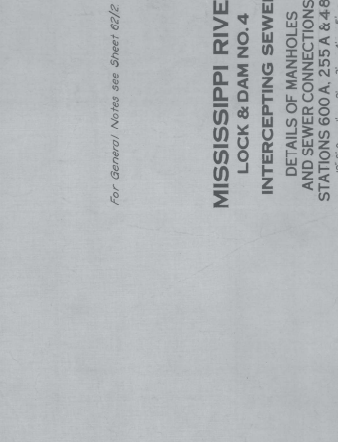


MANHOLE AND SEWER CONNECTION DETAILS STA. 255.0A



SECTION E-E

SECTION AT STEEL PILE  
CUTOFF WALL STA. 5590A

BY	DATE	CHARACTER
		FINISHED STRUCTURE AS OF MARCH 1937

**MISSISSIPPI RIVER  
LOCK & DAM NO. 4  
INTERCEPTING SEWER  
DETAILS OF MANHOLES  
AND SEWER CONNECTIONS,  
STATIONS 600 A, 255 A & 48 B**

For General Notes see Sheet 62/2.

IN SHEETS  
U. S. ENGINEER OFFICE  
SAINT LOUIS, MISSOURI

SCALE: 1" = 1' FOOT

SHEET NO.  
UPPER MISSISSIPPI VALLEY DIVISION  
JUNE 1932

SUBMITTED *L. Lyman* APPROVED *L. Lyman*  
BY, CHIEF OF DIVISION  
FOR, DISTRICT ENGINEER  
BY, DISTRICT ENGINEER

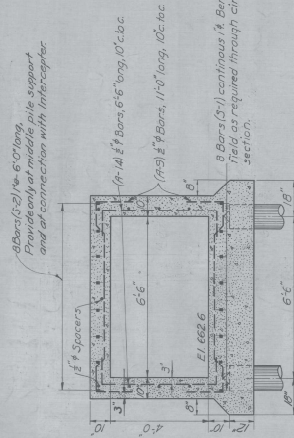
TRANSMITTED WITH LETTER  
DATED

RECEIVED BY E. N. R.  
JUN 20 1932  
RECEIVED BY A. C. C.  
JUN 20 1932  
RECEIVED BY S. H. H. & O. H.

PREPARED UNDER GENERAL DIRECTION OF  
THE UPPER MISSISSIPPI RIVER BOARD  
COL GEORGE SPALDING SENIOR MEMBER  
COL WILDOUR WILLING

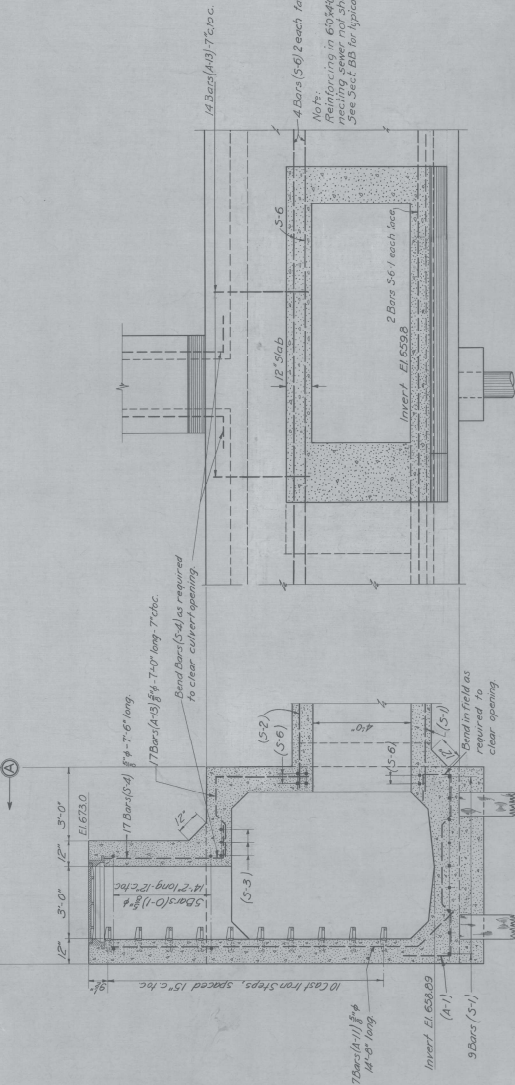
THIS SHEET SHOWS WORK AS ACTUALLY CONSTRUCTED



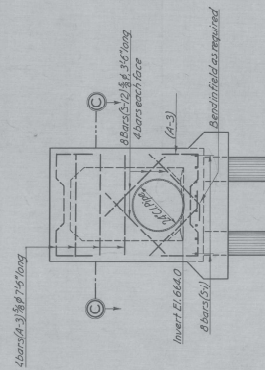


SECTION B-B

Exact section of old sewer not known;  
Suitable transition section connecting to  
above section to be made in field.



SECTION A-A



ELEVATION OF UPPER END OF SEWER

SLUICE PIPE CONNECTION

needing sewer not shown.  
See Sect BB for typical reinforcing

SECTION C-C

**MISSISSIPPI RIVER  
LOCK & DAM NO. 4**

**INTERCEPTING SEWER  
DETAILS OF MANHOLES  
AND SEWER CONNECTIONS,  
STATIONS 957A & 361B**

For General/Notes see Sheet 62/2

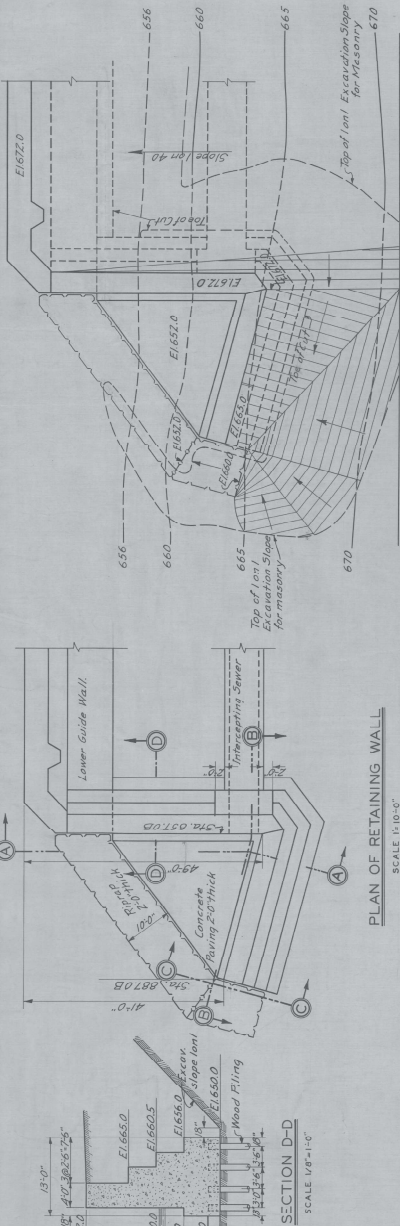
MANHOLE AND SEWER CONNECTION DETAILS STA. 361.0B

IN SHEET'S SCALE:  $\frac{1}{2}$  INCH = 1 FOOT SHEET NO.  
U. S. ENGINEER OFFICE UPPER MISSISSIPPI VALLEY DIVISION  
SAINT LOUIS, MISSOURI JUNE 1932

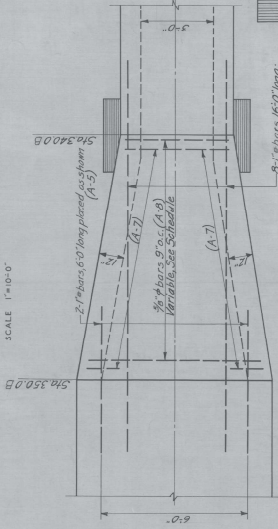
**PREPARED UNDER GENERAL DIRECTION OF  
THE UPPER MISSISSIPPI RIVER BOARD**

THIS SHEET SHOWS WORK AS ACTUALLY CONSTRUCTED

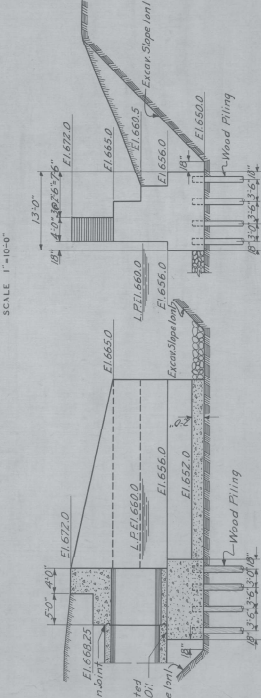




PLAN OF FILL BEHIND RETAINING WALL



PLAN OF ROUND PILES UNDER RETAINING WALL



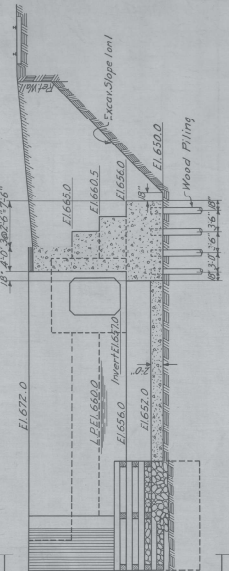
SECTION B-B

SECTION C-C

SCALE 1/8"=1'-0"

SCALE 1/8"=1'-0"

REINFORCEMENT SCHEDULE - INTERCEPTING SEWER				
TYPE	SIZE	LENGTH	BENDING DIAGRAM	WEIGHT
A-1	16B7	11'-9"		20.634
A-2	16B7	5'-4"		10.932
A-3	25B4	1'-4"		5.010
A-4	25B4	1'-4"		5.010
A-5	2	1'-4"		10.400
A-6	8	1'-4"		4.35
A-7	26	8'-9"		9.126
A-8	26	8'-9"		11.955
A-9	44	3'-4"		7.300
A-10	7	5'-4"		16.600
A-11	7	5'-4"		16.301
A-12	7	5'-4"		8.003
A-13	17	7'-0"		7.300
A-14	44	3'-4"		4.340
A-15	6	3'-4"		9.648
A-16	12	3'-4"		10.932
A-17	6	3'-4"		12.235
A-18	6	3'-4"		13.559
S-1	5B0	1'-4"		102.000
S-2	12B2	1'-4"		20.400
S-3	20	3'-4"		9.012
S-4	34	3'-4"		7.823
S-5	8	3'-4"		10.514
S-6	6	1'-4"		5.120
S-7	17	3'-4"		4.694
S-8	30	3'-4"		6.258
S-9	17	3'-4"		7.301
S-10	17	3'-4"		8.605
S-11	2	3'-4"		13.518
S-12	8	3'-4"		3.661
S-13	35	3'-4"		14.179
S-14	20	3'-4"		2.612
Spacer	5/16"	22'-9"		15.20
Total				161.952



SECTION A-A

SCALE 1/8"=1'-0"

MISSISSIPPI RIVER  
LOCK & DAM NO. 4  
RETAINING WALL AT LOWER END  
AND MISCELLANEOUS

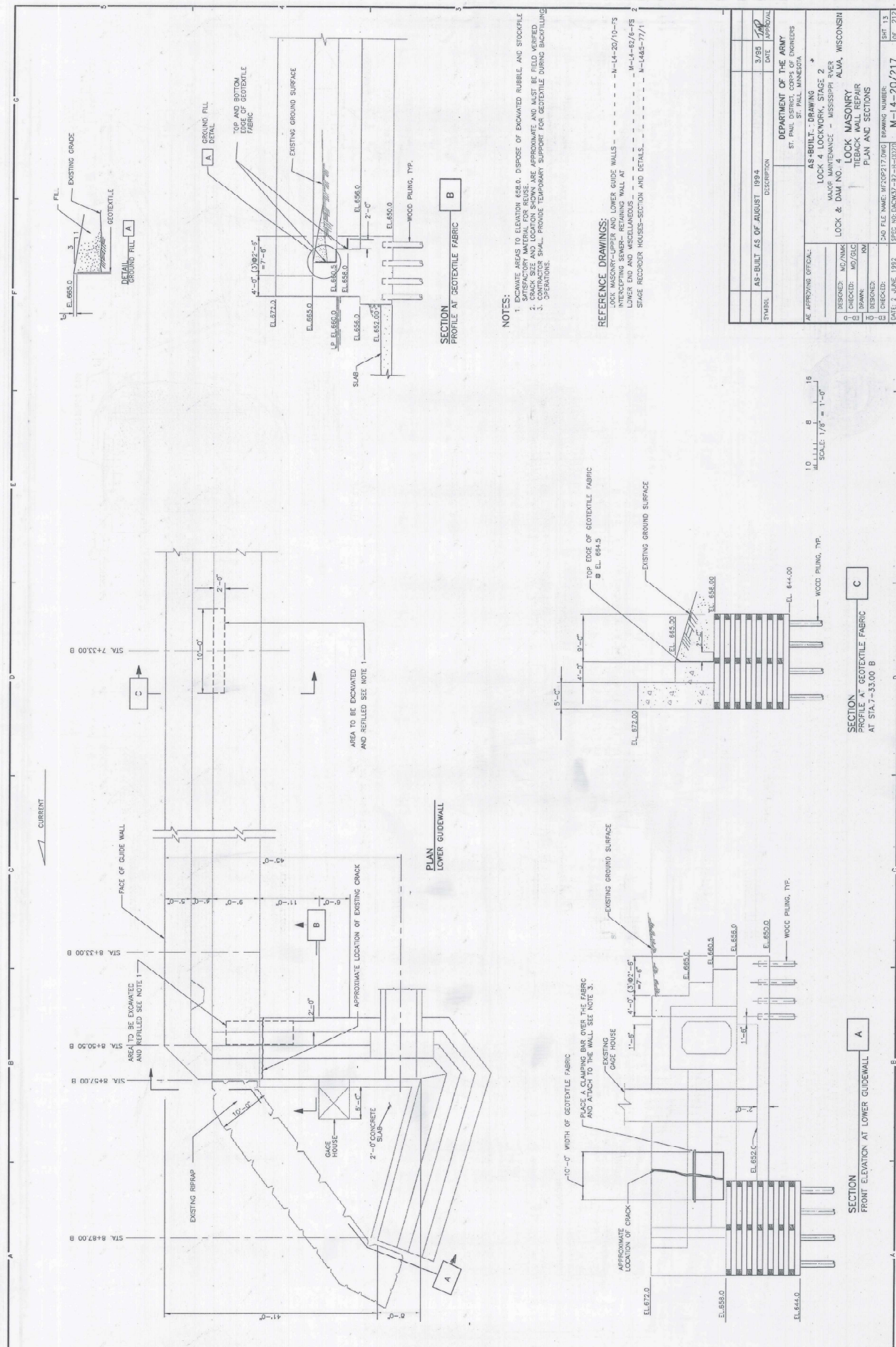
SCALE 1/8"=1'-0"

TRANSITION SECTION

SCALE 1/8"=1'-0"

SCALE AS SHOWN  
U. S. ENGINEER OFFICE, ST. PAUL, MINN.  
MARCH 1937  
SUBMITTED BY  
PRINCIPAL ENGINEER  
DRAWN BY  
CHECKED BY





**NOTES:**

1. EXCAVATE AREAS TO ELEVATION 650.0. DISPOSE OF EXCAVATED RUBBLE AND STOCKPILE SATISFACTORY MATERIAL FOR REUSE. EXCAVATION SURFACES ARE APPROXIMATE AND MUST BE REFINISHED BY CONTRACTOR.
2. EXCAVATION SHALL BE PROTECTED BY SHIELDING DURING BACKFILLING.
3. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR GEOTEXTILE DURING BACKFILLING OPERATIONS.

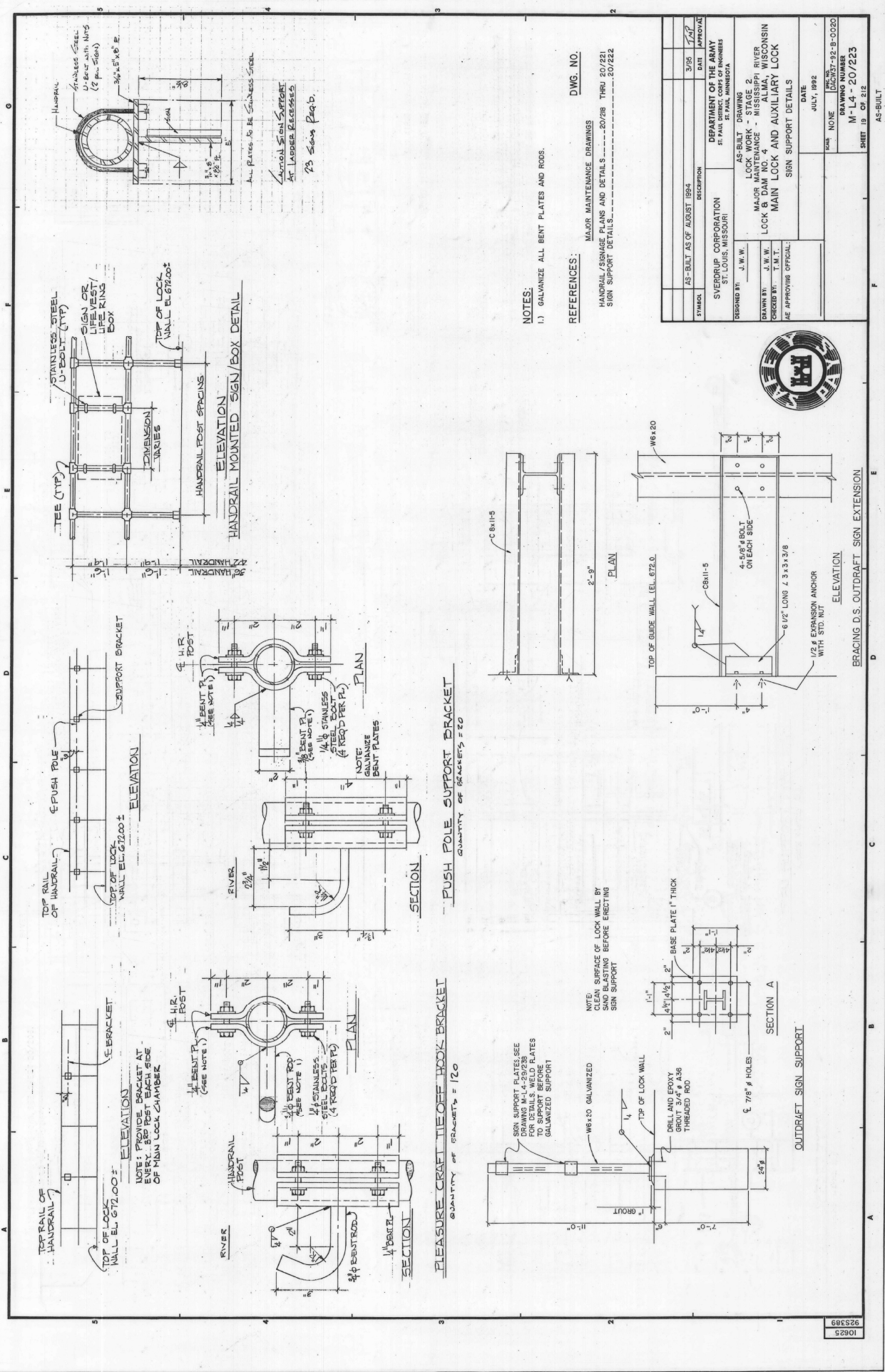
**REFERENCE DRAWINGS:**

- LOCK MASONRY-UPPER AND LOWER GUIDE WALLS - N-14-20/10-75
- INTERCEPTING SENSITIVE RETAINING WALL AT LOWER END AND MISCELLANEOUS - N-14-82/6-FS 2
- SHIELD RECORDER HOUSES-SECTION AND DETAILS - N-1485-77/1

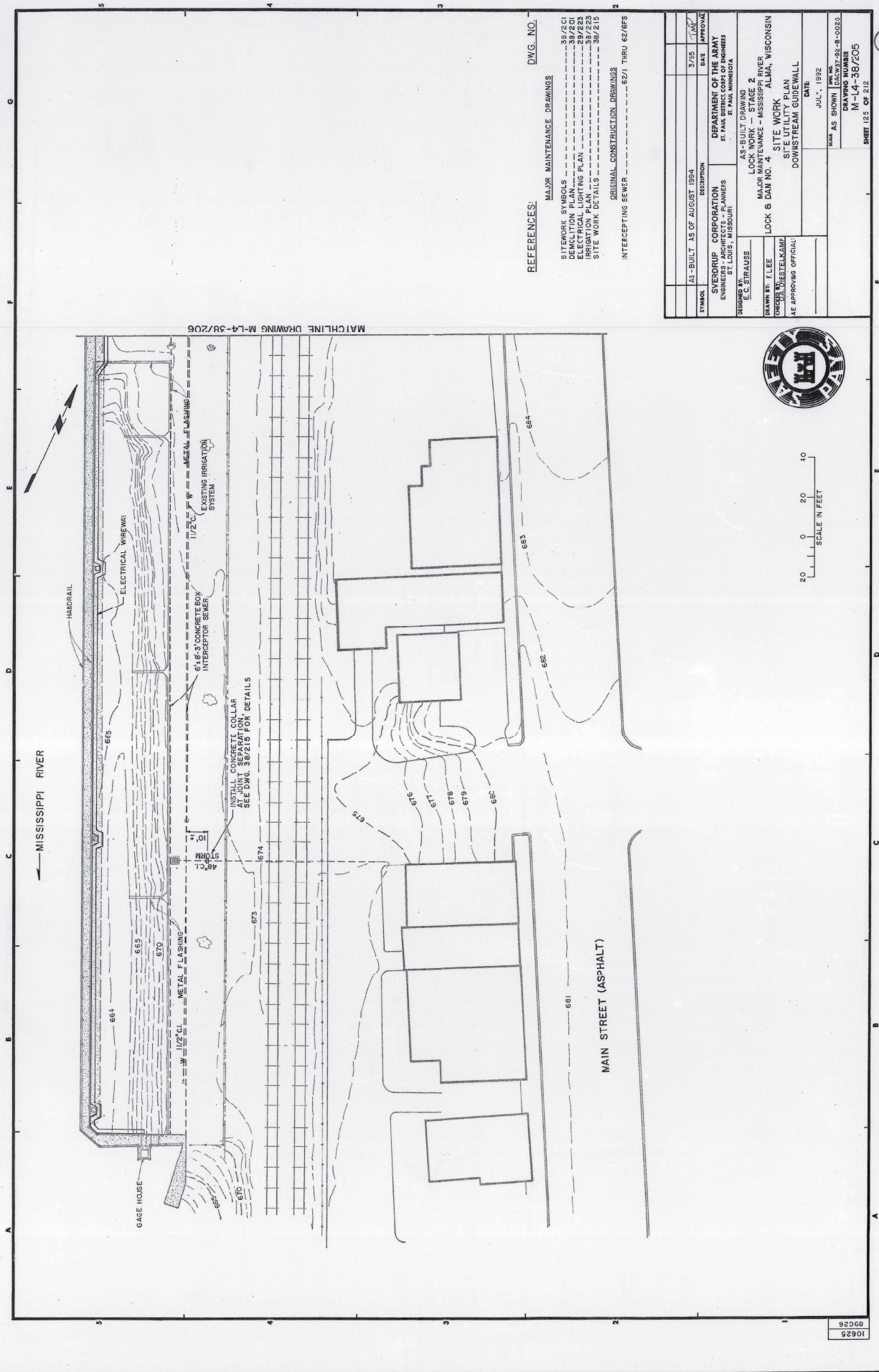
SYMBOL	AS-BUILT AS OF AUGUST 1994	DESCRIPTION	DATE
		DEPARTMENT OF THE ARMY ST. PAUL DISTRICT OFFICE OF ENGINEERS ST. PAUL, MINNESOTA	10/94
AS-BUILT - DRAWING			
LOCK 4 LOCKWORK, STAGE 2			
LOCK & DAM NO. 4			
LOCK MASONRY			
TIEBACK WALL REPAIR			
PLAN AND SECTIONS			
DATE: 2 JUNE 1992			
DRAWING NUMBER: M-14-20/217			
SHEET 13 OF 212			

AS-BUILT





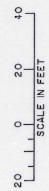




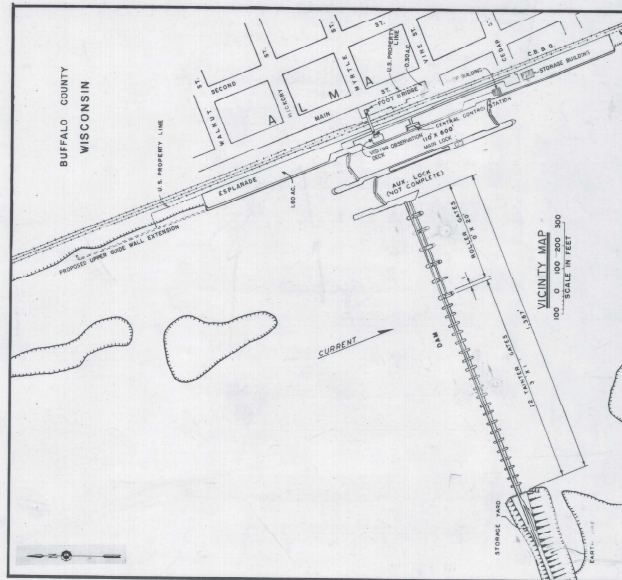
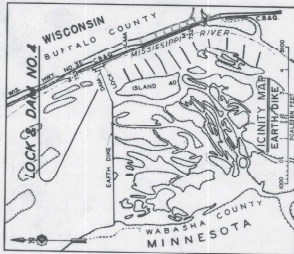
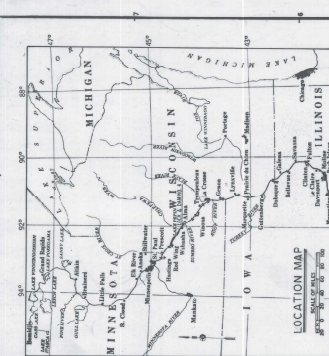
MATCHLINE DRAWING M-L4-38/206

- REFERENCES:
- MAJOR MAINTENANCE DRAWINGS
  - SITING SYMBOLS ----- 38/201
  - DEMOLITION PLAN ----- 38/201
  - ELECTRICAL LIGHTING PLAN ----- 38/201
  - LOCK B DAN NO. 4 ----- 38/203
  - SITE WORK DETAILS ----- 38/215
  - ORIGINAL CONSTRUCTION DRAWINGS
  - INTERCEPTING SEWER ----- 62/1 THRU 62/6/5

DATE	3/25	APPROVED	DATE	3/25
SYMBOL	AS-BUILT AS OF AUGUST 1924	DESCRIPTION	DEPARTMENT OF THE ARMY	ENGINEERS - ARCHITECTS - PLANNERS
DESIGNED BY	C. STRAUSS	AS-BUILT DRAWING	LOCK B DAN NO. 4	SITE WORK
DRAWN BY	F. LEE	MAJOR LOCK WORK - STAGE 2	LOCK B DAN NO. 4	SITE UTILITY PLAN
CHECKED BY	W. STELLKAMP	MAJOR LOCK WORK - STAGE 2	LOCK B DAN NO. 4	DOWNSTREAM GUIDEWALL
IN CHARGE	W. STELLKAMP	MAJOR LOCK WORK - STAGE 2	LOCK B DAN NO. 4	DOWNSTREAM GUIDEWALL
DATE	JULY, 1922	DATE	JULY, 1922	DATE
SCALE	AS SHOWN	SCALE	AS SHOWN	SCALE
DRAWING NUMBER	M-L4-38/205	DRAWING NUMBER	M-L4-38/205	DRAWING NUMBER
SHEET 123 OF 212		SHEET 123 OF 212		SHEET 123 OF 212

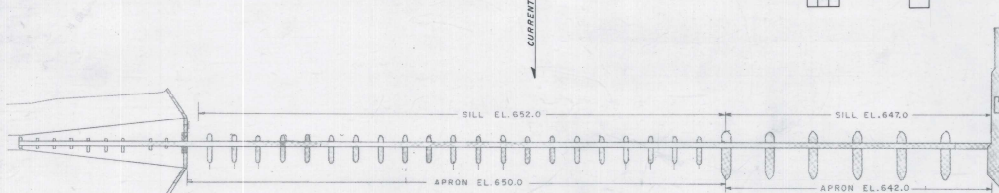




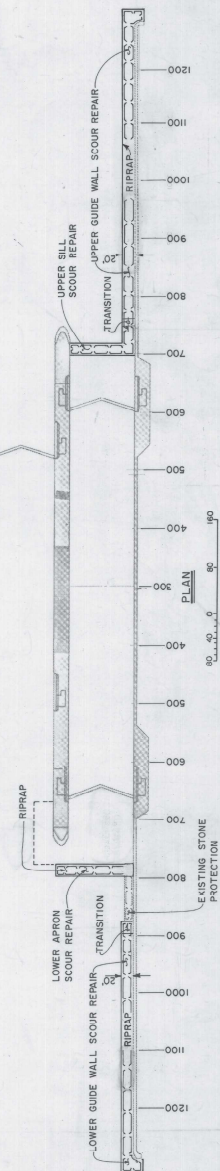


## SECTION &amp; DETAIL REFERENCES

- 1 THE SECTION OR DETAIL NUMBER, OR THE SHEET NUMBER ON WHICH THE SECTION OR DETAIL IS DRAWN.
- 2 THE SHEET NUMBER ON WHICH THE SECTION OR DETAIL IS TAKEN.
- 3 IF SECTION OR DETAIL IS DRAWN ON THE REVERSE OF THE SHEET, THE IDENTIFICATION NUMBER IS INDICATED.



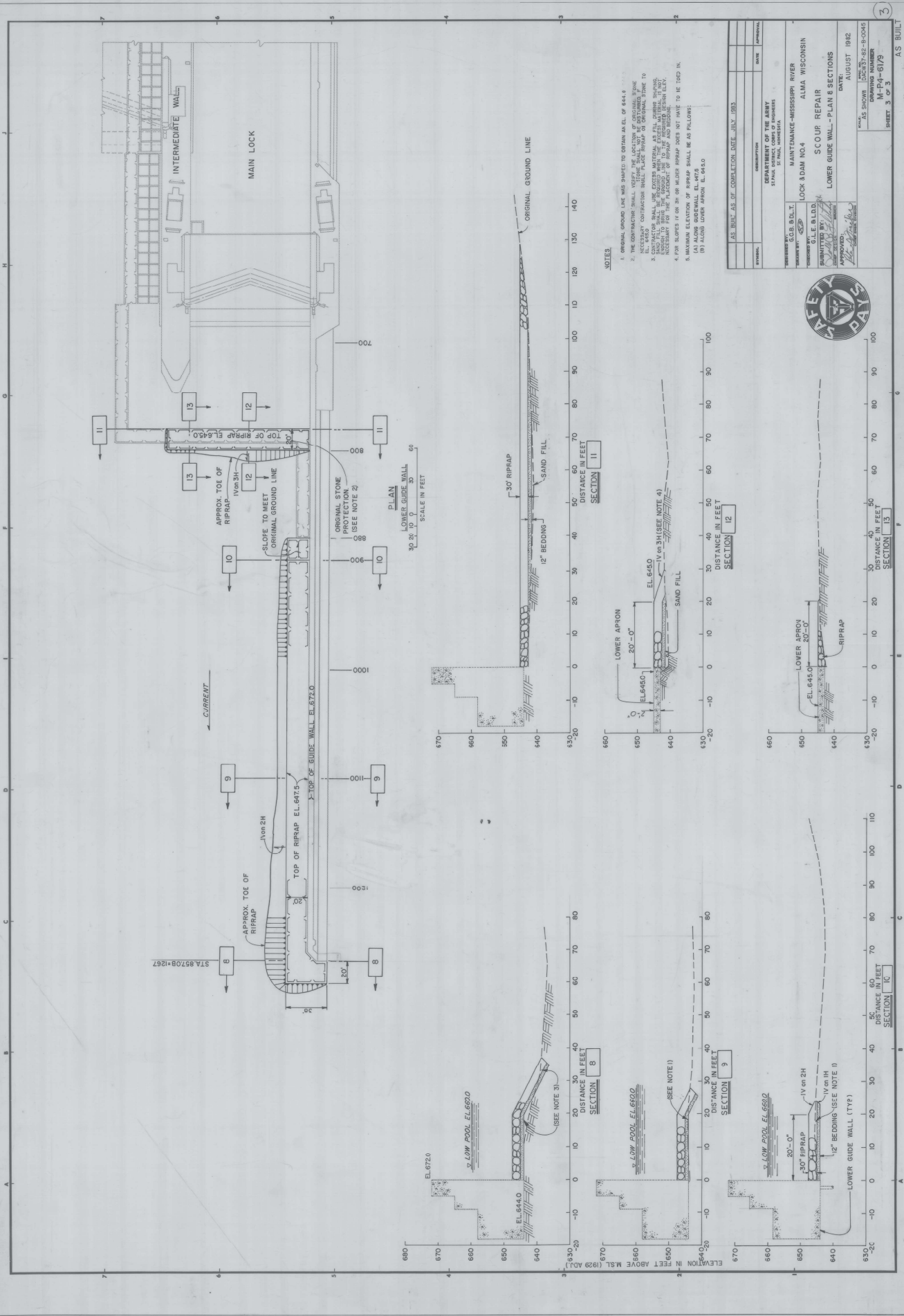
DRAWING SCHEDULE		
DRAWING NO.	SHT. NO.	TITLE
M-P4-1071	1	PLAN VICINITY & DWG. SCHEDULE
M-P4-6/8	2	UPPER GUIDE WALL-PLAN & SECTIONS
M-P4-6/9	3	LOWER GUIDE WALL-PLAN & SECTIONS



AS BUILT AS OF COMPLETION DATE JULY 1982	DESCRIPTION	DATE	APPROVAL
DEPARTMENT OF THE ARMY ST. PAUL DISTRICT ENGINEER'S OFFICE	MAINTENANCE - MISSISSIPPI RIVER LOCK & DAM NO. 4 ALMA, WISCONSIN		
DESIGNED BY: G.O.B. BOLT	SCOUR REPAIR	DATE: AUGUST 1982	
CHECKED BY: G.L.E. BLOD	PLAN, VICINITY & DRAWING SCHEDULE		
APPROVED BY: [Signature]			
AS SHOWN DASHED-82-B-0045			
M-P4-1071			
SHEET 1 OF 3			





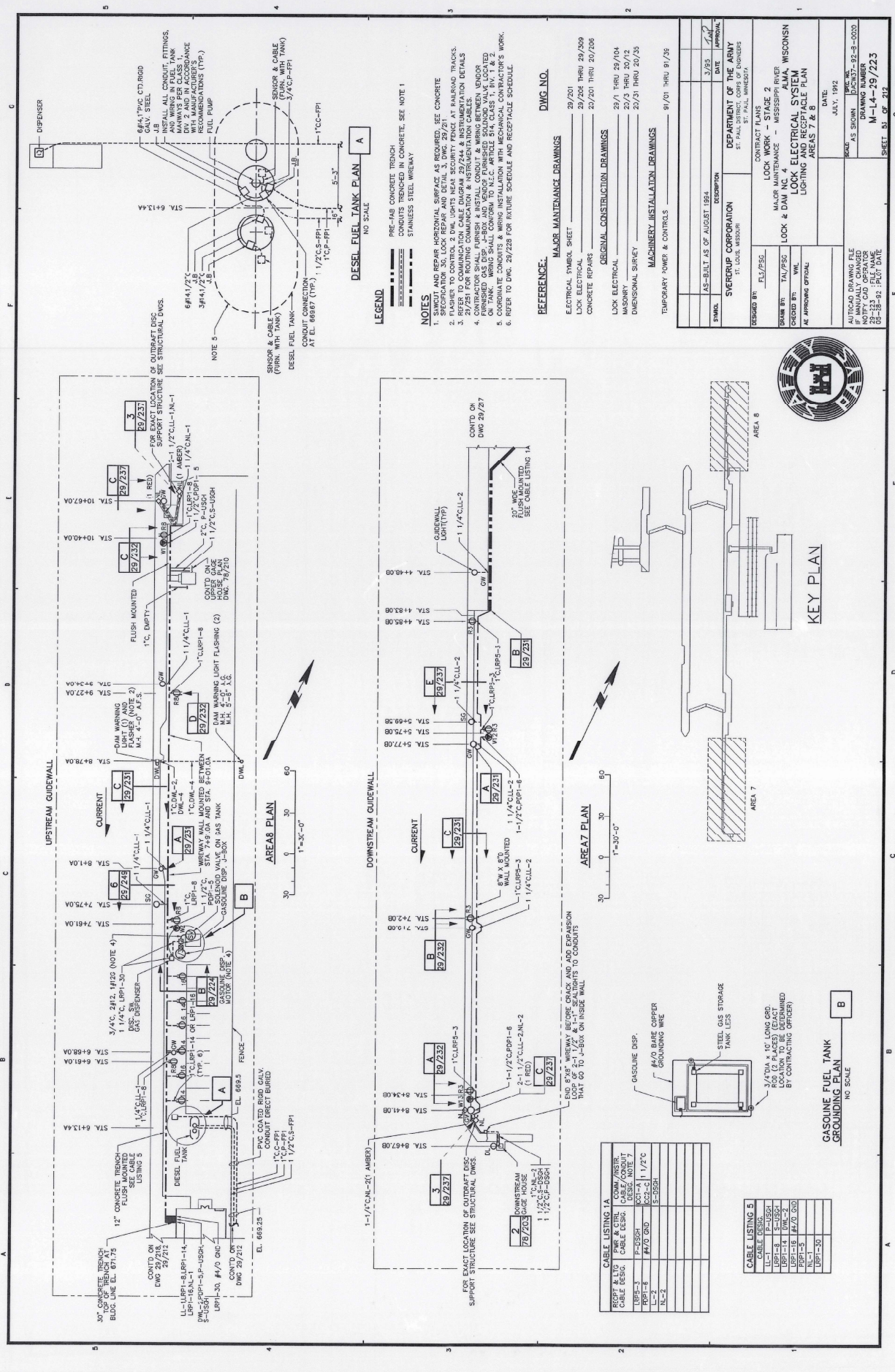


- NOTES**
1. ORIGINAL GROUND LINE WAS SHAVED TO OBTAIN AN EL. OF 644.4
  2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING ELEVATIONS AND RECORD THEM IN THE FIELD BOOKS.
  3. THE CONTRACTOR SHALL PLACE RIPRAP OF ORIGINAL TYPE TO EL. 645.0.
  4. SAND FILL SHALL BE PLACED WITHIN THE EXISTING MATERIAL TO EL. 645.0.
  5. MAXIMUM ELEVATION OF RIPRAP DOES NOT HAVE TO BE 20.0 IN.
  6. MAXIMUM ELEVATION OF RIPRAP SHALL BE AS FOLLOWS:
    - (A) ALONG LOWER APRON EL. 645.0
    - (B) ALONG LOWER APRON EL. 643.0

AS BUILT, AS OF CORRECTION DATE, JULY 1953	DATE	APPROVAL
DEPARTMENT OF THE ARMY ENGINEERING DISTRICT NO. 1 ST. PAUL, MINNESOTA	NAME	APPROVAL
MAINTENANCE-MISSISSIPPI RIVER LOCK & DAM NO. 4 ALMA, WISCONSIN	DATE	APPROVAL
SCOUR REPAIR LOWER GUIDE WALL - PLAN & SECTIONS	DATE	APPROVAL
APPROVED BY [Signature]	DATE	APPROVAL
APPROVED BY [Signature]	DATE	APPROVAL
AS SHOWN, LOCKS 7-8-9-10-11 M-P-4-6/9 SHEET 3 OF 3	DATE	APPROVAL







DESEL FUEL TANK PLAN A

NO SCALE

PRE-CAST CONCRETE TRENCH  
CONDUIT IN CONCRETE SEE NOTE 1  
STAINLESS STEEL WIRENET

LEGEND

NOTES

- 1. REPAIR AND REPAIR HORIZONTAL SURFACE AS REQUIRED, SEE CONCRETE SPECIFICATION 35, LOCK REPAIR AND DETAIL 3, DMC 29/21.
- 2. FLASHER TO CONTROL 2 DWL LIGHTS NEAR SECURITY FENCE AT RAILROAD TRACKS.
- 3. 21/21 FOR ROUTING COMMUNICATIONS AND POWER CONDUITS AND CABLES.
- 4. CONTRACTOR SHALL FURNISH & INSTALL CONDUIT & WIRING BETWEEN VENDOR ON TANK. WIRING SHALL CONFORM TO N.E.C. ARTICLE 84, CLASS 1, DIVISION 1.
- 5. COORDINATE CONDUITS & WIRING INSTALLATION WITH MECHANICAL CONTRACTOR'S WORK.
- 6. REFER TO DMC 29/228 FOR FUTURE SCHEDULE AND RECEIPTABLE SCHEDULE.

REFERENCE

- MAJOR MAINTENANCE DRAWINGS  
ELECTRICAL SYMBOL SHEET 29/201  
LOCK ELECTRICAL 29/204 THRU 29/209  
CONCRETE REPAIRS 29/201 THRU 29/206
- ORIGINAL CONSTRUCTION DRAWINGS  
LOCK ELECTRICAL 29/1 THRU 29/104  
MASONRY 29/3 THRU 29/12  
DIMENSIONAL SURVEY 29/31 THRU 29/25
- MACHINERY INSTALLATION DRAWINGS  
TEMPORARY POWER & CONTROLS 9/201 THRU 9/236

DWG NO.

29/201

29/204 THRU 29/209

29/201 THRU 29/206

29/1 THRU 29/104

29/3 THRU 29/12

29/31 THRU 29/25

9/201 THRU 9/236

3/793

DATE

APPROVAL

DESIGNED BY

FLU/PSG

CONTRACT PLANS

LOCK WORK - STAGE 2

MAJOR MAINTENANCE - MISSISSIPPI RIVER

LOCK & DAM NO. 1, WISCONSIN

LOCK ELECTRICAL SYSTEM

LIGHTING AND RECEIPTABLE PLAN

AREAS 7 & 8

DATE

JULY, 1992

REVISION

AS SHOWN

LOCK 92-8-0020

DRAWING NUMBER

M-14-29/223

SHEET 51 OF 212

AS-BUILT



KEY PLAN

CABLE LISTING 1A			
RECEPT	ELV	PNR & CIR	COMM/INSR
CABLE DESIG			CABLE DESIG
LRP-1			LRP-1
LRP-2			LRP-2
LRP-3			LRP-3
LRP-4			LRP-4
LRP-5			LRP-5
LRP-6			LRP-6
LRP-7			LRP-7
LRP-8			LRP-8
LRP-9			LRP-9
LRP-10			LRP-10
LRP-11			LRP-11
LRP-12			LRP-12
LRP-13			LRP-13
LRP-14			LRP-14
LRP-15			LRP-15
LRP-16			LRP-16
LRP-17			LRP-17
LRP-18			LRP-18
LRP-19			LRP-19
LRP-20			LRP-20

CABLE LISTING 5			
CABLE DESIG	PNR & CIR	COMM/INSR	CABLE DESIG
LRP-1			LRP-1
LRP-2			LRP-2
LRP-3			LRP-3
LRP-4			LRP-4
LRP-5			LRP-5
LRP-6			LRP-6
LRP-7			LRP-7
LRP-8			LRP-8
LRP-9			LRP-9
LRP-10			LRP-10
LRP-11			LRP-11
LRP-12			LRP-12
LRP-13			LRP-13
LRP-14			LRP-14
LRP-15			LRP-15
LRP-16			LRP-16
LRP-17			LRP-17
LRP-18			LRP-18
LRP-19			LRP-19
LRP-20			LRP-20

GASOLINE FUEL TANK

NO SCALE

EL 669.25

CONDUIT DIRECT BURIED

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1

1 1/2" C.S.-FP1