a list of similar projects that the organization has participated on in the past five (5) years. Attach a separate sheet for each project, up to five (5) maximum, giving a brief description of each project and the organizations participation. Provide a description of your firm's experience with sustainable design, green buildings, or related work including but not limited to
  - Recycled content and sustainable building product selection
  - Waste reduction strategies
  - Use of USGBC LEED rating system to guide project design
- E. **Project Organization and Staff Experience:** Include an organizational structure of the project team, including the relationship of the sub-consultants to be used for this project. The name of the Principal In Charge of this project along with their Professional Registration Number in the State of Wisconsin must be clearly indicated in this section of the proposal, along with the name, occupation and title of the Project Manager who will be in charge of this project. Provide a resume' for each individual involved in the project, and include their name, title and/or duties for the project, professional registration, relevant certifications, a brief description of related experience including time contribution in this capacity to past projects, and qualifications. Provide a description of your staff's experience with sustainable design or related work. Include names of project team that are LEED-AP (accredited professionals).
- F. **Sub-Consultants:** Indicate the names and addresses of any sub-consultants and/or associates proposed to be used in this project. State the capacity they would be used in and the approximate percentage of the total services they would provide. Also state their past experience in the field.
- G. **Project Approach:** Provide a description of architectural and engineering problems you anticipate in this project and how you propose to overcome them. Discuss how you plan to staff the project to efficiently complete the work effort.
- H. **Scheduling:** Will be based on contractor schedule. Base proposal on schedule provided in this RFP.
- I. **Constant Effort:** Include a spreadsheet/matrix listing the names, classifications, hourly rates and hours to be spent by each required task to complete the project as described in this RFP.
- J. **DBE Goals:** The Disadvantaged Business Enterprise (DBE) participation goal for this project/contract **is 25%**. Use the DBE forms found here for proposal submission: <http://county.milwaukee.gov/cbdp/ComplianceServices.htm>
- K. **Quality Control:** Submit a contract document quality control plan. Quality control is to be performed by individuals not assigned to the project on an ongoing basis.
- L. **Fee Proposal:** The fee for this project shall be clearly stated as an **actual cost** not-to-exceed fee for

Subject: Request for Proposal  
Project: **Rawson Avenue Lift Station**  
Project No.: **V025-13807**

these services.

- M. Sustainability** As part of your proposal, provide examples of which elements of LEED you would consider applicable and appropriate for this project. Limit this to items related to construction and exclude operational plans. Evaluate sustainable design alternatives, where applicable, to determine the feasibility of incorporating the alternatives into the project (see checklist in Appendix \_\_\_ for examples). The evaluation shall include a comparison of construction costs, annual operating costs, and other non-fiscal benefits of each option considered. In your cost proposal, break out any additional analyses required to evaluate and design these elements. Describe how these analyses will affect the project schedule.

## **VI. PROPOSAL EVALUATION**

See section XV of the attached Milwaukee County Proposal Preparation, Submission and Evaluation Guidelines for the evaluation criteria. Proposers must recognize this is not a bid procedure, and a Professional Services agreement will not be awarded solely on the basis of the low fee proposal. Milwaukee County reserves the right to accept or reject any and all proposals, issue addenda, request clarification, waive technicalities, alter the nature and/or scope of the proposed project, request additional submittals, and/or discontinue this process.

## **VII. GENERAL REQUIREMENTS**

1. The successful consultant and/or any contractor affiliated with the prime consultant shall be prohibited from submitting bids in the construction bidding process for this project.
2. Selected Consultant shall follow Milwaukee County Code of Ethics as follows: No person(s) with a personal financial interest in the approval or denial of a Contract being considered by a County department or with an agency funded and regulated by a County department, may make a campaign contribution to any County official who has approval authority over that Contract during its consideration. Contract consideration shall begin when a Contract is submitted directly to a County department or to an agency until the Contract has reached final disposition, including adoption, County Executive action, proceeding on veto (if necessary) or departmental approval.
3. The successful consultant must be an Equal Opportunity Employer.
4. The proposal shall conform with all attached documents. All proposals should use this RFP and its attachments as the sole basis for the proposal. The issuance of a written addendum are the only official method through which interpretation, clarification or additional information will be given.
5. All costs for preparing a proposal, attending the selection interview if required, or supplying additional information requested by Milwaukee County, is the sole responsibility of the submitting party. Material submitted will not be returned.
6. The proposal must be submitted in a single bound 8-1/2" x 11" document.
7. With the signing and submission of a statement or proposal the submitting consultant certifies that the standard terms and conditions of the Agreement for Professional Services (that will be used to contract with the selected consultant) has been read and understood and that the submitting consultant is ready, willing and able to sign the agreement when requested without making any substantive changes.

Subject: Request for Proposal  
Project: **Rawson Avenue Lift Station**  
Project No.: **V025-13807**

Please return Four (4) copies of your proposal no later than 4 P.M. on June 27<sup>th</sup>, 2013, to Steve Keith, City Campus, 2711 W. Wells Street, 2<sup>nd</sup> Floor Milwaukee, Wisconsin, 53208, Telephone (414) 278-4355, FAX (414) 223-1366; email stevan.keith@milwcnty.com.

Please direct any questions regarding this RFP to me at 414-278-4891, sean.hayes@milwcnty.com.

Sincerely,

---

Sean Hayes, PE  
Project Manager

Attachments:

- 1) Project Location Map (1 page)
- 2) Proposal Preparation, Submission and Evaluation (5 pages)
- 3) Consultant Proposal Form (1 page)
- 4) Original Plan Set (8 pages)

cc: G. High, DAS-FM  
G. Drent, DAS-FM

Owner Dept. Representative  
Project Manager, DAS-FM

M. Phillips, CDBP

MILWAUKEE COUNTY  
DEPARTMENT OF ADMINISTRATIVE SERVICES  
ARCHITECTURE, ENGINEERING & ENVIRONMENTAL SERVICES DIVISION

PROJECT:

**(project title as adopted in the budget) & (project number as assigned by Cost Schedule Analyst)**

CONSULTANT PROPOSAL

I. BASIC SERVICES (Include services of all needed subconsultants)

LUMP SUM OR ACTUAL COST - "NOT TO EXCEED" fee:

\$ \_\_\_\_\_

( \_\_\_\_\_ )

II. REIMBURSABLE EXPENSES

ACTUAL COST: \$ \_\_\_\_\_

( \_\_\_\_\_ )

III. ADDITIONAL SERVICES (Include services of all needed subconsultants)

ACTUAL COST - "NOT TO EXCEED" fee:

\$ \_\_\_\_\_

( \_\_\_\_\_ )

IV. PRINCIPAL IN CHARGE

Name of Principal \_\_\_\_\_

Architect or Engineer's Registration No. in Wisconsin \_\_\_\_\_

Other Registration No. In Wisconsin \_\_\_\_\_

Flat hourly rate for principal \_\_\_\_\_

Participation of Disadvantaged Business Enterprises is waived for this project.

\_\_\_\_\_  
Firm Name

\_\_\_\_\_  
Authorized Signature

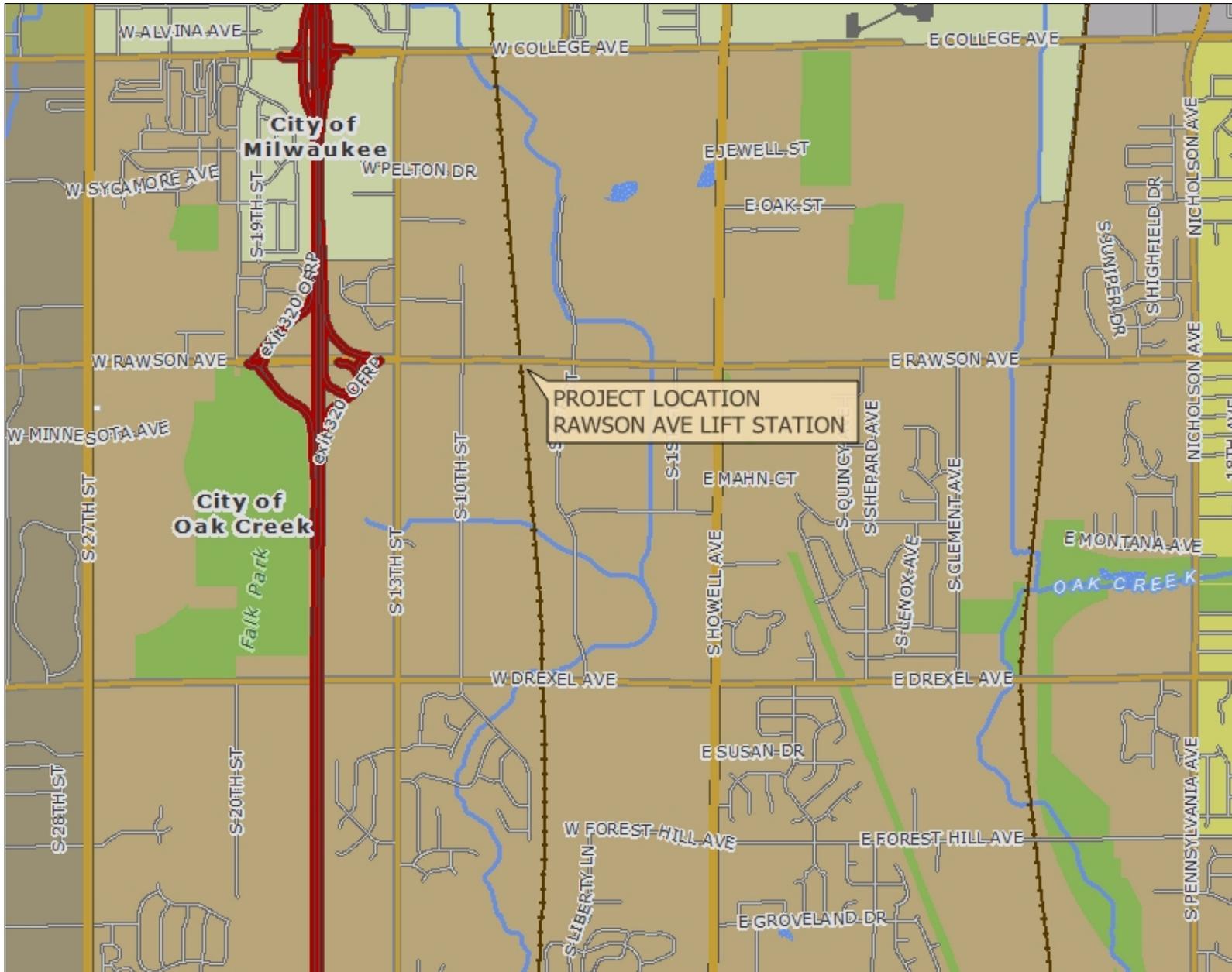
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

# ATTACHMENT 1



# ATTACHMENT 1: PROJECT LOCATION



## Legend

- County Boundary
- Highways, 8k to 30k
  - Freeway
  - Primary
  - Secondary
  - Freeway Ramp
  - Primary Ramp
- Street Centerlines, 20k to 50k
  - Primary and Secondary
  - Local
- ↑ Railroad 30k
- Water 195k
  - Rivers 50k
- Airport 80k
- Landmarks 80k
  - Cemetery
  - Golf Course
- County Parks 195k
- Municipal Subdivisions 125k
  - Milwaukee (City)
  - Hales Corners (Village)
  - Whitefish Bay (Village)
  - South Milwaukee (City)
  - Greenfield (City)
  - Fox Point (Village)
  - West Milwaukee (Village)
  - River Hills (Village)
  - Oak Creek (City)
  - Wauwatosa (City)
  - Greendale (Village)
  - Cudahy (City)
  - Glendale (City)
  - Shorewood (Village)
  - Bayside (Village)
  - West Allis (City)
  - Franklin (City)
  - Brown Deer (Village)
  - St. Francis (City)

1 : 29,480



4,913 0 2,457 4,913 Feet

**DISCLAIMER:** This map is a user generated static output from the Milwaukee County Land Information Office Interactive Mapping Service website. The contents herein are for reference purposes only and may or may not be accurate, current or otherwise reliable. No liability is assumed for the data delineated herein either expressed or implied by Milwaukee County or its employees.

## Notes

RAWSON AVE LIFT STATION

## ATTACHMENT 2

# PROPOSAL PREPARATION, SUBMISSION AND EVALUATION GUIDELINES

# PROPOSAL PREPARATION, SUBMISSION & EVALUATION

## I. Explanation to Prospective Offerors

Any prospective offeror desiring an explanation or interpretation of this RFP must request it in writing no later than seven business days before the last date for submission of proposals. Requests should be directed to the individual in charge at the address listed in the RFP. Any information given to a prospective offeror concerning a solicitation will be furnished promptly to all other prospective offerors as an amendment to the RFP, if that information is necessary in submitting offers or if the lack of it would be prejudicial to any other prospective offerors.

## II. Complete Proposals

Proposals shall represent the best efforts of the offerors and will be evaluated as such. Proposals must set forth full, accurate, and complete information as required by this section and other sections of this RFP.

## III. Unnecessarily Elaborate Proposals

Brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation are not desired and may be construed as unnecessarily elaborate and an indication of the offeror's lack of cost consciousness. Elaborate art work, expensive paper and binding, and expensive visual and other presentation aids are neither necessary nor desired. Concise and clear proposals are sought.

## IV. Retention of Proposals

All proposal documents shall be retained by the County and therefore, will not be returned to the offerors. The County will not pay for preparation of proposals or for proposals that are retained by the County.

## V. Examination of Proposals

Offerors are expected to examine the Site, Statement of Work and all instructions and attachments in this RFP. Failure to do so will be at the offeror's risk.

## VI. Legal Status of Offeror

Each offeror must provide the following information in its proposal:

- A. Name of the offeror;
- B. Whether offeror is a corporation, joint venture, partnership (including type of partnership), or individual;

- C. Copy of any current license, registration, or certification to transact business in the State of Wisconsin if required by law to obtain such license, registration, or certification. If the offeror is a corporation or limited partnership and does not provide a copy of its license registration, or certification to transact business in the State of Wisconsin, the offeror shall certify its intent to obtain the necessary license, registration or certification prior to contract award or its exemption from such requirements; and
- D. Copies of any current license, registration or certification required in RFP;
- E. If the offeror is a partnership of joint venture, names of general partners or joint venturers.

VII. Organization of Offeror

Each proposal must further contain a chart showing the internal organization of the offeror and the numbers of regular personnel in each organizational unit.

VIII. Offerors Authorized Agent

Each proposal shall set forth the name, title, telephone number, and address of the person authorized to negotiate in behalf of the offeror and contractually bind the offeror, if other than the person signing the proposal.

IX. Price Schedule Submission

Offerors are to submit prices for each item identified in the Proposal. Offers for services other than those specified will not be considered. The prices set forth in the schedule will be used for evaluation purposes and for establishing a contract price. Milwaukee County reserves the right to accept or reject any and all Proposals.

X. Certification and Representations

Offerors shall return with their proposal resumes and any other documents as may be requested in the RFP.

XI. Signing of Offers

The offeror shall sign the proposal and print or type its name on the form. Erasures or other changes must be initialed by the person signing the offer. Offers signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the County.

XII. Proposal Guarantee

By submitting a proposal the offeror guarantees that it will keep its initial offer open for at least 60 days.

XIII. Acknowledgement of Amendments

Offerors shall acknowledge receipt of any amendment to this solicitation by signing and returning the amendment or by letter or telegram including mailgrams. The County must receive the acknowledgment by the date and time specified for receipt of offers. Offeror's failure to acknowledge an amendment may result in rejection of the offer.

XIV.      Late Proposals and Modifications and Withdrawals of Proposals

Any proposal received at the office designated in the solicitation after the exact time specified for receipt will not be considered.

XV.      Proposal Evaluation Criteria

Following a list of general criteria which will be used to evaluate the proposals:

**SAMPLE CRITERIA**

- a.      Quality and responsiveness to the RFP. Weight: 20%
  
- b.      Project approach and understanding, including strategy to perform requested work and time schedule. Weight: 30%.
  
- c.      Qualifications and experience. Weight: 35%
  
- d.      Fee and hourly rates. Weight: 15%.

XVI.      Staffing

Consultant shall provide, at its own expense, all personnel required in performing the services under this agreement. Such personnel shall not be employees of Owner.

The offeror must describe his or her qualifications and experience to perform the work described in this RFP. Information about experience should include direct experience with the specific matter and similar facilities. Areas of expertise of each proposed staff member shall be provided (i.e., engineering, economics, architecture, planning). Specific examples of similar or related projects previously conducted shall cite:

- Name of client organization
  
- Name, address, and current telephone number of client contact person
  
- Contract number and inclusive dates
  
- Contract amount

Offeror shall provide the following information for every resume:

- Full name
  
- Title and areas of specialty

- Affiliation (that is, staff of offeror or subconsultant)
- Experience directly related to the proposed project
- Education/training
- Individual personnel hours and percentage of total project time which will be devoted to the proposed project in total and broken down by task. (See suggested matrix below)
- Resumes shall be included for all personnel expected to work on the project. Only resumes of staff or subconsultant staff employed by or under contract with the firm as of the date of proposal submission are to be included.

	NAME OF EMPLOYEE 1	NAME OF EMPLOYEE 2	ETC.....	EXPENSES	SUB TASK	TASK TOTAL
TASK	HOURLY RATE W/OH	HOURLY RATE W/OH	ETC.....		TOTAL	
DESCRIPTION						
1. TASK 1	Number of Hrs/Task	Number of Hrs/Task				
2. TASK 2						
3. TASK 3						
4. TASK 4						
5. TASK 5						
6. TASK 6						
TOTAL HOURS						
TOTAL COST						
% OF TIME						

TOTAL FEE

**ATTACHMENT 3**

**CONSULTANT PROPOSAL**

MILWAUKEE COUNTY  
DEPARTMENT OF ADMINISTRATIVE SERVICES  
ARCHITECTURE , ENGINEERING & ENVIRONMENTAL SERVICES DIVISION

**PROJECT:**     **Rawson Avenue Lift Station (V025-13807)**

CONSULTANT PROPOSAL

I.     BASIC SERVICES (Include services of all needed subconsultants)

A.     "LUMP SUM" or "ACTUAL COST" fees:   \$  
          (\_\_\_\_\_)

II.    PRINCIPAL IN CHARGE

Name of Principal

Architect or Engineer's Registration No. in Wisconsin

Flat hourly rate for principal

Participation of Disadvantaged Business Enterprises at the rate of \_\_\_ will be required.

Firm Name

Authorized Signature

Title

Date

# ATTACHMENT 4

A-A-40

INDEX OF SHEETS

SHEET NO.	TITLE
2.4	TYPICAL CROSS SECTIONS
3	ESTIMATE OF QUANTITIES
3A-3B	MISCELLANEOUS QUANTITIES
4.3	RIGHT OF WAY PLAT
5-14	PLAN AND PROFILE STA. 382+35.00 TO STA. 420+00.00
15-15.5	STANDARD DETAILS
16-44	STRUCTURE B40-385
45-66	CROSS SECTIONS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		R.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
40.6	351.0		12.12	4 WIS	1	66
40.6	351.0		12.13			

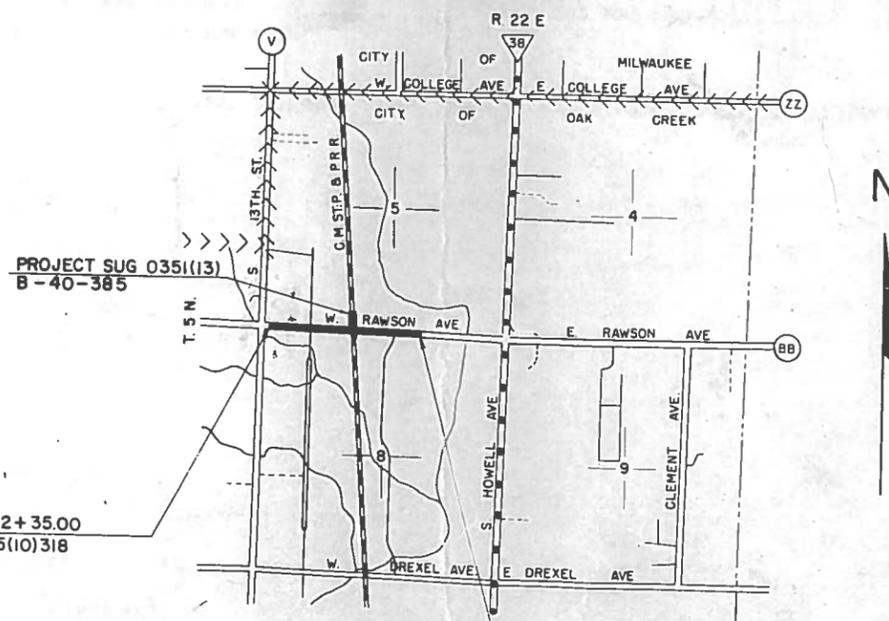
PLAN AND PROFILE OF PROPOSED  
WEST RAWSON AVENUE

SOUTH 13TH STREET—SOUTH HOWELL AVENUE  
C.T.H. "BB"  
MILWAUKEE COUNTY  
PROJECT SU 0351(12)

WEST RAWSON AVENUE UNDERPASS  
MILWAUKEE COUNTY  
B-40-385  
PROJECT SUG 0351(13)



PLAN 1 IN. = 20 FT OR SOFT.  
PROFILE HOR. 1 IN. = 20' OR 50' VERT. 1 IN. = 2 FT OR 5 FT  
CROSS SECTIONS HOR. 1 IN. = 10 FT VERT. 1 IN. = 5 FT.



BEGIN PROJECT SU 0351(12) STA. 382+35.00  
= STA 65+08.00 PROJECT I-94-5(10)318  
18310' E OF S.W. COR. OF SEC 5, T5N, R.22E

END PROJECT SU 0351(12) STA. 420+00.00  
= STA. 420+00.00 PROJECT SU 0351(14)  
1388.09' W OF S.E. COR. OF SEC 5, T5N, R.22E

LAYOUT

SCALE 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.713 MI.

CONVENTIONAL SIGNS

LINE	CULVERTS IN PLACE	EXISTING SANITARY SEWER	SAN.
LINE	CULVERTS REQUIRED	EXISTING STORM SEWER	ST.
LINE	DROP INLET	EXISTING TELEPHONE	TEL.
LINE	POWER POLE	MANHOLE	M.H. O
LINE	TELEPHONE OR TELEGRAPH POLE	HYDRANT	H.
LINE	RIGHT OF WAY MARKERS	GATE VALVE	G.V. O
LINE	REFERENCE STAKE FOR HUBS ONLY		
LINE	MARSH		
LINE	HEDGE		
LINE	TREES		
LINE	GROUND ELEVATION		
LINE	DATUM LINE		
LINE	GRADE ELEVATION		
LINE	CONTRACTION JOINT		
LINE	EXPANSION JOINT		

DESIGN DESIGNATION

ADT(1964)	9,700
ADT(1986)	20,200
DHV(ONE WAY)	1,700
T	10%
D	60%-40%
V	50MPH
K	12%

PLANS PREPARED BY  
MILWAUKEE COUNTY DEPARTMENT OF PUBLIC WORKS  
HIGHWAY DIVISION

SURVEYOR MILW COUNTY X-SECTIONS CHECKED G.J.G.  
DRAFTSMAN R.L.K. O.P.R. PLANS CHECKED G.J.G.  
COMPUTER L.V.W. G.B.

RECOMMENDED FOR APPROVAL  
DATE 8-25-67 S.H. Brichmann  
HIGHWAY ENGINEER

APPROVED  
DATE 9-25-67 W.B. Wilschick  
COUNTY HIGHWAY COMMISSIONER  
AND DIRECTOR OF PUBLIC WORKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
MADISON, WISCONSIN

SURVEYOR B. KINNEL NOTE BOOK  
DIVISION COMPUTER M.O. CHECKER W.H.B.  
DISTRICT CHECKER I.M. G.H.D.S. CORRECT

CORRECT:  
DATE 9/27/67 J.L. Meier  
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL  
DATE 10/16/67 E.J. Bystek  
CHIEF DESIGN ENGINEER

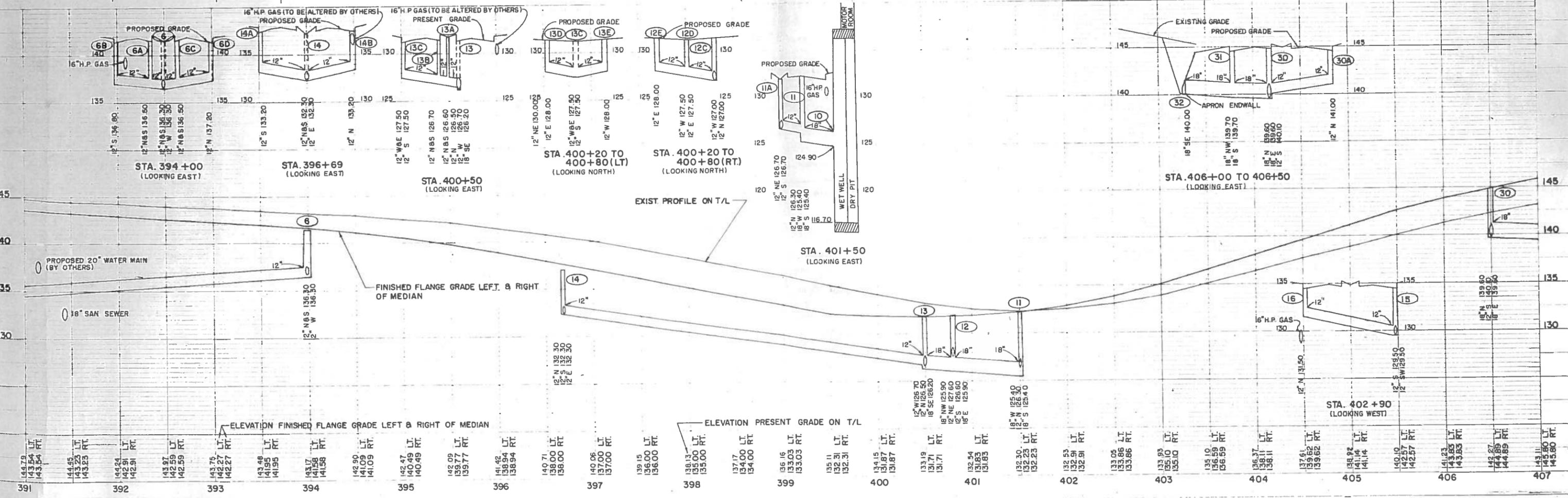
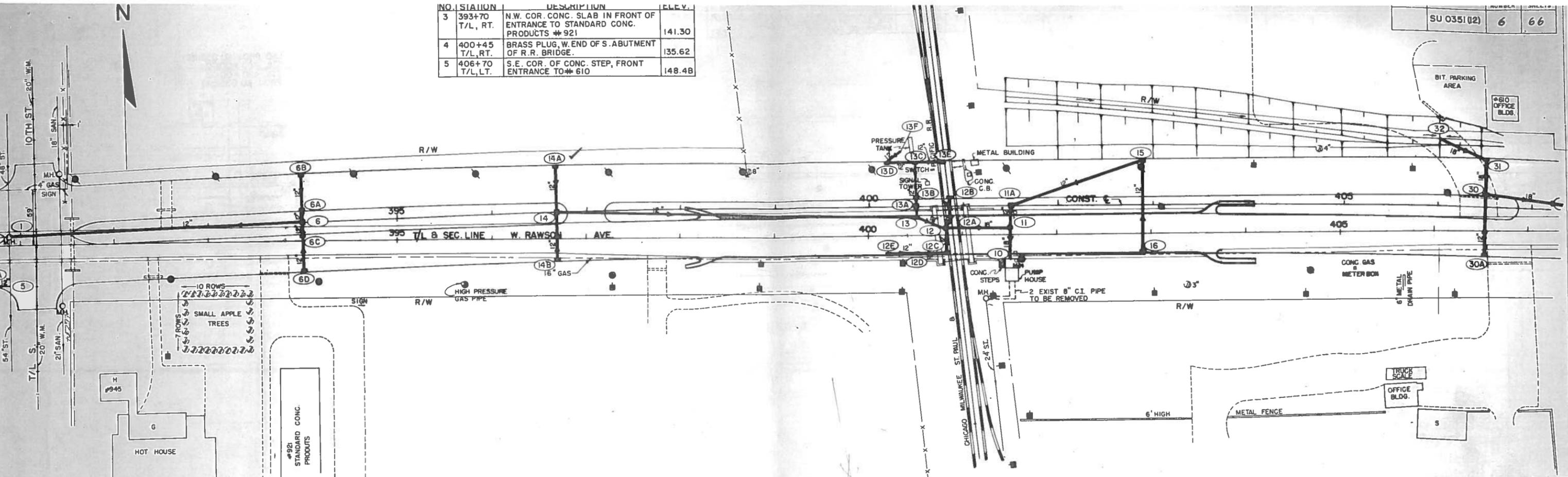
APPROVED:  
DATE 10/14/67 W. J. Summister  
STATE HIGHWAY ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS

APPROVED

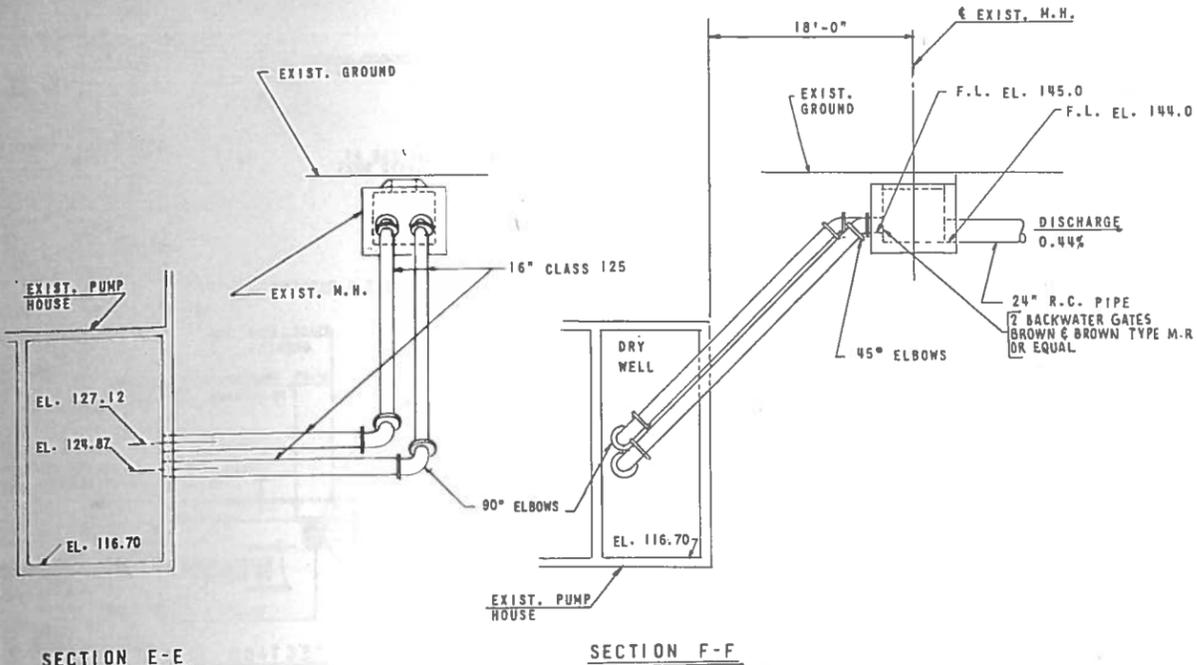


NO.	STATION	DESCRIPTION	ELEV.
3	393+70 T/L, RT.	N.W. COR. CONC. SLAB IN FRONT OF ENTRANCE TO STANDARD CONC. PRODUCTS #921	141.30
4	400+45 T/L, RT.	BRASS PLUG, W. END OF S. ABUTMENT OF R.R. BRIDGE.	135.62
5	406+70 T/L, LT.	S.E. COR. OF CONC. STEP, FRONT ENTRANCE TO #610	148.48



STATION	ELEVATION FINISHED FLANGE GRADE LEFT & RIGHT OF MEDIAN	ELEVATION PRESENT GRADE ON T/L
391	144.79 LT., 143.54 RT.	
392	144.45 LT., 143.23 RT.	
393	144.24 LT., 142.91 RT.	
394	143.97 LT., 142.59 RT.	
395	143.75 LT., 142.27 RT.	
396	143.48 LT., 141.95 RT.	
397	143.17 LT., 141.58 RT.	
398	142.90 LT., 141.09 RT.	138.13 LT., 135.00 RT.
399	142.47 LT., 140.49 RT.	137.17 LT., 134.00 RT.
400	142.09 LT., 139.77 RT.	136.16 LT., 133.03 RT.
401	141.42 LT., 138.94 RT.	135.11 LT., 132.31 RT.
402	140.71 LT., 138.00 RT.	134.15 LT., 131.67 RT.
403	140.06 LT., 137.00 RT.	133.19 LT., 131.71 RT.
404	139.15 LT., 136.00 RT.	132.54 LT., 131.83 RT.
405	138.13 LT., 135.00 RT.	132.30 LT., 132.23 RT.
406	137.17 LT., 134.00 RT.	132.53 LT., 132.91 RT.
407	136.16 LT., 133.03 RT.	133.05 LT., 133.66 RT.
		133.93 LT., 135.10 RT.
		135.10 LT., 136.59 RT.
		136.59 LT., 138.11 RT.
		138.11 LT., 139.62 RT.
		139.62 LT., 141.14 RT.
		141.14 LT., 142.57 RT.
		142.57 LT., 144.00 RT.
		144.00 LT., 145.50 RT.

RI-11/8/67



SECTION E-E

SECTION F-F

**BILL OF MATERIAL FOR PUMP HOUSE MODIFICATIONS**

NO.	UNIT	DESCRIPTION
2	EACH	10x16 REDUCING ELBOWS
2	EACH	5200 GAL. PER MIN. PUMPS
2	EACH	ANMA PARALLEL SEAT GATE VALVES WITH HAND WHEELS
5	EACH	WALL CASTINGS
106	L.F.	16" C.I. CLASS 125 PIPE
2	EACH	90° ELBOWS FOR 16" PIPE
2	EACH	45° ELBOWS FOR 16" PIPE
440	L.F.	24" R.C. PIPE
2	EACH	BROWN & BROWN TYPE M-R OR EQUAL BACKWATER GATES
440	L.F.	18" R.C. PIPE REMOVAL
3	C.Y.	CONC. MASONRY
300	LBS.	STRUCTURAL STEEL

**NOTE**

PUMP HOUSE MODIFICATIONS, ITEM 90003. THE WORK UNDER THIS ITEM SHALL CONSIST OF THE FURNISHING, INSTALLING AND TESTING OF ALL PIPING, VALVES AND APPURTANANCES; THE FURNISHING AND PLACING OF ALL WALL CASTINGS IN ALL CONCRETE WALLS TO WHICH PIPING WILL CONNECT, THE FURNISHING AND INSTALLATION OF TWO STORM WATER PUMPS ALONG WITH THEIR RESPECTIVE ELECTRIC MOTOR DRIVE UNITS AND ACCESSORIES; THE FURNISHING AND INSTALLATION OF ALL ELECTRICAL WORK; THE REMOVAL OF THE EXISTING 18" SEWER AND THE FURNISHING AND INSTALLING OF THE 24" SEWER.

2P., 240V., 30A. SINGLE-THROW GENERAL DUTY SAFETY SWITCH OF THE FUSIBLE TYPE, SQUARE 'D' CAT. NO. D221 IN GENERAL PURPOSE ENCLOSURE. PROVIDE TWO FUSES WITH 5 AMP. RATING.

INSTALL 2 #12-3/4" C. RIPPLE.

FURNISH AND INSTALL TWO-CIRCUIT ALTERNATOR PANEL WITH OPERATING COIL VOLTAGE 240V. AS PER AUTOMATIC CONTROL CO. CLASS 7101 IN GENERAL PURPOSE ENCLOSURE. (TYPICAL)

INSTALL 4 #12-3/4" C.

RED PILOT LIGHT, SQUARE 'D' CAT. NO. TP-3R2, WITH 'MOTOR RUN' LEGEND PLATE (TYPICAL)

DISCONNECT AND REMOVE EXISTING MAGNETIC MOTOR STARTER AND REPLACE WITH CLASS 8539, 240V., NEMA SIZE 5 COMBINATION MAGNETIC STARTER - CIRCUIT - BREAKER TYPE, IN NEMA 12 ENCLOSURE AS PER SQUARE 'D' MAGNETIC STARTER TO BE PROVIDED WITH 1 N.O. AUXILIARY CONTACTS. (TYPICAL)

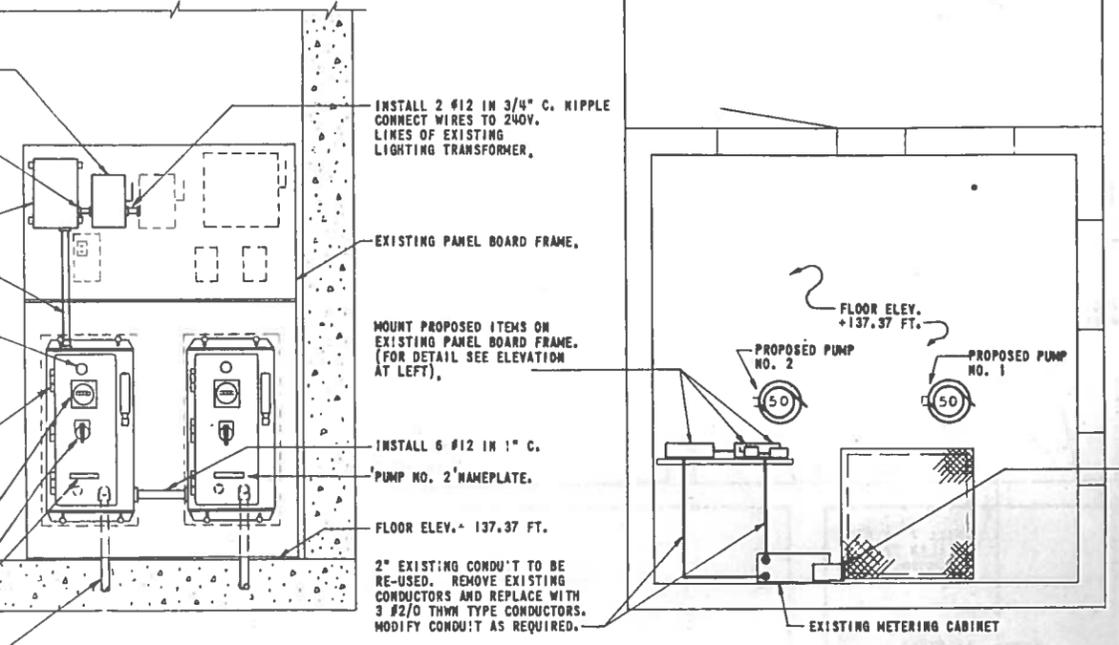
3 1/2-INCH TYPE KT-11 SQUARE SEALED CASE, 240V. ELAPSED TIME METER WITH A NON-RESET REGISTER-HOURS, GENERAL ELECTRIC CAT. NO. 50-235 152 ABAA (TYPICAL)

HEAVY DUTY OIL-TIGHT 'TEST-OFF-AUTOMATIC' SELECTOR SWITCH WITH SPRING RETURN FROM 'TEST' TO 'OFF' (TYPICAL)

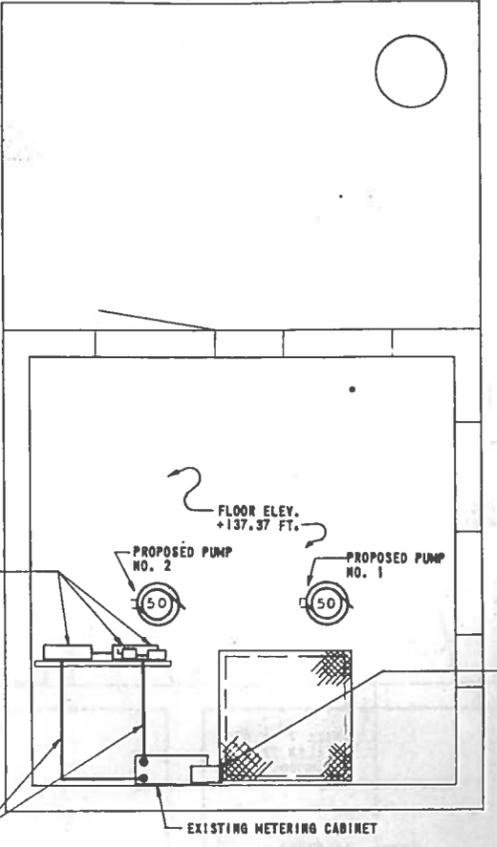
'PUMP NO. 1' NAMEPLATE

1 1/2" EXISTING CONDUIT TO BE RE-USED. REMOVE EXISTING CONDUCTORS AND REPLACE WITH 3 #2/0 THWN TYPE CONDUCTORS. MODIFY CONDUIT AS REQUIRED (TYPICAL).

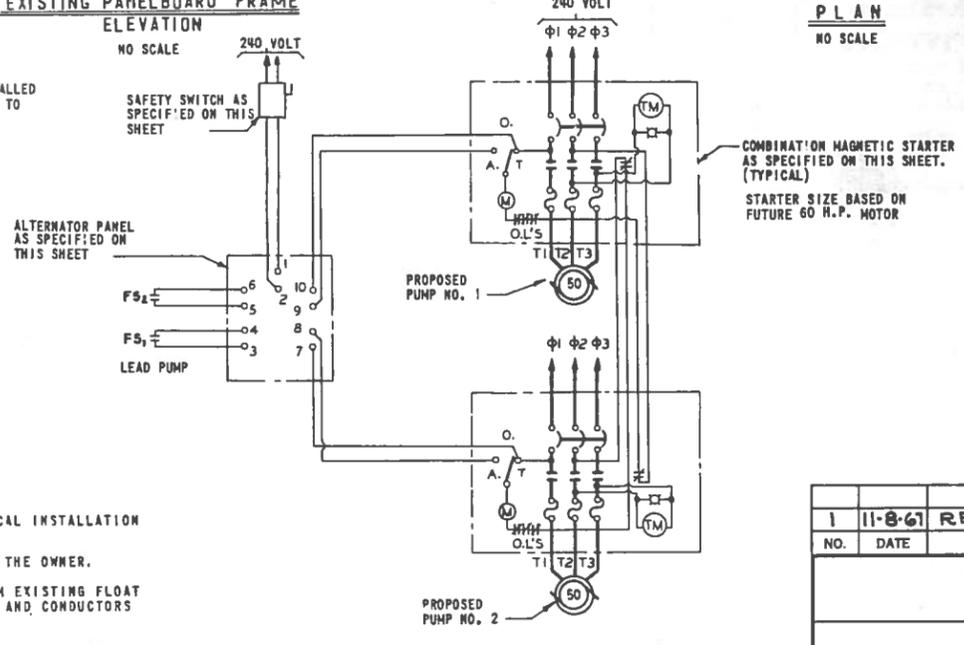
\* ALL HEAVY LINES DENOTE ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR. LIGHT LINES DENOTE EXISTING EQUIPMENT TO REMAIN.



EXISTING PANELBOARD FRAME ELEVATION NO SCALE



PLAN NO SCALE



WIRING DIAGRAM NO SCALE

**NOTES:**

- UNLESS OTHERWISE NOTED THE EXISTING ELECTRICAL INSTALLATION IS TO REMAIN.  
ALL REPLACED ITEMS SHALL BE THE PROPERTY OF THE OWNER.
- MODIFY EXISTING CONDUITS AND CONDUCTORS FROM EXISTING FLOAT SWITCHES AS REQUIRED AND RECONNECT CONDUITS AND CONDUCTORS TO PROPOSED ALTERNATOR PANEL.
- DISCONNECT CONDUITS AND CONDUCTORS FROM EXISTING MOTORS AND RECONNECT TO PROPOSED 50HP MOTORS. MODIFY CONDUITS AS REQUIRED.
- ALL CONDUCTORS SHALL BE OF RHW TYPE EXCEPT AS NOTED.
- ALL EQUIPMENT TO BE AS SPECIFIED OR APPROVED EQUAL.

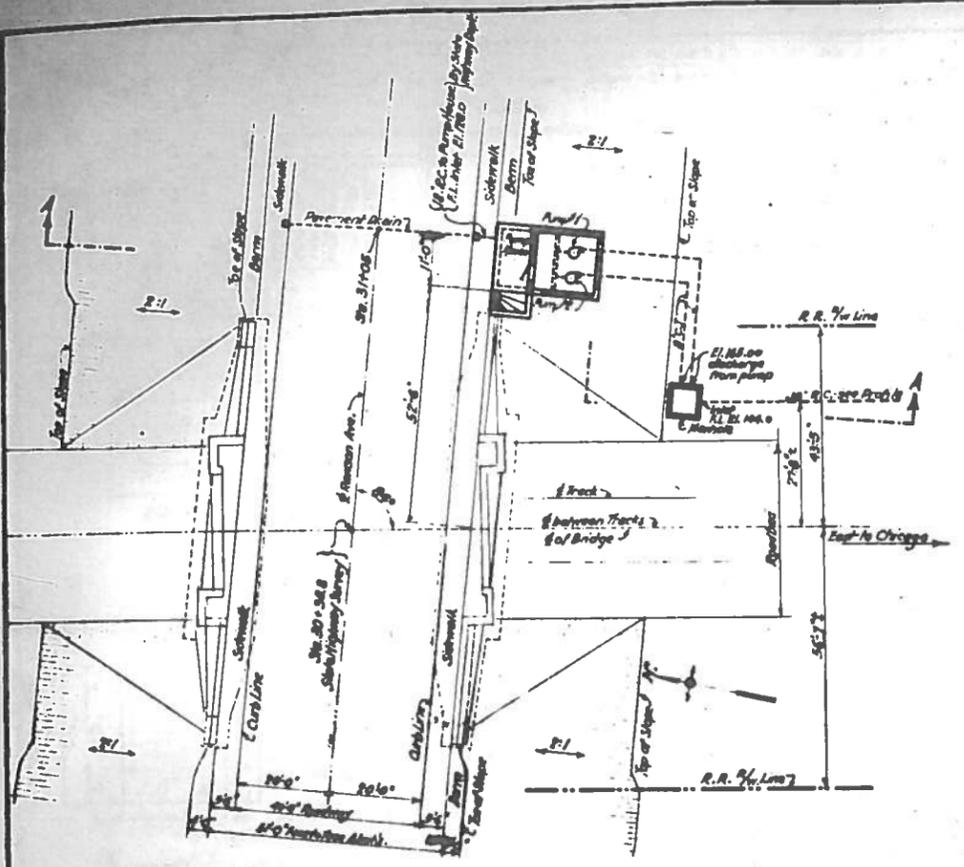
NO.	DATE	REVISION	W.K. BY
1	11-8-67	REVISED NOTE	

MILWAUKEE COUNTY  
HIGHWAY DEPARTMENT  
BRIDGE B-40-385  
CHICAGO MILWAUKEE ST. PAUL & PACIFIC RAILROAD  
OVER RAWSON AVENUE  
PUMP HOUSE DETAILS

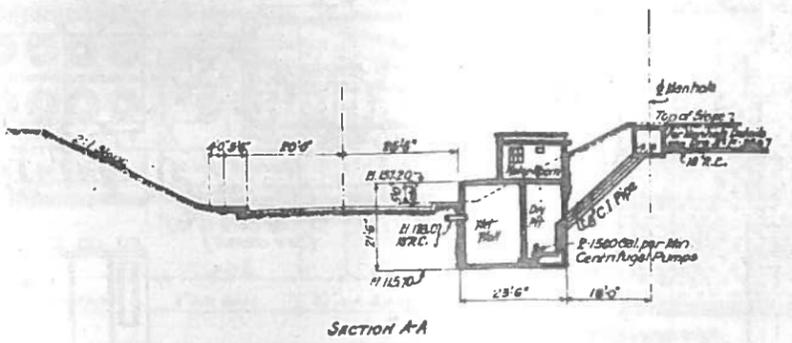
SCALE \_\_\_\_\_ CONSOER, TOWNSEND & ASSOCIATES



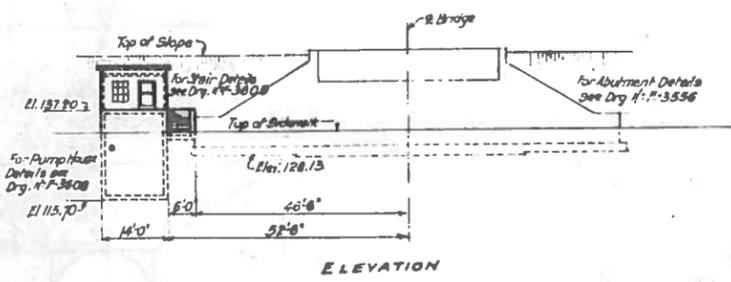
Revisions	Date
Discharge and Storm Sewer changed	7/19/85
Profile changed	7/19/85
SUG 0351 (13)	4/2



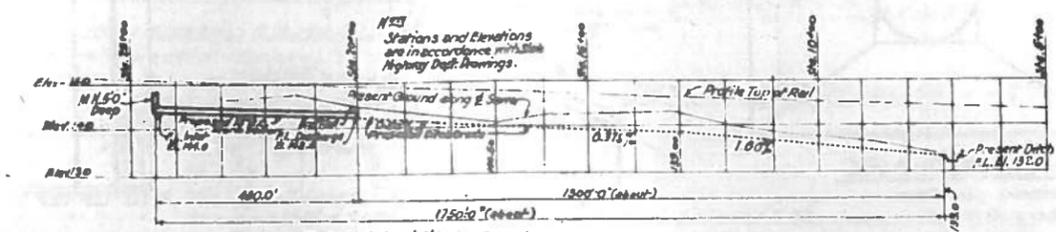
LOCATION PLAN - PUMPHOUSE  
Scale 1" = 20'



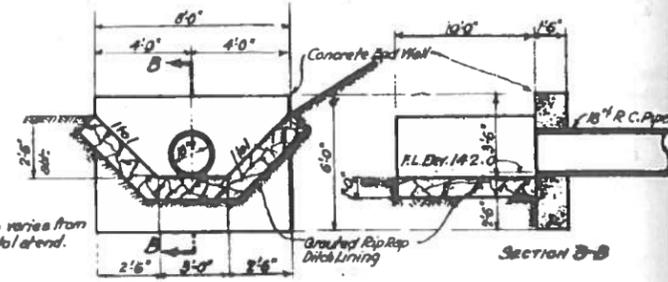
SECTION A-A



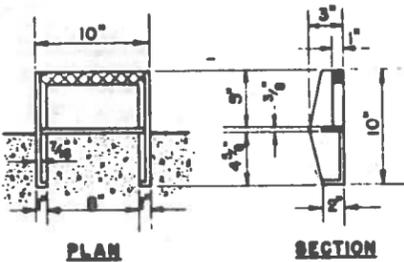
ELEVATION



Manhole to be 6'-6" inside dimensions  
PROFILE OF DISCHARGE LINE ALONG R.R. 7th  
HORIZ. SCALE 1" = 100' VERT. SCALE 1" = 20'



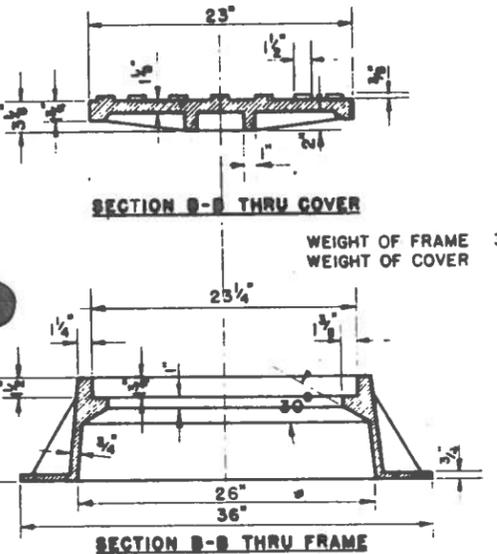
DETAIL AT DISCHARGE END OF STORM SEWER  
Scale 1/2" = 1'-0"



MATERIAL - CAST IRON  
WEIGHT EACH - 12 LBS.

PLAN

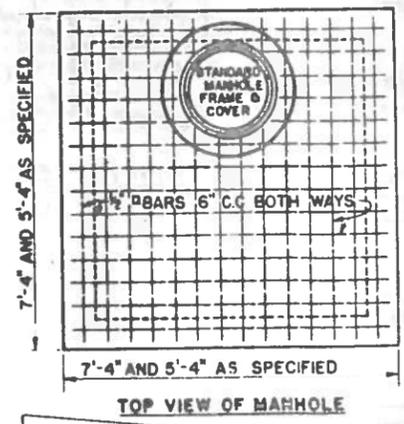
SECTION



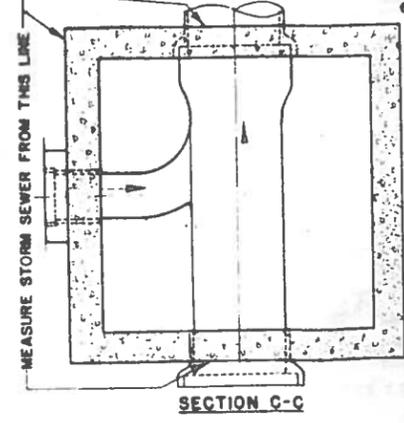
SECTION B-B THRU COVER

WEIGHT OF FRAME 300 LBS. MIN.  
WEIGHT OF COVER 150 LBS. MIN.

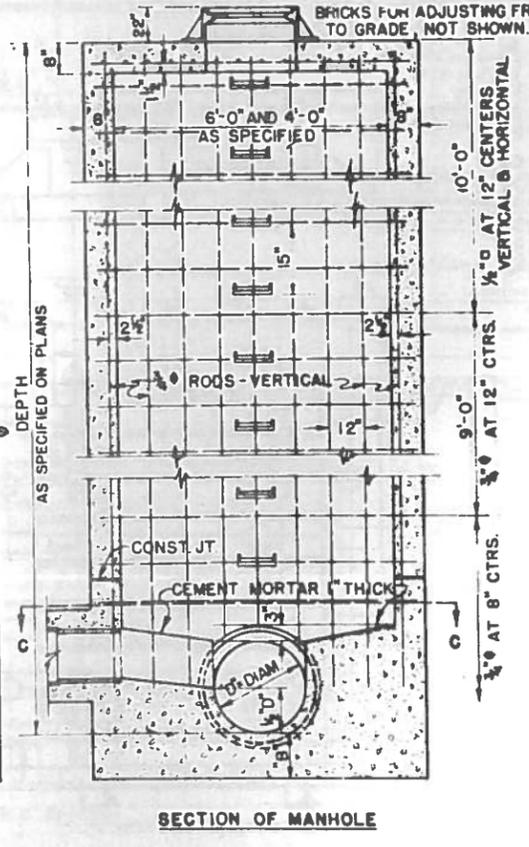
SECTION B-B THRU FRAME



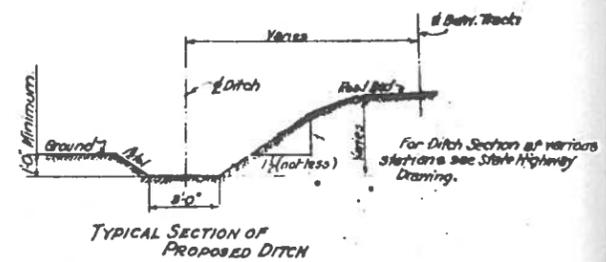
TOP VIEW OF MANHOLE



SECTION C-C



SECTION OF MANHOLE



TYPICAL SECTION OF PROPOSED DITCH

**Construction Notes for Manholes**

Details of construction not shown shall conform to the requirements of Highway Standard Specifications for road and bridge construction and the applicable special provisions.  
All castings shall be cleaned by sandblasting or tumbling and shall be shape sealed so that the cover shall have an even bearing on its seat at all points without rocking or tilting.  
Top of manhole to be below finished grade. To adjust manhole casting proper grade see standard brick masonry construction as specified in Section 5.  
Storm sewer openings shall conform to outside dimensions of sewer pipe. The invert thru manholes shall conform in size and shape to inside dimensions of sewer pipe.  
Inside dimension of manhole for storm sewer from pump discharge shall be 8'-0" up to 100' depth and 12' for greater depths.

For Bill of Material for Pump House, Equipment and Discharge see Dry. 10'

EXISTING STRUCTURE PLANS FOR INFORMATION ONLY.

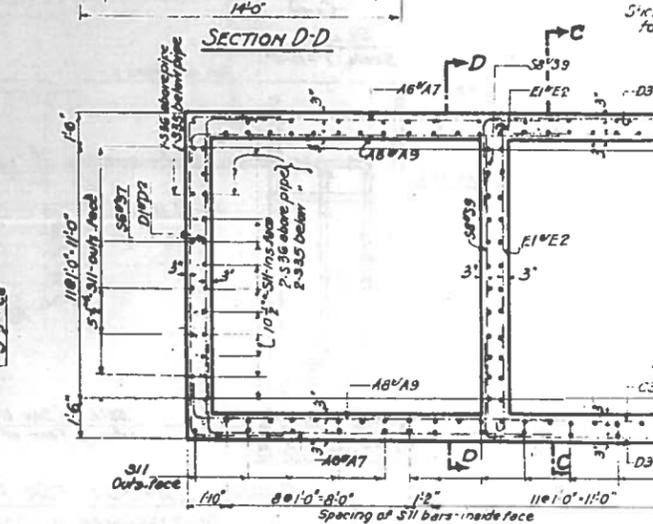
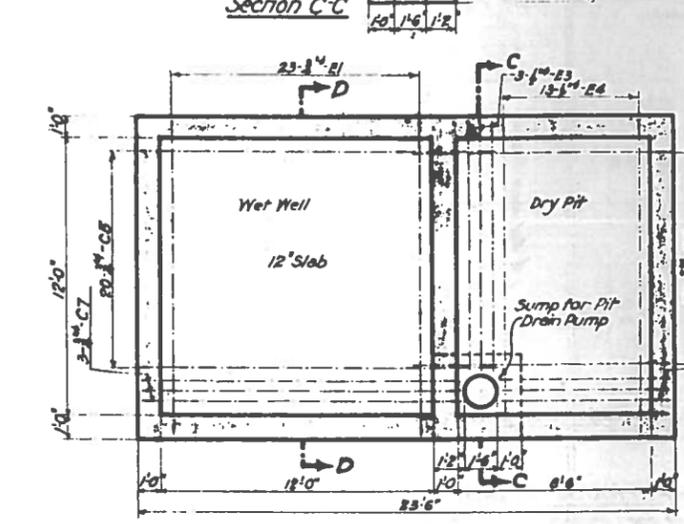
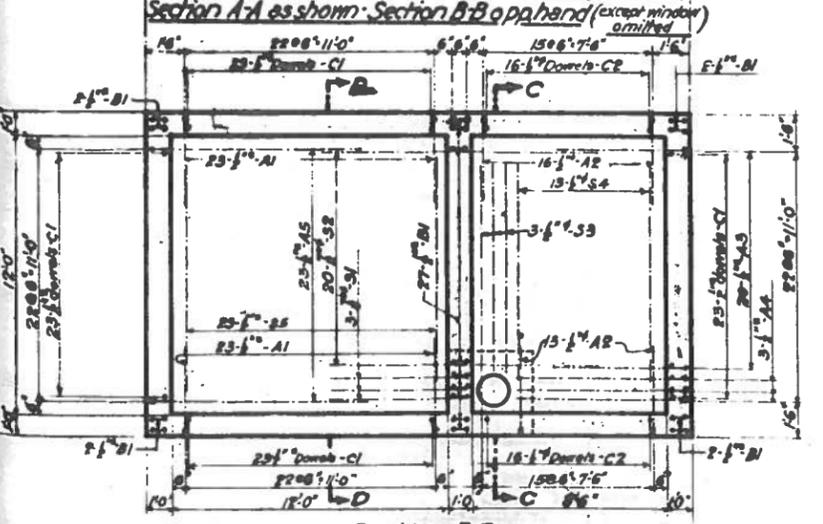
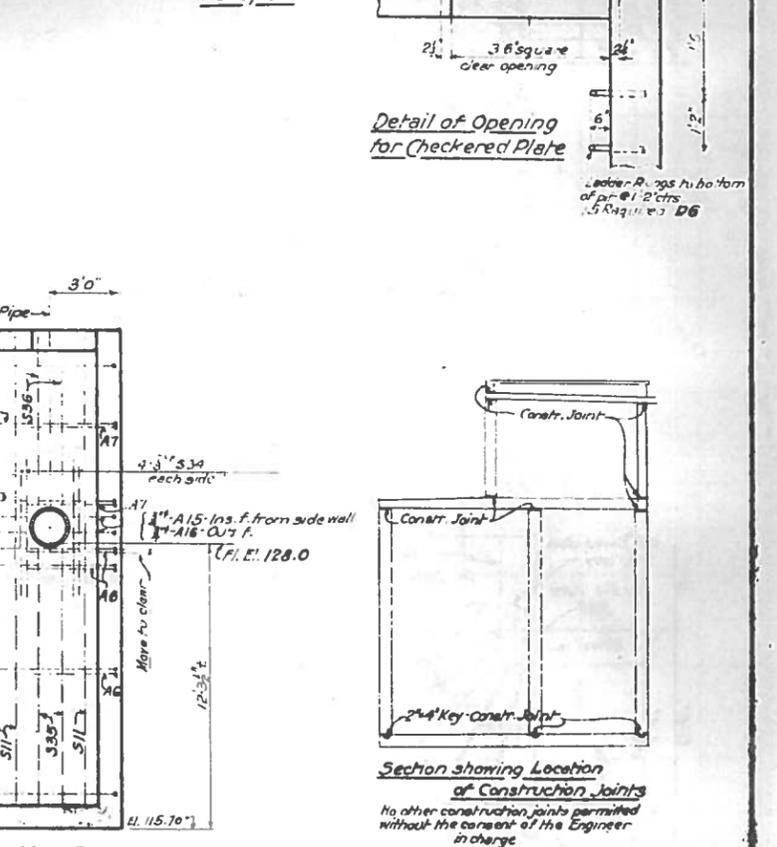
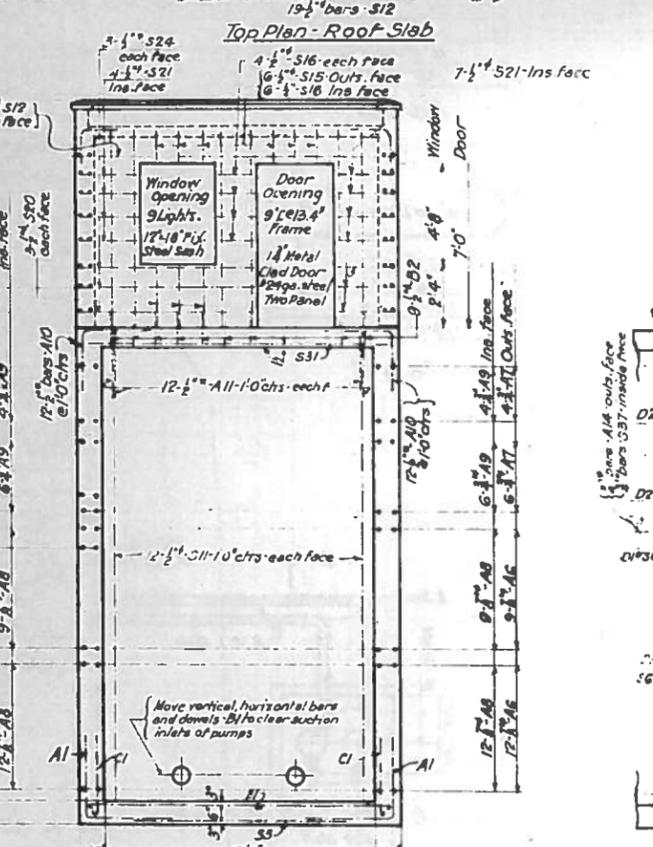
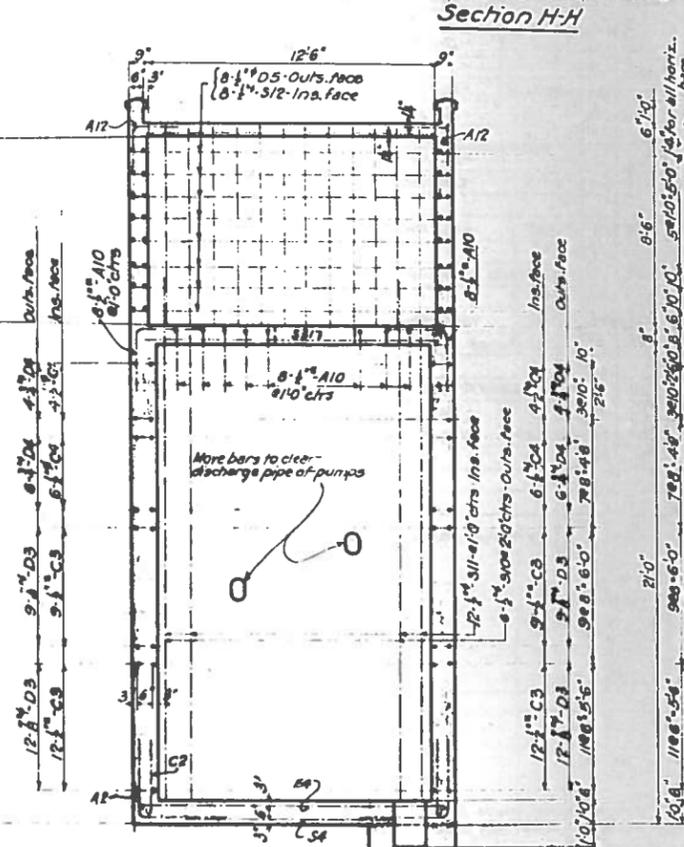
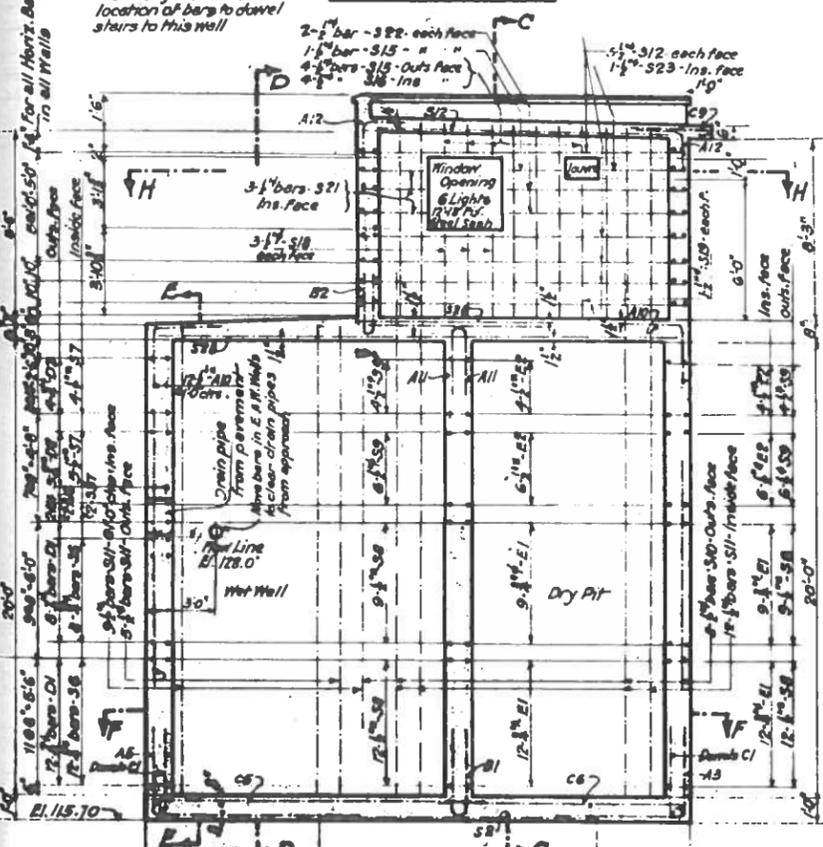
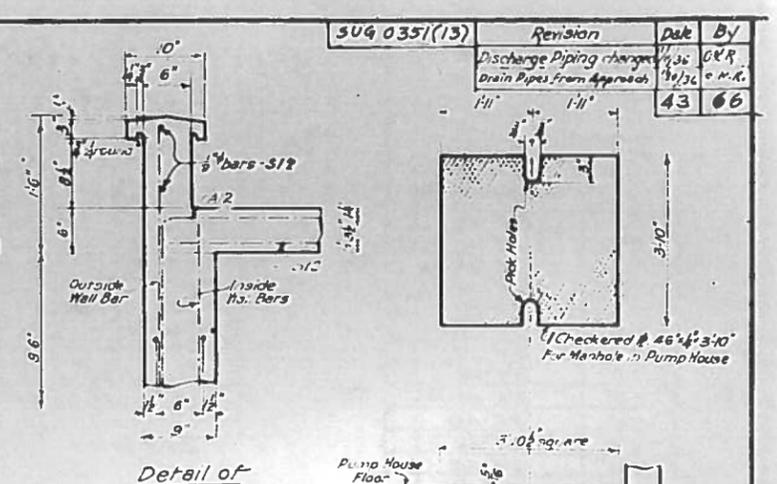
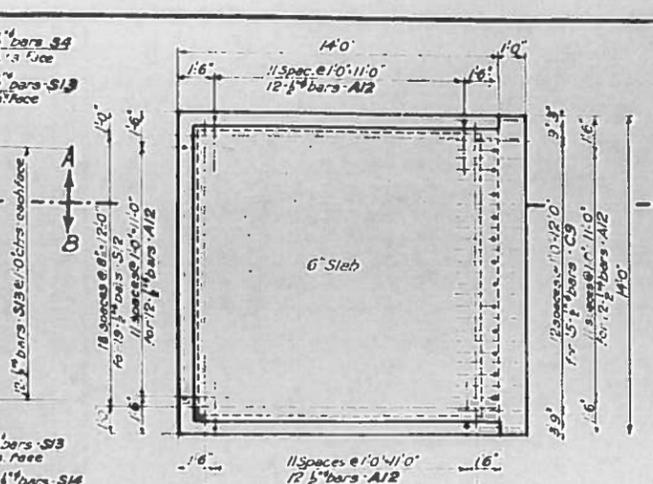
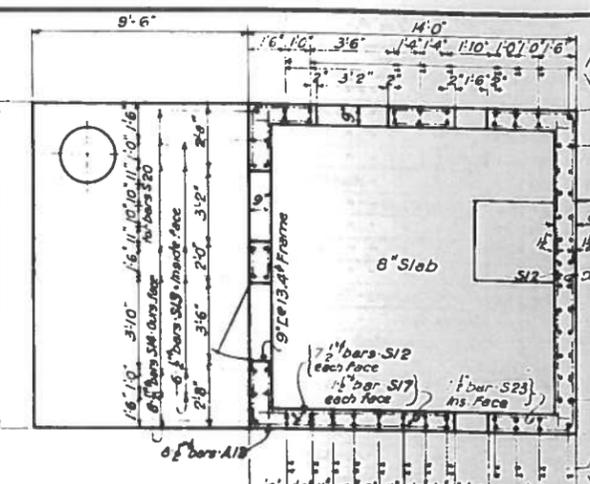
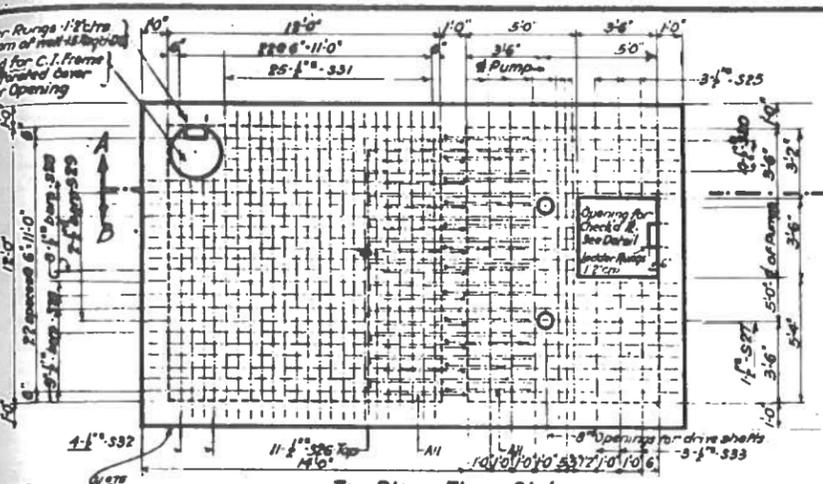
**C. M. St. P. & P. R. R.**

**A-284 1/2** 1-60'-0" THRU GIRDER SPAN - 2 TRAC  
Ransom Ave. Subway, 1.0 Mi. E. of Lake, Wis.  
**GENERAL PLAN - DRAINAGE SYSTEM**

Chicago Dec. 20, 1985  
Correct  
Approved: *H. J. Hansen* Office Engineer  
Approved: *W. J. Middleton*  
Approved: *W. J. Middleton* Sup't. of Bridges and Buildings  
Drawing No. F-54

Scale: Manufacturer

Revision	Date	By
Discharge Piping changed	11/30	G.R.
Drain Pipes from Approach	11/30	C.M.K.
	43	66



For Construction Notes, Bills of Material, Bar Details, Stair Details and Piping Layout - see Dwg. N.F. 3609. For Location Plan see Dwg. N.F. 3607.

EXISTING STRUCTURE PLANS FOR INFORMATION ONLY.

**C.M. ST.P. & P.R.R.**

**A-284 1/4** 160'0" THRU GIRDER SPAN - 2 TRACKS  
Ranson Ave Subway - 1.0 Mi. E. of Lake, Wisc.

**PUMP HOUSE DETAILS**

Chicago Dec 20, 1935  
Corrected: \_\_\_\_\_  
Approved: \_\_\_\_\_  
Office Engineer

Drawing N.F. 3608  
Approved: \_\_\_\_\_  
Sup't of Bridges and Buildings

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

