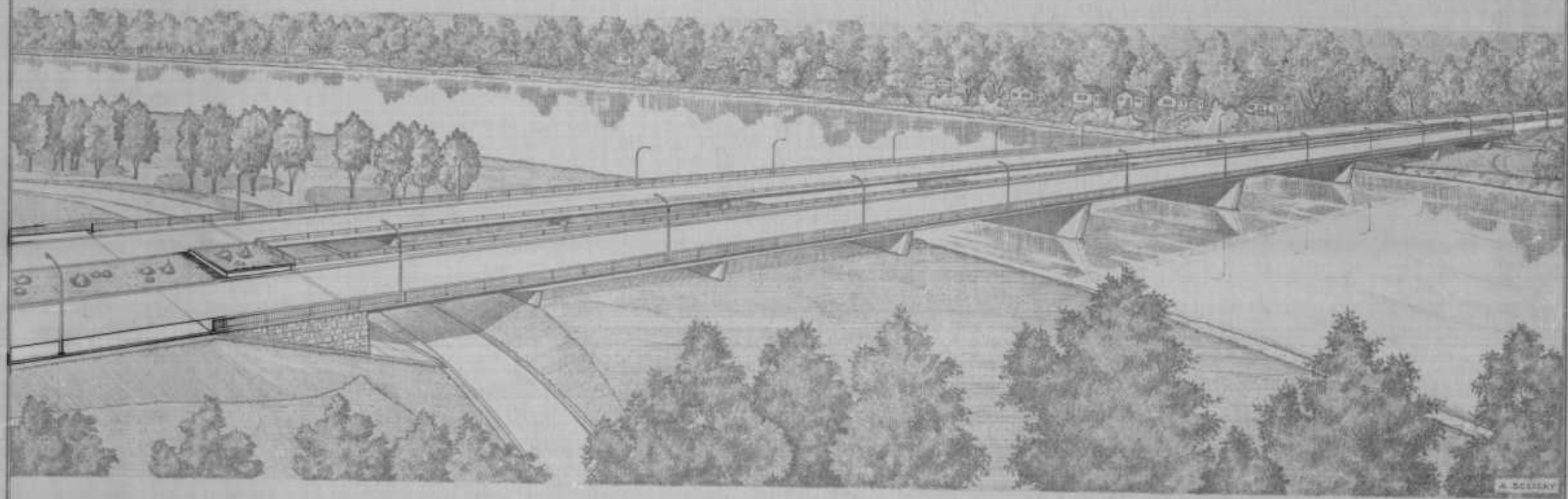
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG

STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT



LIST OF DRAWINGS — DECK

- D-1 PLAN AND ELEVATION B-5015-7A
- B-5015-61 D-2 CROSS SECTION, SITE PLAN, & NOTES
- 62 D-3 CROSS SECTIONS & DECK GEOMETRY
- 63 D-4 SUPERSTRUCTURE DETAILS
- 64 D-5 NORTH ABUTMENT
- 65 D-6 NORTH ABUTMENT REINFORCING DETAILS
- 66 D-7 NORTH ABUTMENT REINFORCING DETAILS
- 67 D-8 NORTH ABUTMENT REINFORCING SCHEDULE
- 68 D-9 SOUTH ABUTMENT
- 69 D-10 SOUTH ABUTMENT REINFORCING DETAILS
- 70 D-11 SOUTH ABUTMENT REINFORCING DETAILS
- 71 D-12 DECK REINFORCING
- 72 D-13 EXPANSION JOINT DETAILS
- 73 D-14 EXPANSION JOINT DETAILS
- 74 D-15 DECK DRAINAGE LAYOUT AND DETAILS
- 75 D-16 DECK DRAINAGE DETAILS
- 76 D-17 CONDUIT PLAN AND DETAILS
- 77 D-18 ELECTRICAL & MISCELLANEOUS DETAILS
- 78 D-19 SIDEWALK GUARDRAIL DETAILS
- 79 D-20 SAFETY CURB GUARDRAIL DETAILS
- 80 D-21 GUARDRAIL & STONEWORK, DETAILS FOR PEDESTRIAN UNDERPASSES

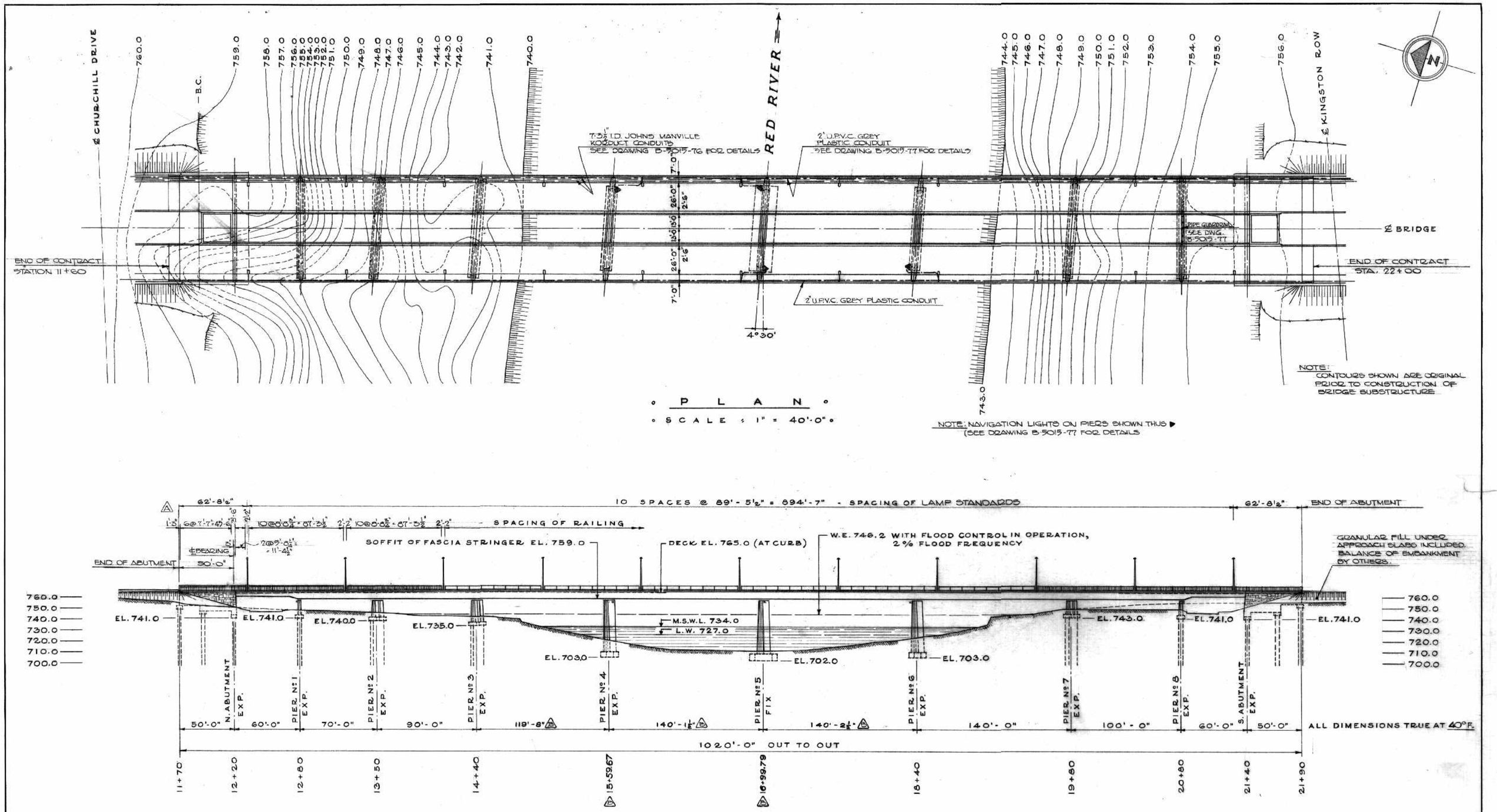
NOTE: FILE THIS SHEET WITH B-5015-61

APPROVED BY

ASS'T DEPUTY MINISTER OF PUBLIC WORKS
PROVINCE OF MANITOBA

DEPUTY DIRECTOR OF STREETS & TRANSIT

T. LAMB Mc MANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
WINNIPEG



• P L A N •

• S C A L E : 1" = 40'-0" •

• E L E V A T I O N •

• S C A L E : 1" = 40'-0" •

NOTES:
1.) FOR DETAILS OF LAMP STANDARDS SEE DWG. B-5015-77
2.) FOR DETAILS OF GUARDRAILS SEE DWGS. B-5015-78 & B-5015-79

AS BUILT ALS MAR/68

B-5015-7A

NO	DATE	BY	DESCRIPTION
B	FEB. 6/70	L.S.	CHAINAGES PIERS 4 & 5 REVISED
A	SEPT. 21	G.S.	GUARD RAIL SPACING REVISED

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

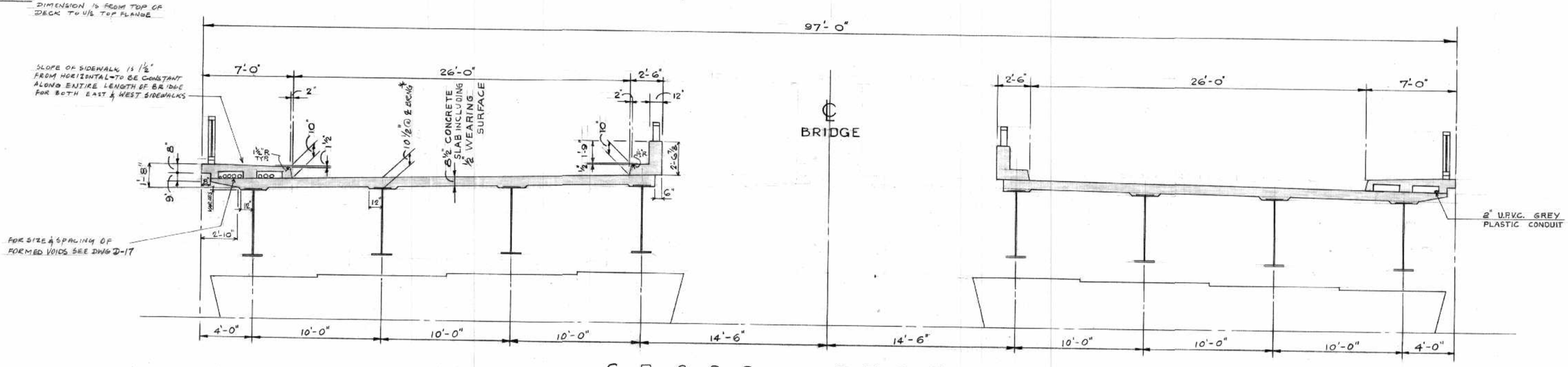
ST. VITAL BRIDGE PROJECT

PLAN AND ELEVATION

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

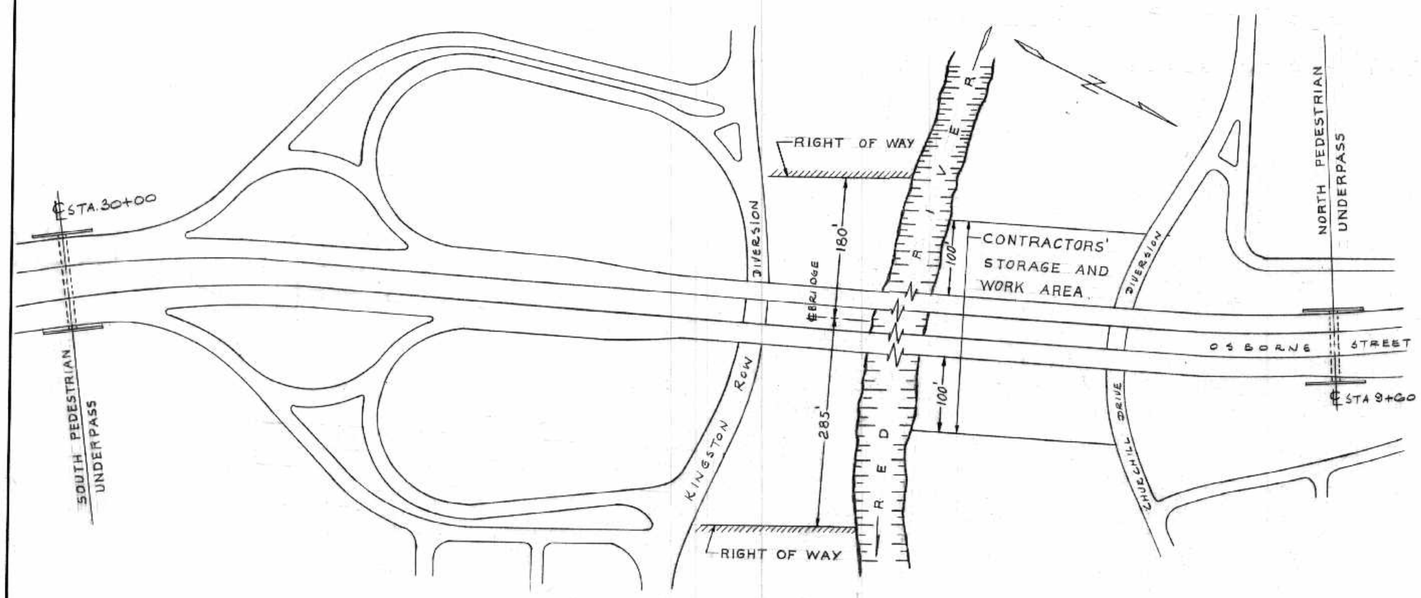
FILE No.	861
DATE	SEPT. 1964
SCALE	1" = 40'-0"
DWN. BY	A.V.S.
CHKD. BY	DAdeH
DWG. No.	F-1

NOTE * DIMENSION IS FROM TOP OF DECK TO U/S TOP FLANGE



C R O S S S E C T I O N

SCALE : ¼" = 1'-0"



S I T E — P L A N

SCALE : 1" = 100'

DESIGN SPECIFICATIONS

1. DESIGN IS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE AASHO. 1961 AS AMENDED
2. DESIGN LIVE LOAD H20-S16-44. FUTURE 6 LANES
3. UNIT STRESSES
   (a) REINFORCING STEEL F_s = 20,000 P.S.I.
   (b) CONCRETE F'_c = 4000 P.S.I.
4. DESIGN OF GUARDRAILS IN ACCORDANCE WITH A. A. S. H. O. INTERIM SPECIFICATION INT. I (64)

GENERAL NOTES

1. ELEVATIONS SHOWN ARE GEODETIC
2. ALL DIMENSIONS TRUE FOR 40° F
3. CONCRETE FINISH AS PER SPECIAL PROVISIONS OF SPECIFICATIONS
4. NO CONSTRUCTION JOINTS OTHER THAN THOSE INDICATED ON THE PLANS WILL BE ALLOWED EXCEPT BY WRITTEN AUTHORIZATION OF THE ENGINEER
5. ALL EXPOSED EDGES TO BE CHAMFERED 1" UNLESS OTHERWISE NOTED

AS BUILT — ALS June/68

B-5015-61

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — E. SCHULTZ — REGISTERED ENGINEER

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

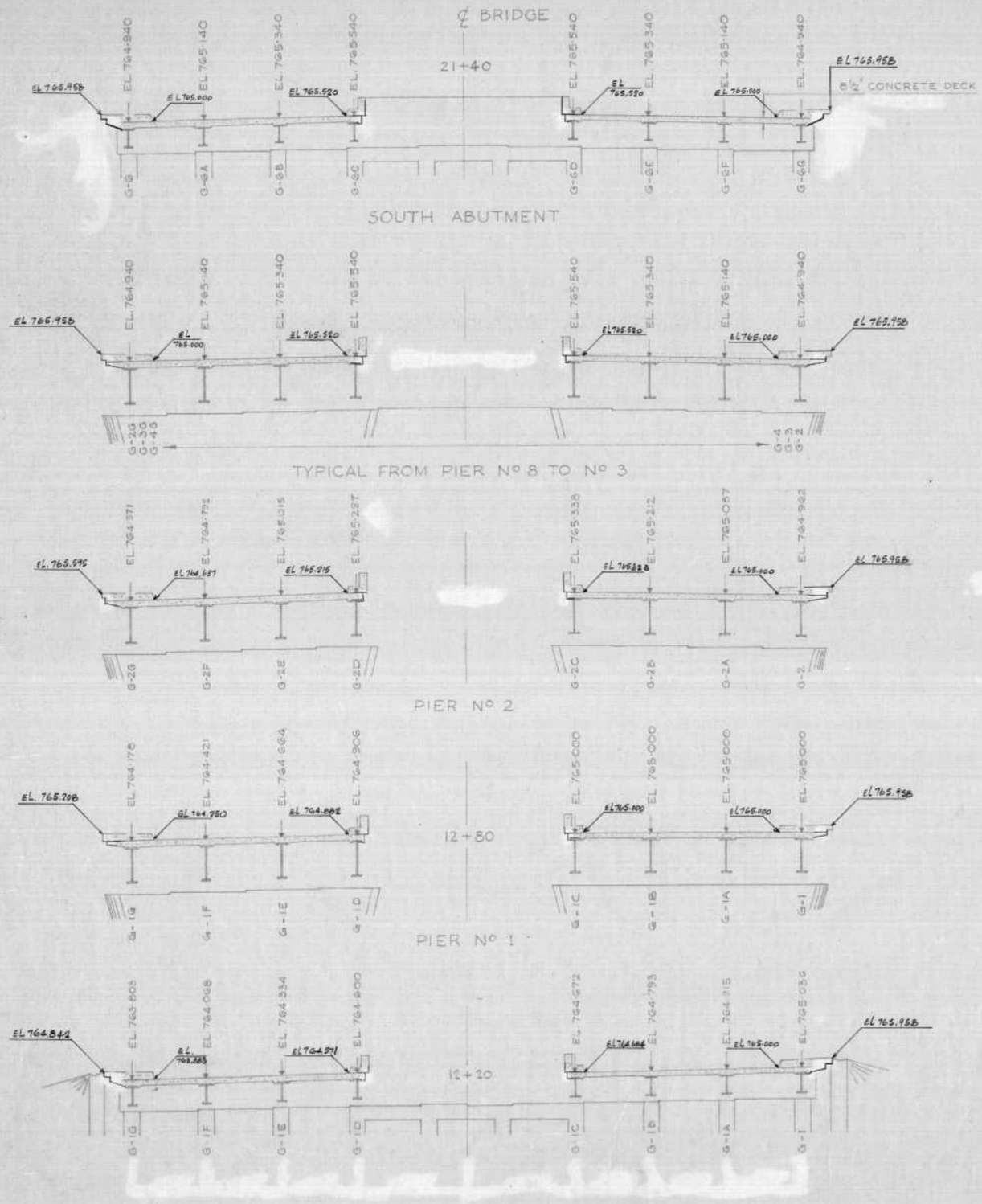
ST. VITAL BRIDGE PROJECT

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

CROSS SECTION, SITE PLAN & NOTES

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

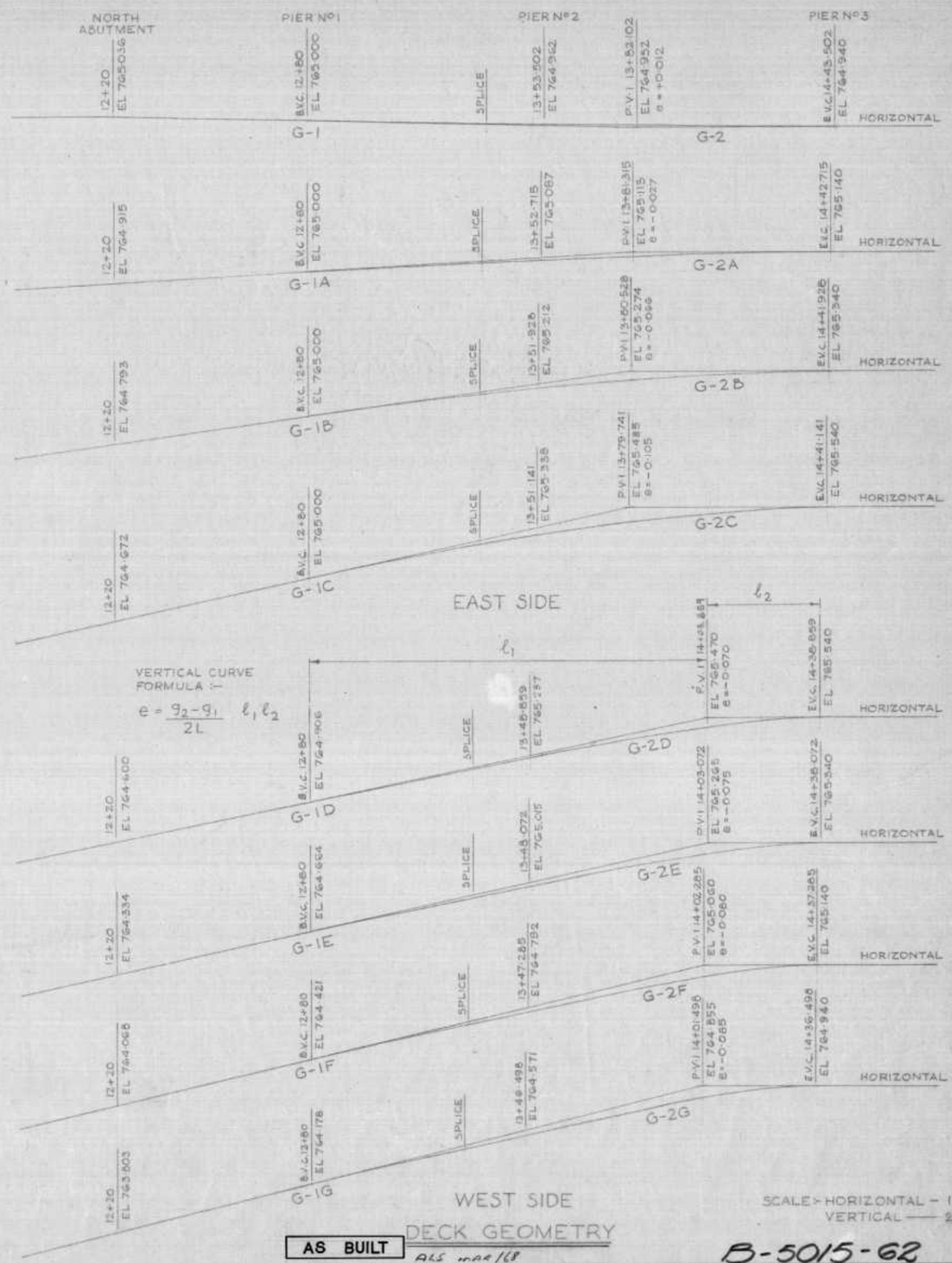
FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	
DWG. No.	D-2



NORTH ABUTMENT

CROSS SECTIONS

SCALE: ⅛" = 1'-0"



DECK GEOMETRY

SCALE:- HORIZONTAL – 1" = 20'
VERTICAL —— 2" = 1'

AS BUILT ALS MAR/68

B-5015-62

NO.	DATE	BY	DESCRIPTION
A	FEB 68	MS	CHAINAGES OF PIERS 4 & 5 TO BE REVISED PER DWG. D-1

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

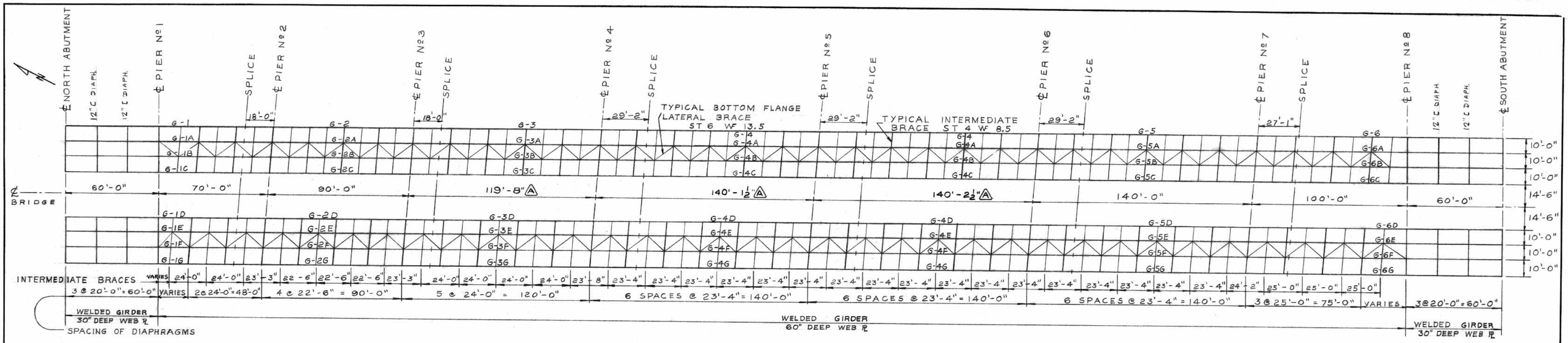
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

CROSS SECTIONS AND DECK GEOMETRY

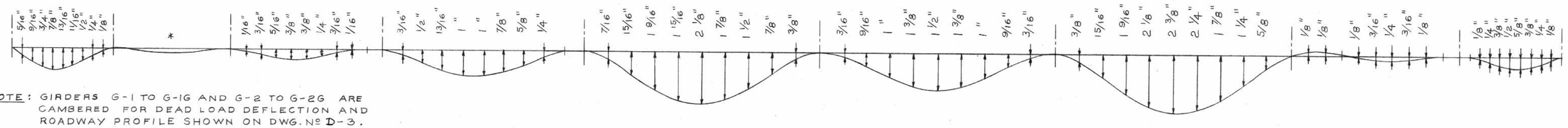
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	
DWG. No.	D-3



∘ GIRDER PLAN SHOWING DIAPHRAGMS AND BRACING ∘

∘ SCALE : 1" = 30'-0" ∘

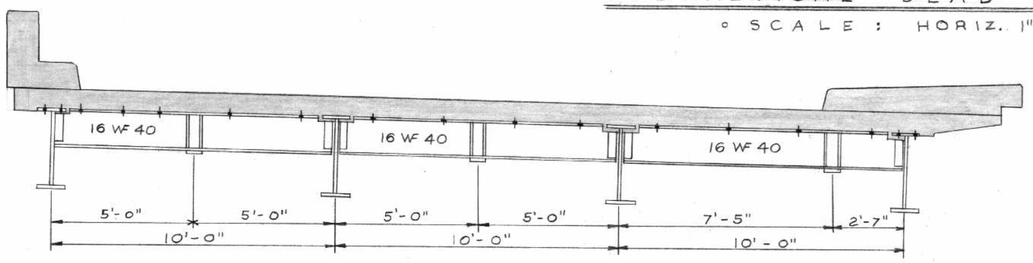


NOTE: GIRDERS G-1 TO G-1G AND G-2 TO G-2G ARE CAMBERED FOR DEAD LOAD DEFLECTION AND ROADWAY PROFILE SHOWN ON DWG. Nº D-3.

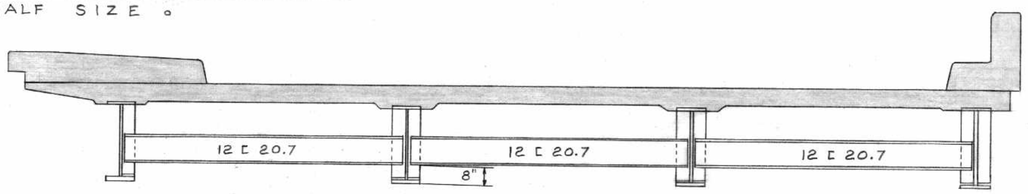
∘ THEORETICAL DEAD LOAD DEFLECTION DIAGRAM ∘

(* DEFLECTIONS LESS THAN 1/8" NOT SHOWN)

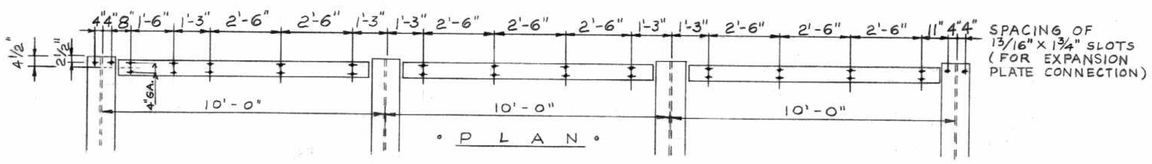
∘ SCALE : HORIZ. 1" = 30'-0", VERT. HALF SIZE ∘



∘ ELEVATION ∘

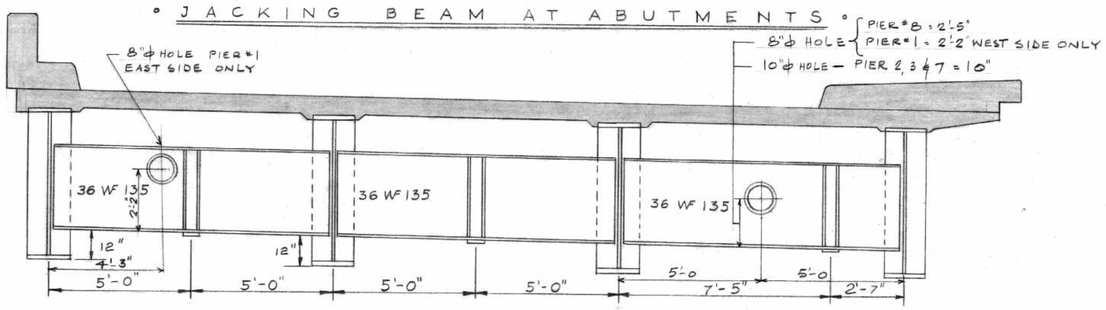


∘ DIAPHRAGM FOR 60 FT. SPAN ∘



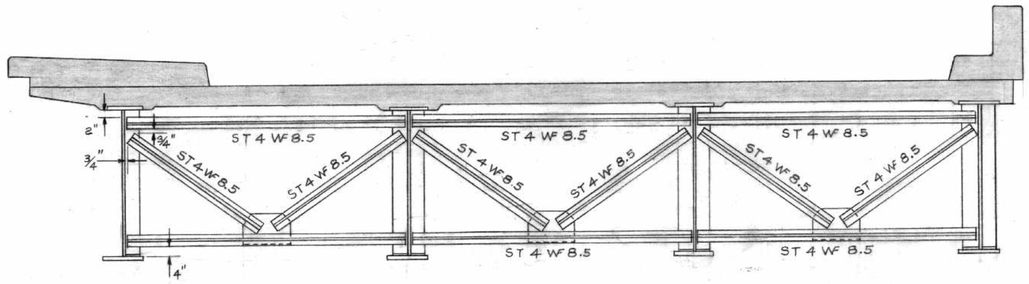
∘ PLAN ∘

∘ JACKING BEAM AT ABUTMENTS ∘



∘ TYPICAL JACKING BEAM OVER PIERS

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



∘ TYPICAL DIAPHRAGM ∘ SCALE : 3/8" = 1'-0"

B-5015-63

AS BUILT
ALS MAR/68

NO.	DATE	BY	DESCRIPTION
A	FEB/68	M.S.	CHAINAGES OF PIERS 4 & 5 REVISED

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — G. SCHULTZ — REGISTERED ENGINEER

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

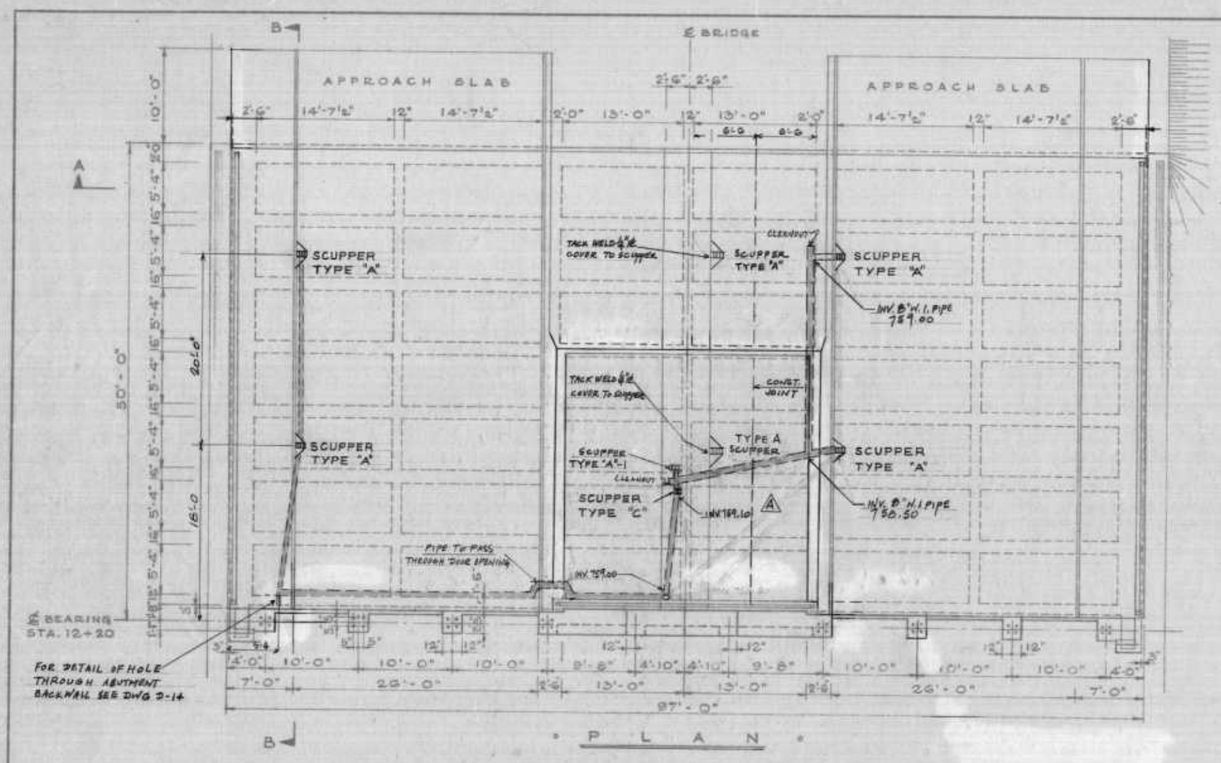
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

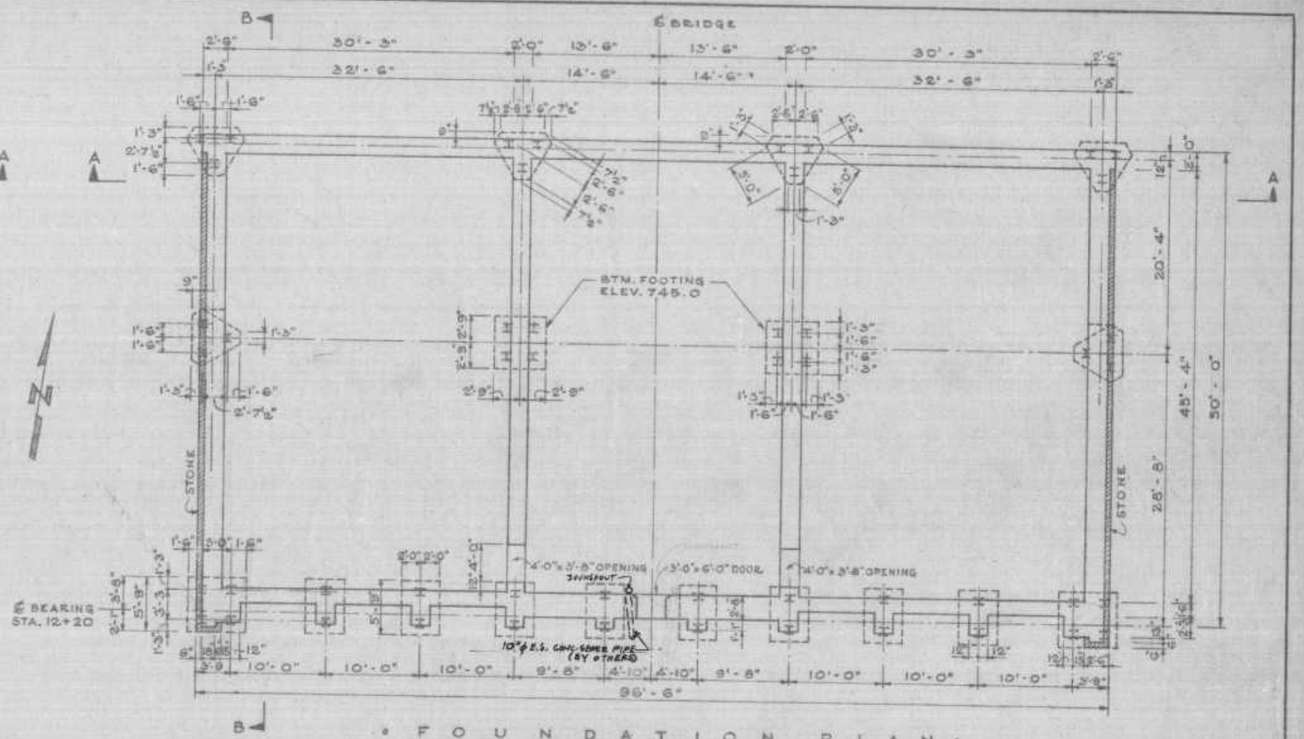
SUPERSTRUCTURE DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

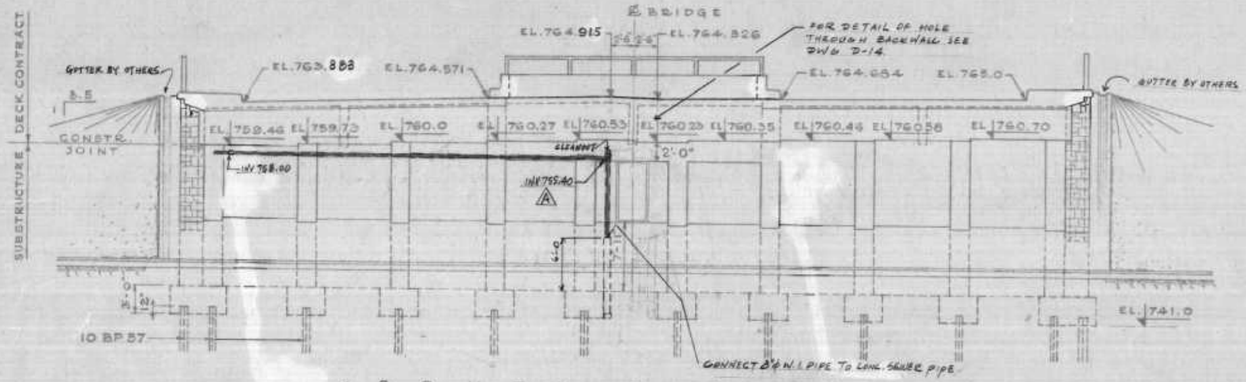
FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	G. S.
DWG. No.	D-4



• P L A N •

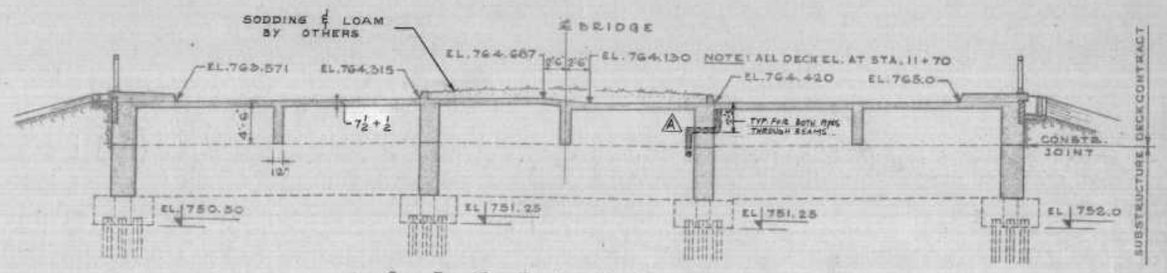


• F O U N D A T I O N P L A N •

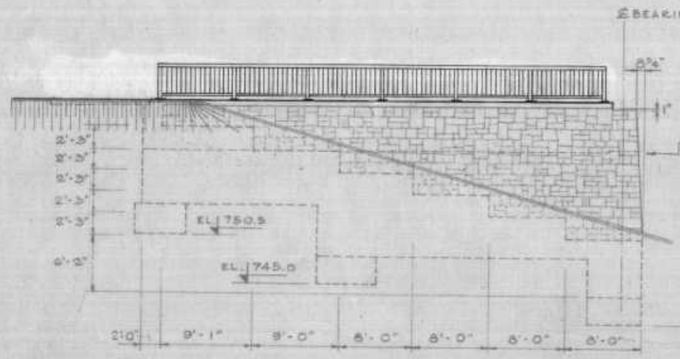


• S O U T H E L E V A T I O N •

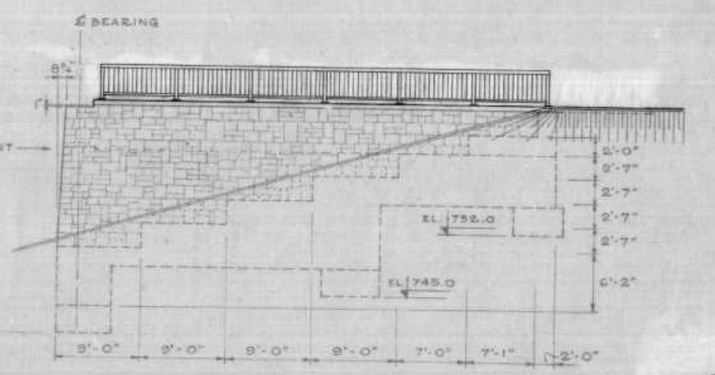
• SEE NOTES DWG. No D-9 •



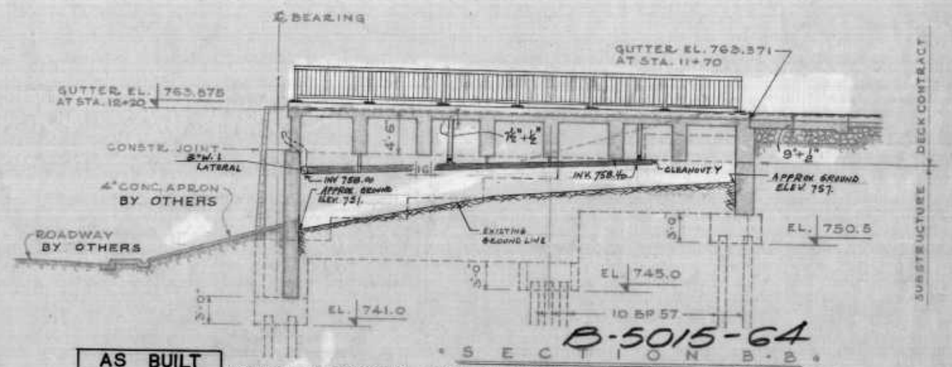
• S E C T I O N A - A •



• W E S T E L E V A T I O N •



• E A S T E L E V A T I O N •



• S E C T I O N B - B •

B-5015-64

AS BUILT NOTE: FIELD REVISIONS MADE IN DRAINAGE SYSTEM - NOT RECORDED

TOTAL VOLUME CONCRETE (DECK) - 379 C.Y. NORTH ABUTMENT.

NO	DATE	BY	DESCRIPTION
A	Aug 6 1966	AS	PIPE LAYOUT REVISED

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

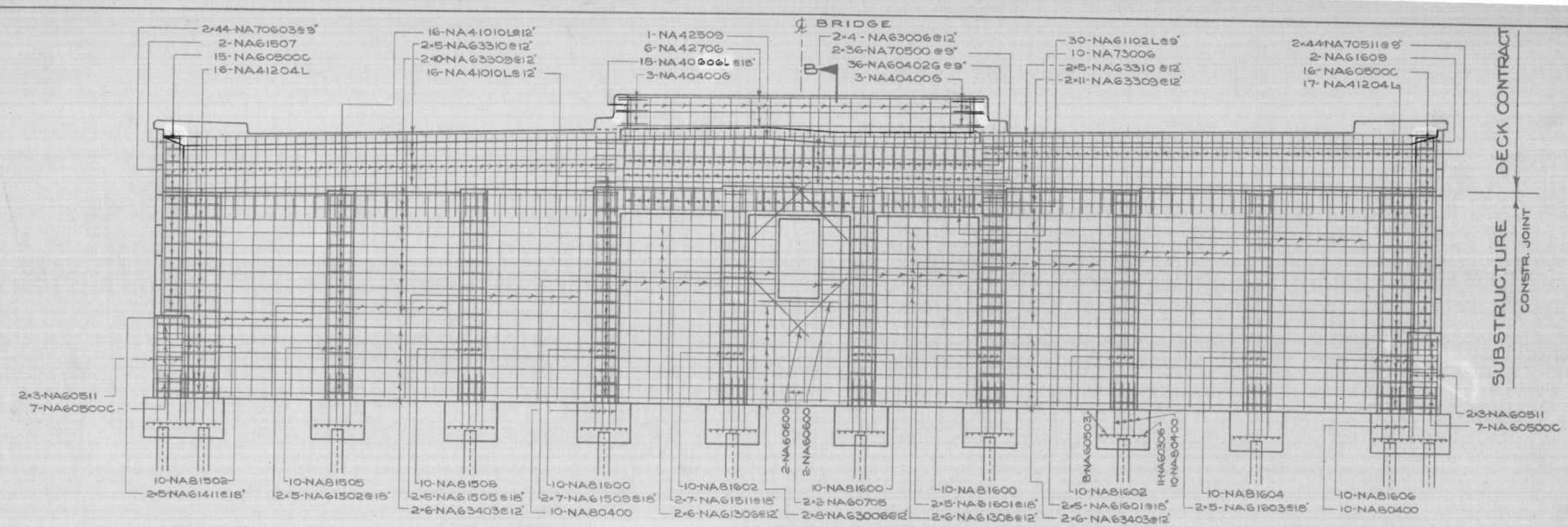
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

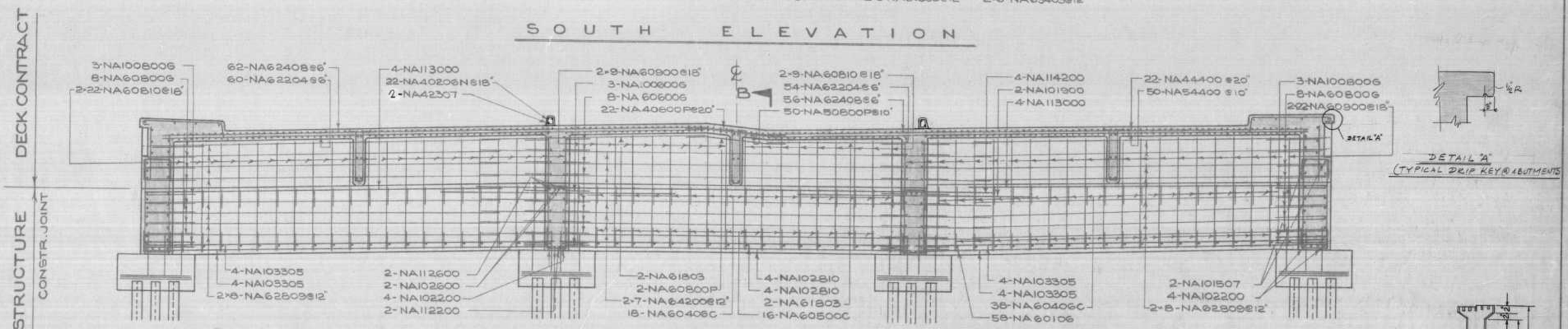
NORTH ABUTMENT

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

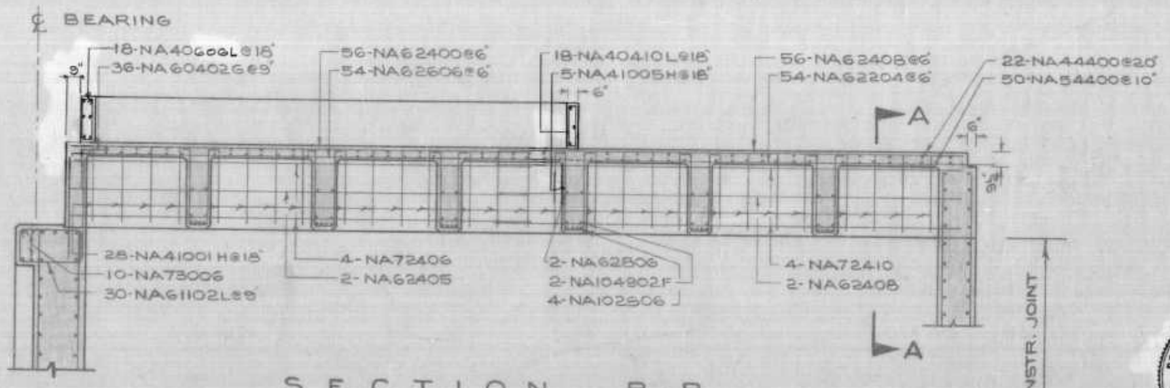
FILE No.	W-1008
DATE	MAY 1965
SCALE	1/8" = 1'-0"
DWN. BY	JB
CHKD. BY	
DWG. No	D-5



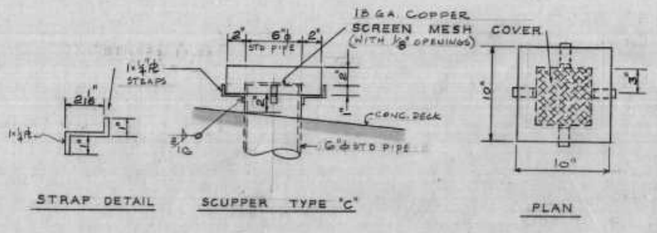
S O U T H E L E V A T I O N



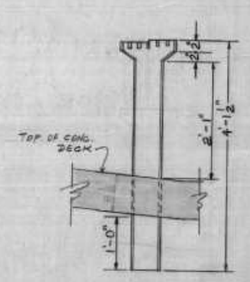
S E C T I O N A-A



S E C T I O N B-B



STRAP DETAIL SCUPPER TYPE "C" PLAN



SCUPPER TYPE "A"-1

AS BUILT ALS MAR/68

B-5015-65

NO	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

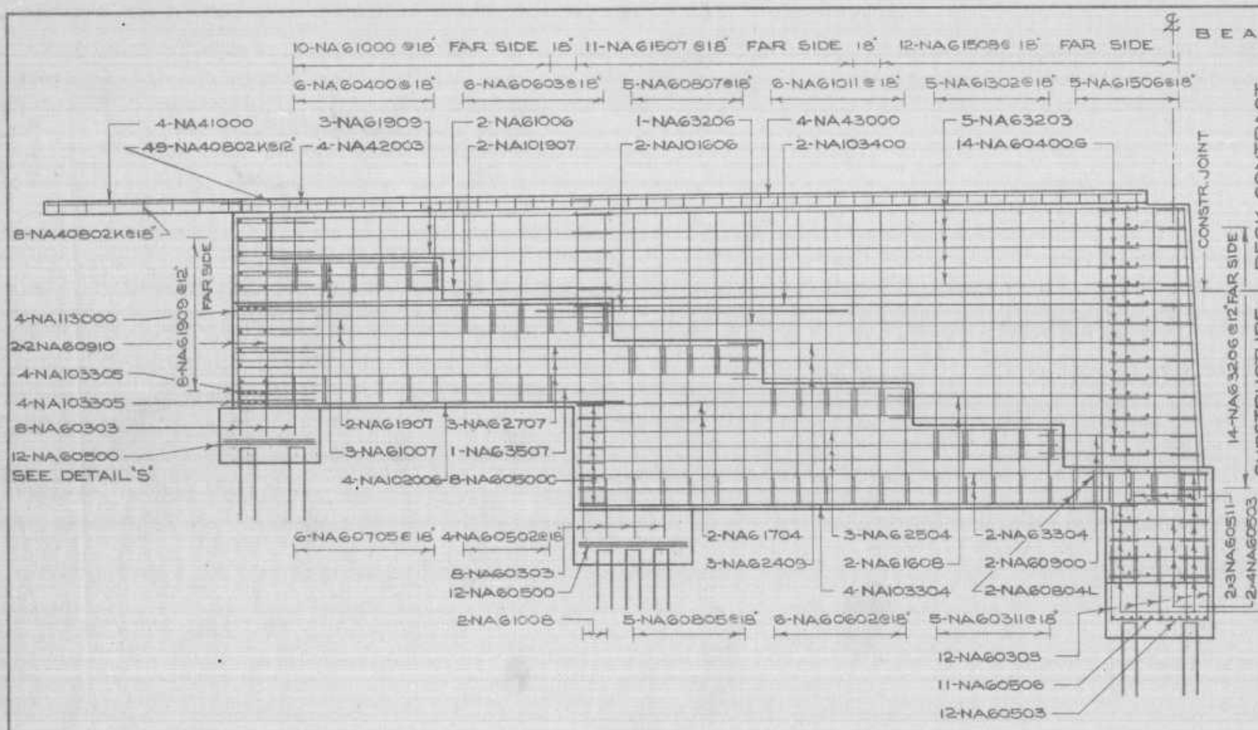
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

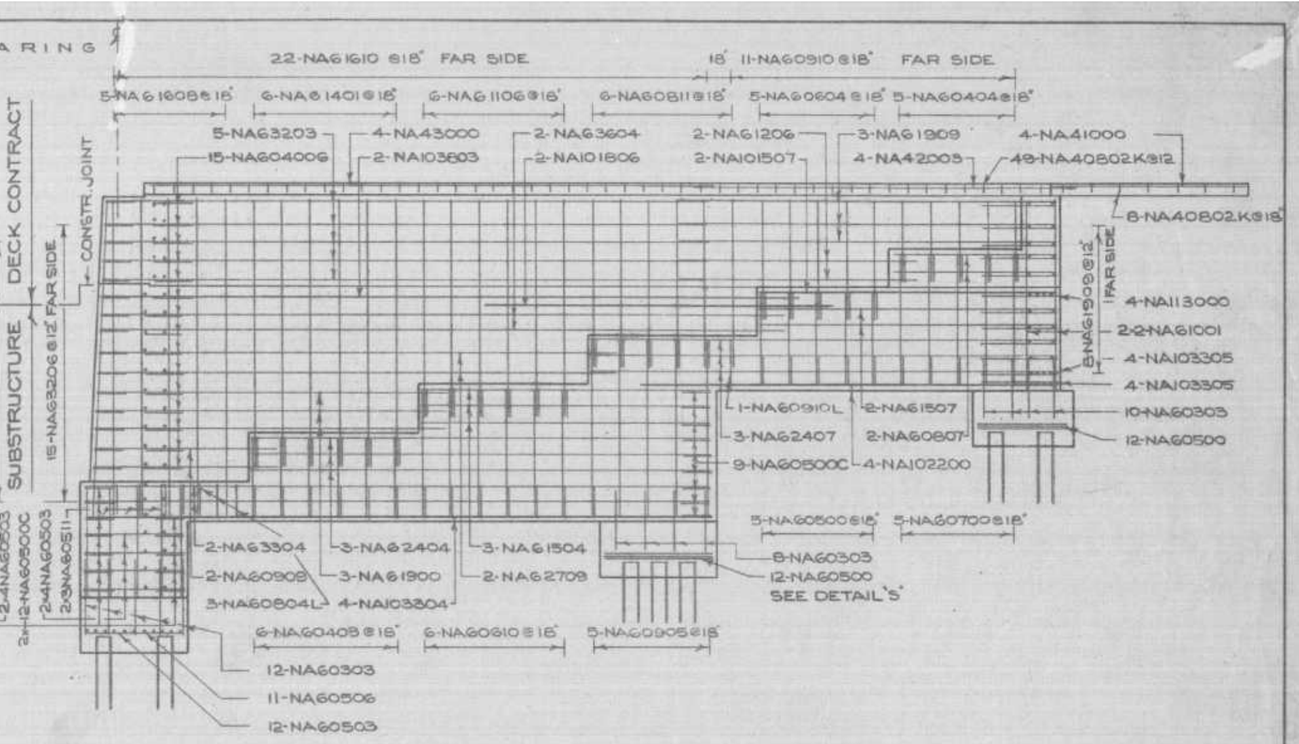
NORTH ABUTMENT REINFORCING DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

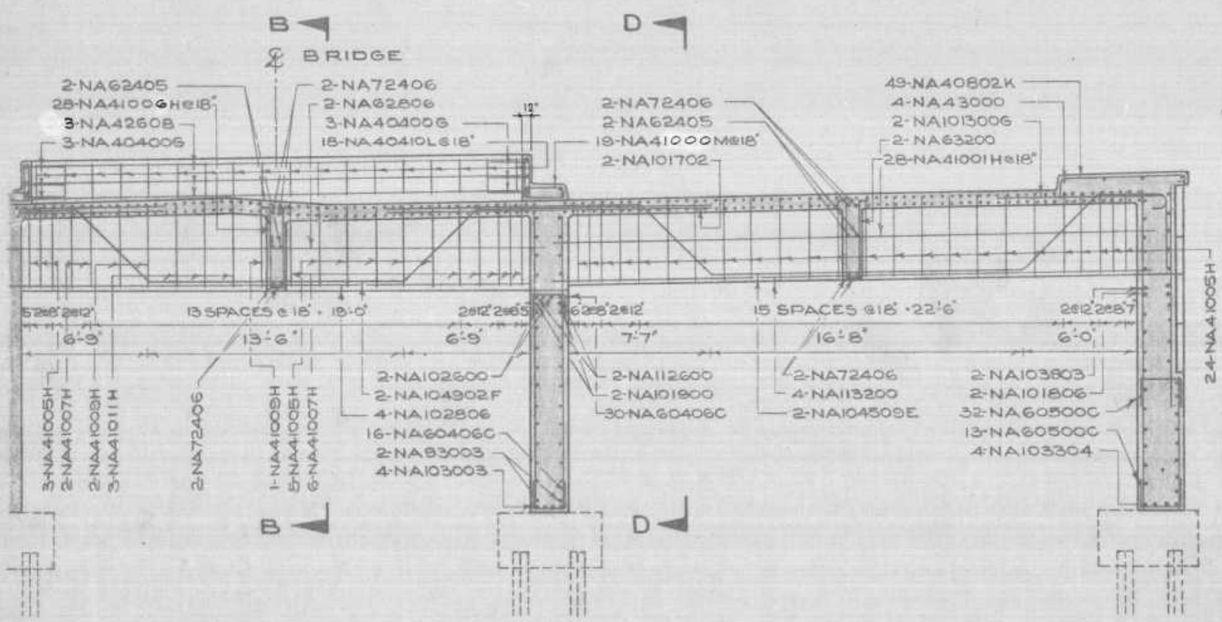
FILE No.	W-1008
DATE	MAY 1965
SCALE	1/4"=1'-0"
DWN. BY	JB
CHKD. BY	
DWG No.	D-6



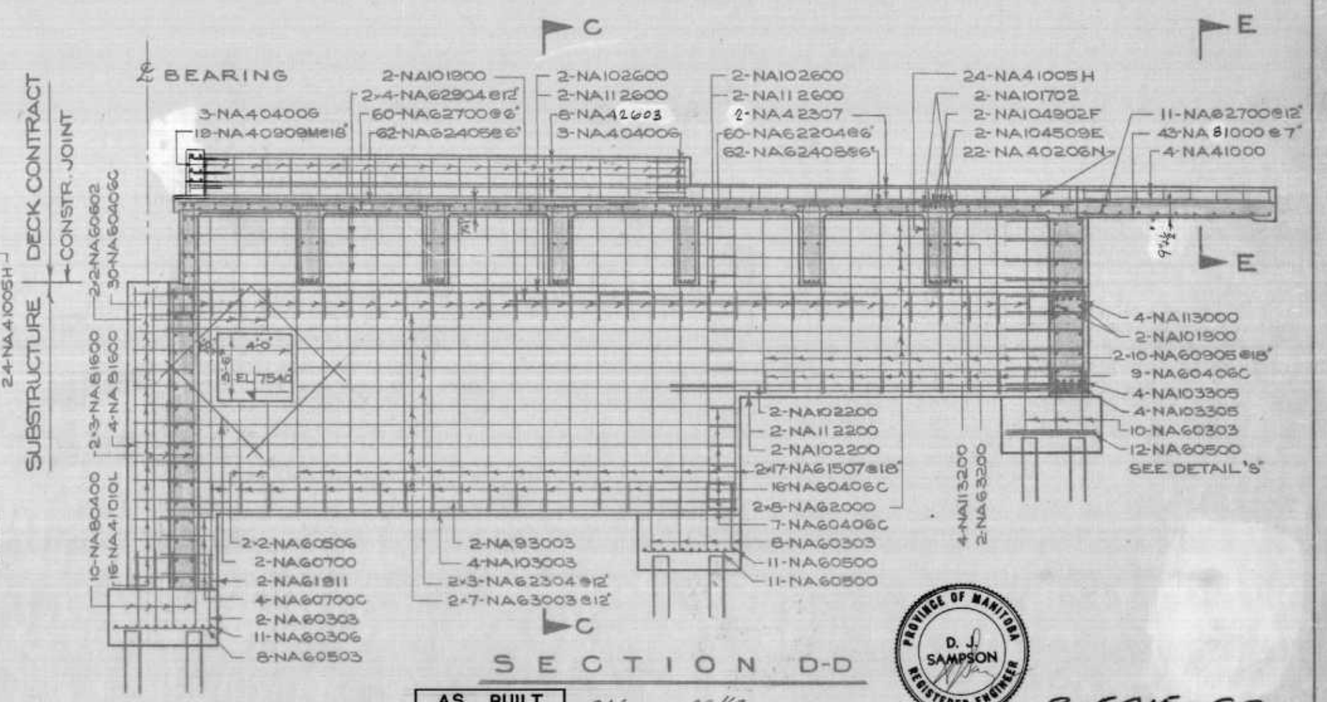
WEST ELEVATION



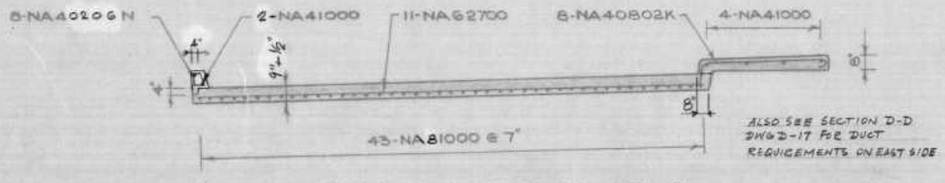
EAST ELEVATION



SECTION C-C

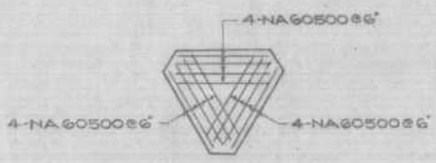


SECTION D-D



SECTION E-E

DECK CONTRACT



DETAIL 'S'

3 PILE FOOTING

AS BUILT ALS MAR/68

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

B-5015-66

NO	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

NORTH ABUTMENT REINFORCING DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	1/4"=1'-0"
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-7

NORTH ABUTMENT REINFORCING STEEL SCHEDULE

SUBSTRUCTURE

FOOTINGS

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60503	88	#6	5'-3"	STR				894.0
NA60506	22	#6	5'-6"	"				181.7
NA60203	98	#6	2'-3"	"				478.3
NA60500	116	#6	5'-0"	"				871.2
NA60306	88	#6	3'-6"	"				468.6
NA60400	100	#6	4'-0"	"				1068.0

WEST WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	69	#6	5'-0"	⊐	1'-6"	2'-0"		518.2
NA60400G	9	#6	4'-0"	⊔	2'-0"	2'-0"		54.1
NA60804L	2	#6	8'-4"	⊐	2'-0"	1'-8"	6"	25.0
NA60503	8	#6	5'-3"	STR				63.0
NA63304	4	#10	33'-4"	"				573.7
NA63204	2	#6	33'-4"	"				100.1
NA62504	3	#6	25'-4"	"				114.1
NA61704	2	#6	17'-4"	"				52.1
NA02206	9	#10	28'-8"	"				352.8
NA63507	1	#6	35'-7"	"				53.4
NA62707	3	#6	27'-7"	"				125.2
NA61307	2	#6	13'-7"	"				58.9
NA60800	2	#6	8'-0"	"				27.0
NA61608	2	#6	16'-8"	"				50.0
NA62408	3	#6	24'-8"	"				111.5
NA63208	11	#6	32'-8"	"				537.0
NA01608	2	#10	16'-8"	"				142.0
NA01907	3	#10	19'-7"	"				169.5
NA03400	2	#10	34'-0"	"				292.6
NA60810	4	#6	8'-10"	"				59.1
NA61909	4	#6	19'-9"	"				118.6
NA60511	8	#6	5'-11"	"				53.3
NA60311	5	#6	3'-11"	"				23.4
NA60205	6	#6	6'-2"	"				55.5
NA60505	5	#6	8'-5"	"				63.2
NA61008	2	#6	10'-8"	"				32.0
NA60502	4	#6	5'-2"	"				31.0
NA60705	6	#6	7'-5"	"				66.8
NA61506	5	#6	15'-6"	"				116.4
NA61302	5	#6	13'-2"	"				98.8
NA61011	6	#6	10'-11"	"				98.4
NA60807	5	#6	8'-7"	"				64.4
NA60608	6	#6	6'-3"	"				56.3
NA61000	10	#6	10'-0"	"				150.2
NA61508	12	#6	15'-8"	"				282.4
NA61307	11	#6	13'-7"	"				257.4

EAST WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	68	#6	5'-0"	⊐	1'-6"	2'-0"		510.7
NA60400G	10	#6	4'-0"	⊔	2'-0"	2'-0"		60.0
NA60804L	3	#6	8'-4"	⊐	2'-0"	1'-8"	6"	37.5
NA60910L	1	#6	9'-10"	⊐	3'-0"	2'-5"	6"	14.7
NA60503	8	#6	5'-3"	STR.				63.1
NA03304	4	#10	33'-4"	"				573.7
NA63304	2	#6	33'-4"	"				100.1
NA62404	3	#6	24'-4"	"				109.8
NA61504	3	#6	15'-4"	"				69.1
NA02206	4	#10	22'-0"	"				379.6
NA62407	3	#6	24'-7"	"				110.7
NA61507	2	#6	15'-7"	"				46.8
NA01507	2	#10	15'-7"	"				134.1
NA60909	2	#6	9'-9"	"				29.3
NA61900	3	#6	19'-0"	"				85.6
NA62709	2	#6	27'-9"	"				83.3
NA63604	2	#6	36'-4"	"				109.1
NA03804	2	#10	38'-3"	"				329.2
NA01806	2	#10	18'-6"	"				159.2
NA63206	11	#6	32'-6"	"				537.0
NA61908	4	#6	19'-9"	"				118.6
NA60511	6	#6	5'-11"	"				53.3
NA60403	6	#6	4'-3"	"				38.3
NA60610	6	#6	6'-10"	"				61.5
NA60905	5	#6	9'-5"	"				70.7
NA60500	5	#6	5'-0"	"				37.5
NA60700	5	#6	7'-0"	"				52.5
NA61608	5	#6	16'-8"	"				125.1
NA61401	6	#6	14'-1"	"				126.9
NA61106	6	#6	11'-6"	"				103.5
NA60811	6	#6	8'-11"	"				80.3
NA60604	5	#6	6'-4"	"				47.5
NA60404	5	#6	4'-4"	"				32.5
NA61610	22	#6	16'-10"	"				556.2
NA60910	11	#6	9'-10"	"				162.4
NA61100	4	#6	10'-1"	"				60.6

NORTH WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60406C	94	#6	4'-6"	⊐	1'-6"	1'-6"		635.1
NA60500C	16	#6	5'-0"	⊐	1'-6"	1'-6"		120.1
NA60600G	16	#6	6'-0"	⊔	2'-0"	4'-0"		144.2
NA00600G	12	#10	6'-0"	⊔	2'-0"	4'-0"		309.8
NA60500G	8	#6	5'-0"	⊔	4'-0"	4'-0"		96.1
NA60800G	6	#10	8'-0"	⊔	4'-0"	4'-0"		206.5
NA11400	4	#11	22'-0"	STR.				892.6
NA01800	4	#10	18'-0"	"				327.0
NA13000	8	#11	30'-0"	"				1275.1
NA64200	8	#6	42'-0"	"				504.6
NA62803	16	#6	28'-3"	"				291.0
NA03300	12	#10	33'-5"	"				2300.6
NA02810	8	#10	28'-10"	"				392.5
NA60810	62	#6	8'-10"	"				822.5
NA60900	62	#6	9'-0"	"				838.1
NA60106	58	#6	1'-6"	"				130.6

SOUTH WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	21	#6	5'-0"	⊐	2'-0"	1'-0"		157.7
NA41204L	33	#4	12'-4"	⊐	3'-5"	2'-5"	4"	271.8
NA41010L	95	#4	10'-10"	⊐	3'-5"	1'-8"	4"	703.2
NA61102L	30	#6	11'-2"	⊐	3'-5"	1'-8"	6"	503.1
NA60511	12	#6	5'-11"	STR				106.6
NA73006	10	#7	30'-6"	"				623.4
NA60600	10	#6	6'-0"	"				90.1
NA63300	42	#6	33'-3"	"				2128.0
NA63403	24	#6	34'-3"	"				1234.6
NA61306	24	#6	13'-6"	"				486.6
NA63006	16	#6	30'-6"	"				732.9
NA81502	10	#8	15'-2"	"				424.9
NA81505	10	#8	15'-5"	"				411.6
NA81508	10	#8	15'-8"	"				418.3
NA81600	10	#8	16'-0"	"				427.2
NA81602	20	#8	16'-2"	"				863.2
NA81604	10	#8	16'-4"	"				436.1
NA81606	10	#8	16'-6"	"				440.5
NA61411	10	#6	14'-11"	"				224.0
NA61502	10	#6	15'-2"	"				227.8
NA61505	10	#6	15'-5"	"				231.5
NA61509	14	#6	15'-9"	"				351.2
NA61511	14	#6	15'-11"	"				334.6
NA61601	20	#6	16'-1"	"				483.1
NA61603	10	#6	16'-3"	"				244.0
NA60705	2	#6	7'-5"	"				22.3
NA61507	2	#6	15'-7"	"				46.8
NA61609	2	#6	16'-9"	"				50.3
NA70500	72	#7	5'-0"	"				735.8
NA70603	88	#7	6'-3"	"				1124.2
NA70511	88	#7	5'-11"	"				1064.1

INTERIOR WALLS

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA41010L	22	#4	10'-10"	⊐	3'-5"	1'-8"	4"	231.5
NA60700C	8	#6	7'-0"	⊐	1'-9"	1'-6"		84.1
NA60406C	124	#6	4'-6"	⊐	1'-6"	1'-6"		835.1
NA03003	8	#10	30'-3"	STR				1041.3
NA63003	4	#9	30'-3"	"				411.4
NA63504	12	#6	23'-4"	"				420.5
NA63003	28	#6	30'-3"	"				1272.2
NA01900	4	#10	19'-0"	"				327.0
NA02800	8	#10	28'-0"	"				803.0
NA112600	8	#11	26'-0"	"				1105.1
NA02200	8	#10	22'-0"	"				757.3
NA112200	4	#11	22'-0"	"				467.5
NA60700	16	#6	7'-0"	"				168.2
NA81600	20	#8	16'-0"	"				854.4
NA60602	8	#6	6'-2"	"				74.1
NA61911	4	#6	19'-11"	"				119.6
NA60506	8	#6	5'-6"	"				66.1
NA61507	28	#6	15'-7"	"				1309.5
NA62000	16	#6	20'-0"	"				480.0
NA60906	40	#6	9'-5"	"				565.7

DECK CONTRACT

WEST WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	6	#6	5'-0"	⊐	1'-6"	2'-0"		45.0
NA60400G	5	#6	4'-0"	⊔	2'-0"	2'-0"		30.0
NA61007	3	#6	10'-7"	STR				48.3
NA63203	5	#6	32'-3"	"				242.5
NA61006	2	#6	10'-6"	"				31.8
NA61909	7	#6	19'-9"	"				209.3
NA63206	4	#6	32'-6	"				196.0
NA60400	6	#6	4'-0"	"				36.0

EAST WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	5	#6	5'-0"	⊐	1'-6"	2'-0"		37.5
NA60400G	5	#6	4'-0"	⊔	2'-0"	2'-0"		30.0
NA63203	5	#6	32'-3"	STR.				242.5
NA61206	2	#6	12'-6"	"				37.8
NA61909	7	#6	19'-9"	"				209.3
NA63206	4	#6	32'-6	"				196.0
NA60807	2	#6	8'-7"	"				26.2

NORTH WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60800P	2	#6	8'-0"	⌒	SEE DETAIL			24.0
NA60800G	8	#6	8'-0"	⊔	4'-0"	4'-0"		96.0
NA60600G	16	#6	6'-0"	⊔	2'-0"	4'-0"		144.0
NA64200	6	#6	42'-0	STR				378.6
NA61803	4	#6	18'-3"	"				110.0
NA62809	16	#6	28'-9"	"				694.4

SOUTH WALL

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA60500C	10	#6	5'-0"	⊐	2'-0"	1'-0"		75.0
NA60402G	36	#6	4'-2"	⊔	2'-6"	1'-6"		226.8
NA63310	20	#6	33'-10"	STR				944.0
NA63006	8	#6	30'-6"	"				368.0

INTERIOR WALLS

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA62904	18	#6	29'-4"	STR				707.2
NA62000	16	#6	20'-0"	"				480.0

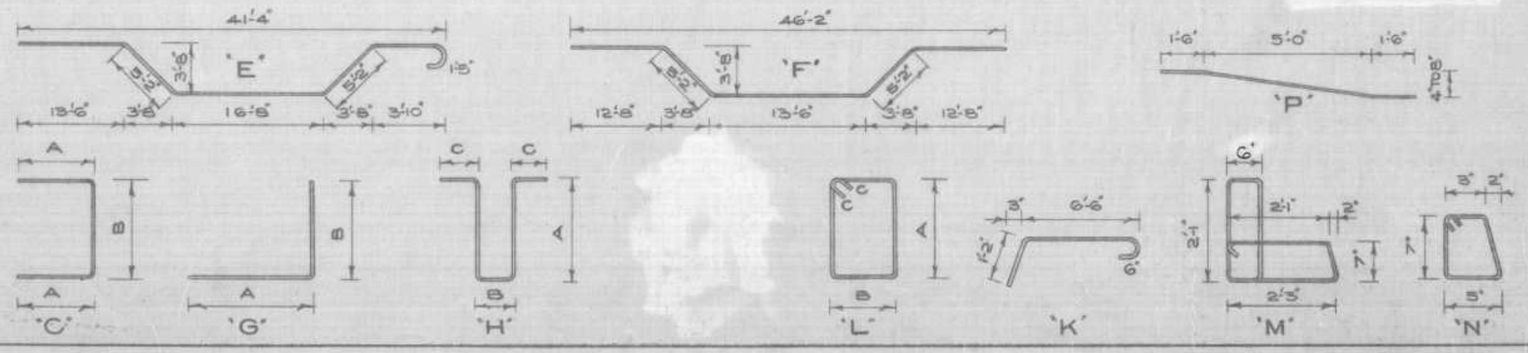
BEAMS, BRIDGING, DECK, APPROACH SLAB.

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA41005H	336	#4	10'-5"	⊔	4'-3"	1'-1"	5"	2352.0
NA41007H	48	#4	10'-7"	⊔	4'-4"	1'-1"	5"	340.8
NA41009H	18	#4	10'-9"	⊔	4'-5"	1'-1"	5"	131.4
NA41011H	18	#4	10'-11"	⊔	4'-6"	1'-1"	5"	122.4
NA41001H	56	#4	10'-1"	⊔	4'-3"	8"	5"	375.2
NA41006H	28	#4	10'-6"	⊔	4'-5"	8"	5½"	198.8
NA104508E	24	#10	45'-8"	⌒	SEE DETAIL			4740.0
NA104902F	12	#10	49'-2"	⌒	SEE DETAIL			2540.4
NA101500G	24	#10	13'-0"	⊔	8'-0"	4'-0"		1841.6
NA63200	24	#6	32'-0"	STR				1154.4
NA113200	48	#11	32'-0"	"				8160.0
NA02806	24	#10	28'-6"	"				2954.4
NA62806	12	#6	28'-6"	"				516.0
NA01702	24	#10	17'-2"	"				1776.0
NA72406	12	#7	24'-6"	"				603.6
NA62405	6	#6	24'-5"	"				220.8
NA72410	12	#7	24'-10"	"				591.6
NA40800P	22	#4	8'-0"	⌒	SEE DETAIL			116.6
NA50800P	50	#5	8'-0"	⌒	SEE DETAIL			415.0
NA62700	120	#6	27'-0"	STR				4872.0
NA62405	124	#6	24'-5"	"				4563.2
NA62204	174	#6	22'-4"	"				5846.4
NA62408	186	#6	24'-8"	"				6919.2
NA44400	44	#4	44'-0"	"				1293.6
NA54400	100	#5	44'-0"	"				4590.0
NA62700	22	#6	27'-0"	"				893.2
NA81000	86	#8	10'-0"	"				2296.2
NA62400	56	#6	24'-0"	"				2016.0
NA62808	54	#6	28'-8"	"				2160.0

SIDEWALKS, CURBS, PLANTER.

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NA40502K	114	#4	5'-2"	⌐	SEE DETAIL			627.0
NA40206N	44	#4	2'-6"	⊟	SEE DETAIL			74.8
NA41000M	38	#4	10'-0	⊟	SEE DETAIL			254.6
NA40606L	18	#4	6'-6	▯	2'-2"	9"	4"	78.1
NA40410L	18	#4	4'-10"	⊐	1'-10"	3"	4"	48.6
NA40400G	12	#4	4'-0"	⊔	2'-0"	2'-0"		32.4
NA43000	8	#4	30'-0"	STR				160.0
NA42003	8	#4	20'-3"	"				108.8
NA41000	16	#4	10'-0"	"				107.2
NA42307	4	#4	23'-7"	"				63.2
NA42608	3	#4	26'-8"	"				58.7
NA42603	10	#4	26'-3	"				280.0
NA42706	3	#4	27'-6"	"				55.2
NA42509	1	#4	25'-9"	"				17.3

TOTAL DECK CONTRACT (LBS) 71,978.0



AS BUILT ALS MAR/68

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

B-5015-67

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

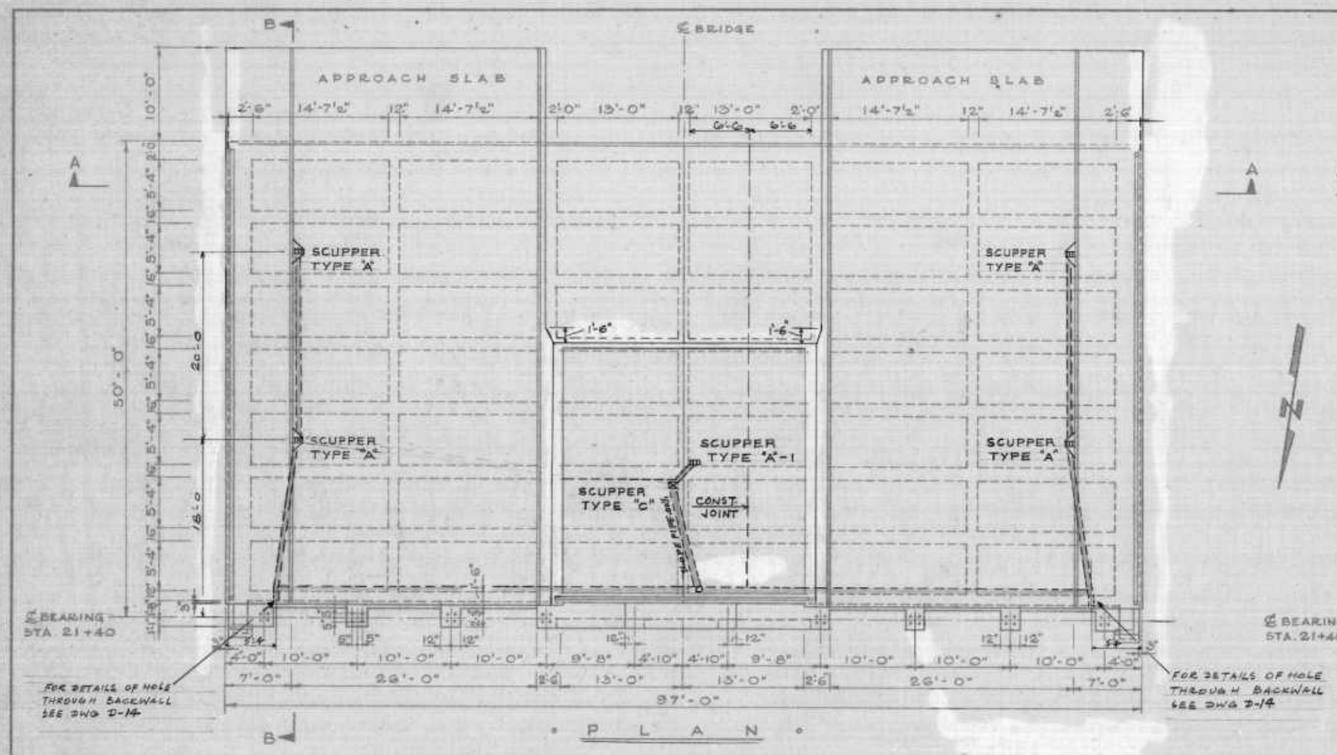
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

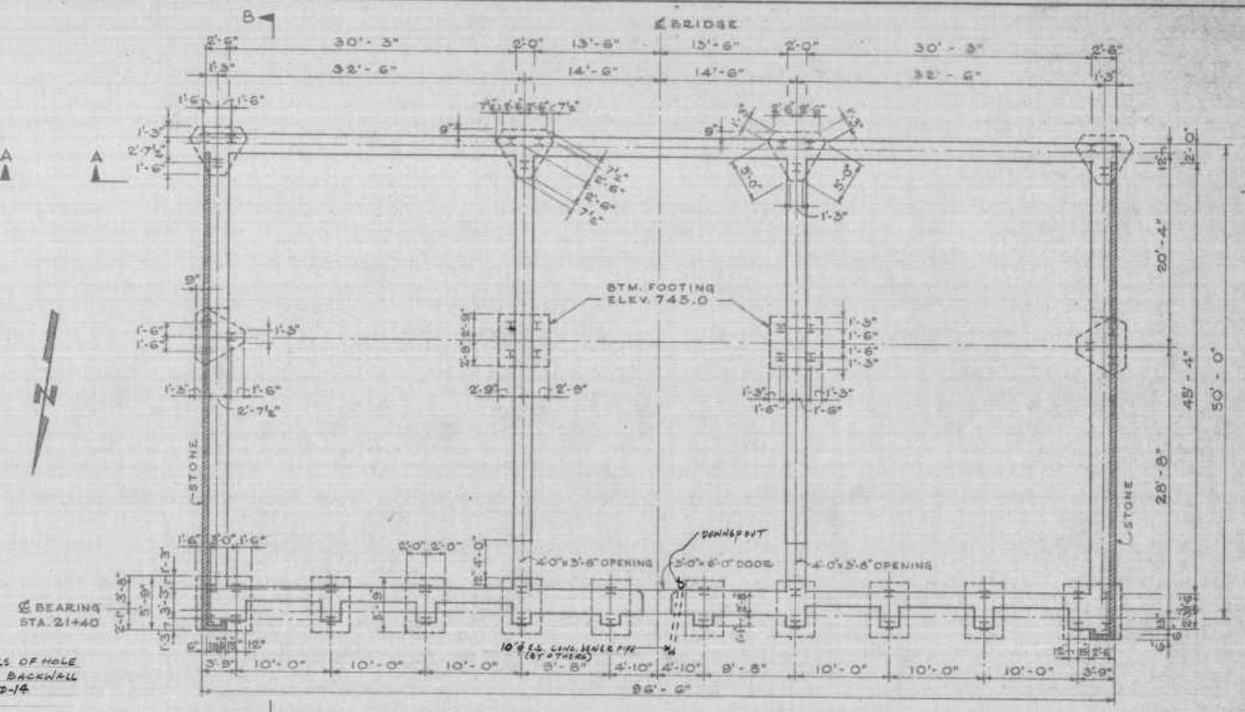
NORTH ABUTMENT REINFORCING SCHEDULE

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

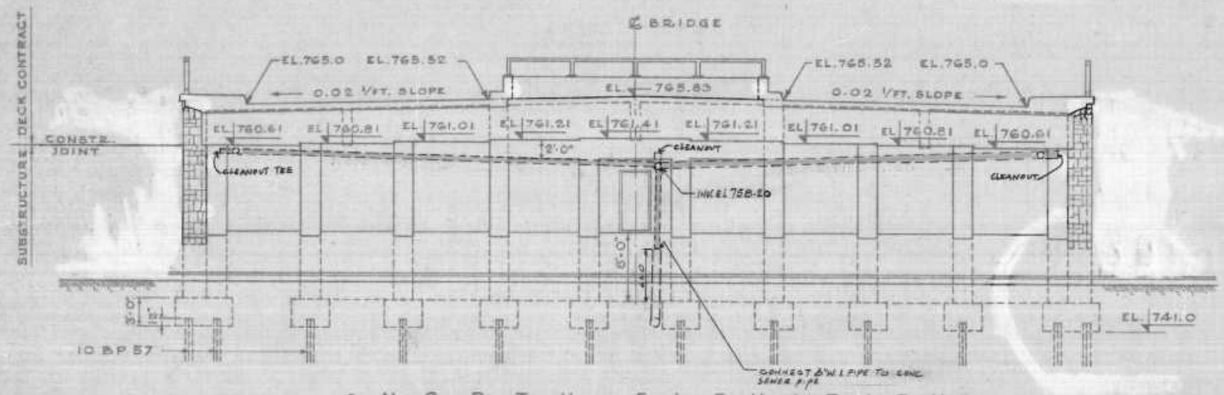
FILE No.	W-1008
DATE	MAY 1965
SCALE	-
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-8



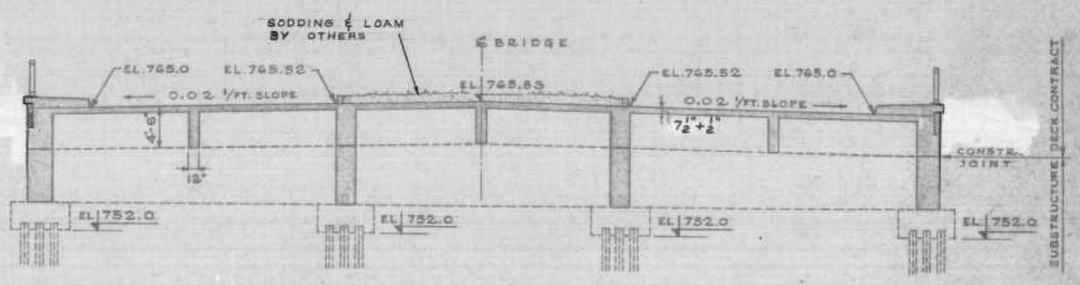
• P L A N •



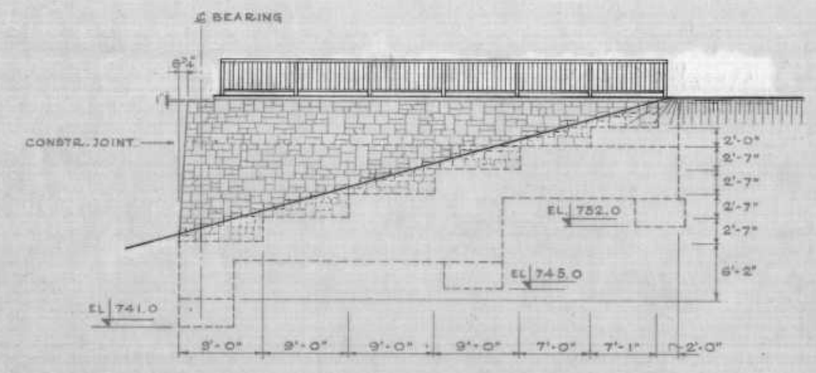
• F O U N D A T I O N P L A N •



• N O R T H E L E V A T I O N •

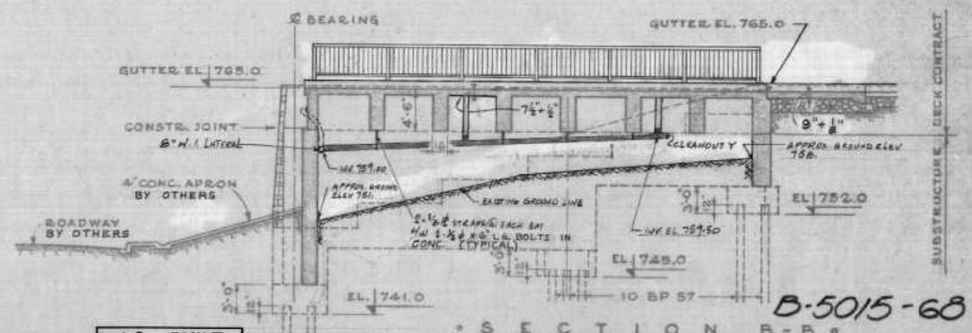


• S E C T I O N A - A •



• W E S T E L E V A T I O N •

• E A S T E L E V A T I O N S I M I L A R •



• S E C T I O N B - B •

B-5015-68

AS BUILT ALS AR/LS

NOTE: FIELD REVISIONS MADE IN DRAINAGE SYSTEM - NOT RECORDED.

• N O T E S •

1. THE SUBSTRUCTURE CONTRACTOR HAS COMPLETED THE CONSTRUCTION OF THE ABUTMENT TO THE ELEVATION OF THE BRIDGE BEARINGS AS SHOWN, EXCEPT AS FOLLOWS:
   ALL STONEWORK SHALL BE SUPPLIED AND PLACED BY THE DECK CONTRACTOR.
2. THE SUBSTRUCTURE CONTRACTOR HAS PLACED DOVETAIL ANCHOR SLOTS FOR THE STONEWORK AT 16" C.C. EACH WAY.
   THE DECK CONTRACTOR IS TO PLACE DOVETAIL ANCHORS IN SLOTS PROVIDED TO SUPPORT STONEWORK.
3. SCUPPER TYPE 'A' TO BE USED IN ABUTMENTS IS AS DETAILED ON DWG D-6 EXCEPT THAT 6" Ø STD. PIPE TO BE USED INSTEAD OF 6×6×.250 TUBING - PIPE LENGTH TO SUIT.
4. ALL LATERAL PIPING & DOWNSPOUTS TO BE 8" W.I. PIPE SHOWN SHADED. DOWNSPOUTS TO BE STRAPPED TO BACKWALL WITH 2×3/8" R STRAPS & 2-1/2" Ø BOLTS @ 4'-0" ℄.

TOTAL VOLUME CONCRETE DECK
379 C.Y. SOUTH ABUTMENT.

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY: DEPUTY DIRECTOR OF STREETS & TRANSIT

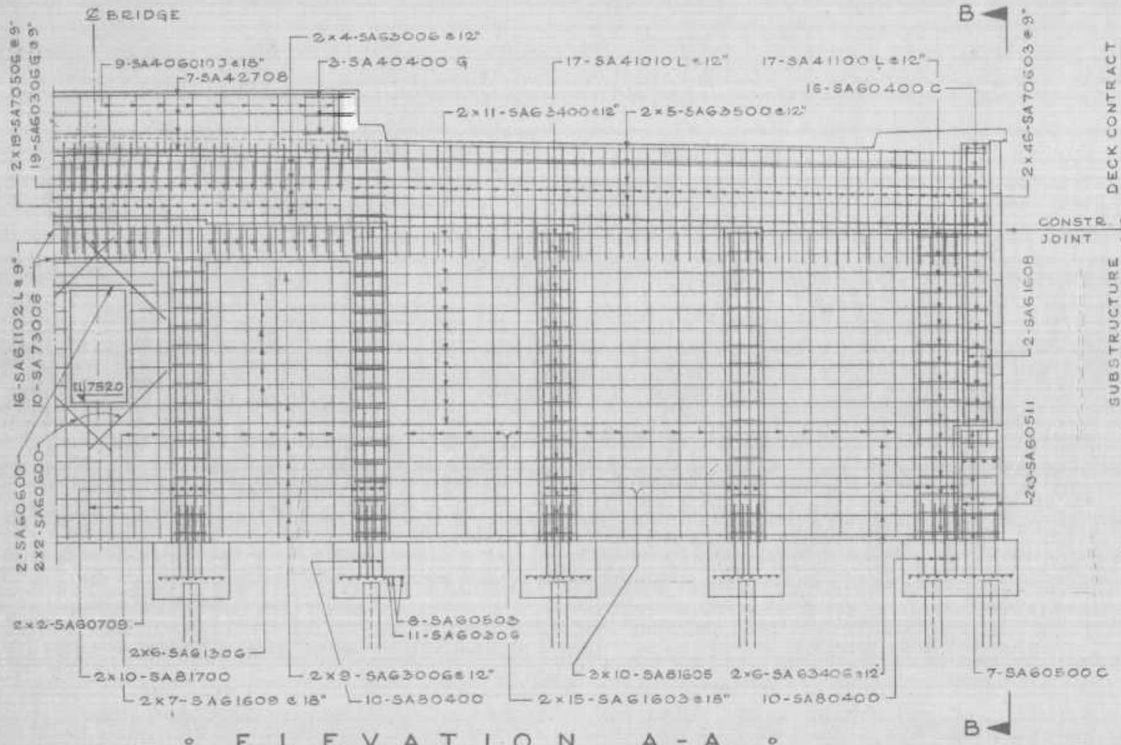
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

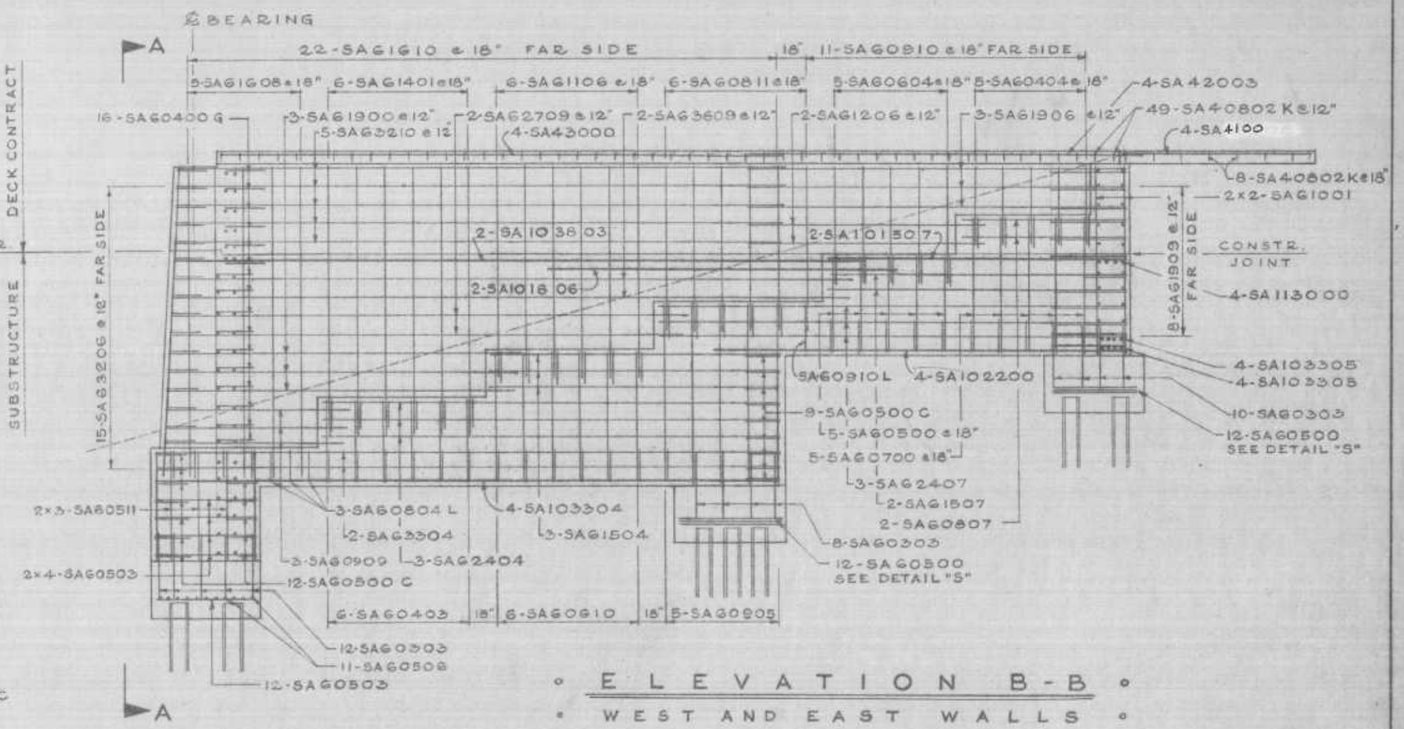
SOUTH ABUTMENT

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

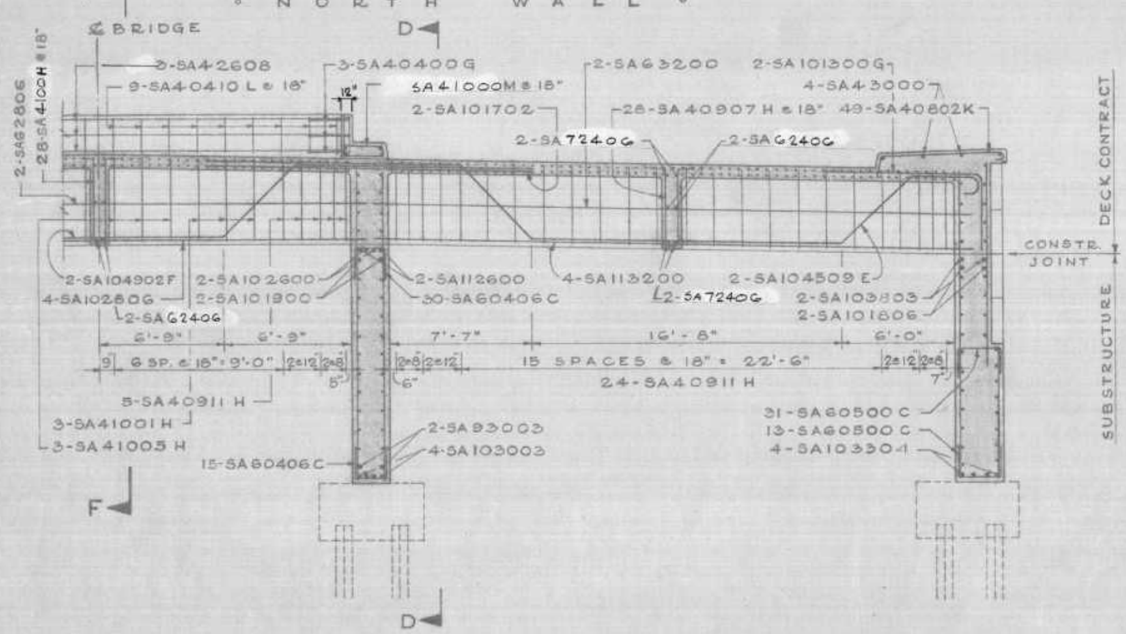
FILE No.	W-1008
DATE	MAY 1965
SCALE	1/8"=1'-0"
DWN BY	JB
CHKD. BY	GS
DWG. No.	D-9



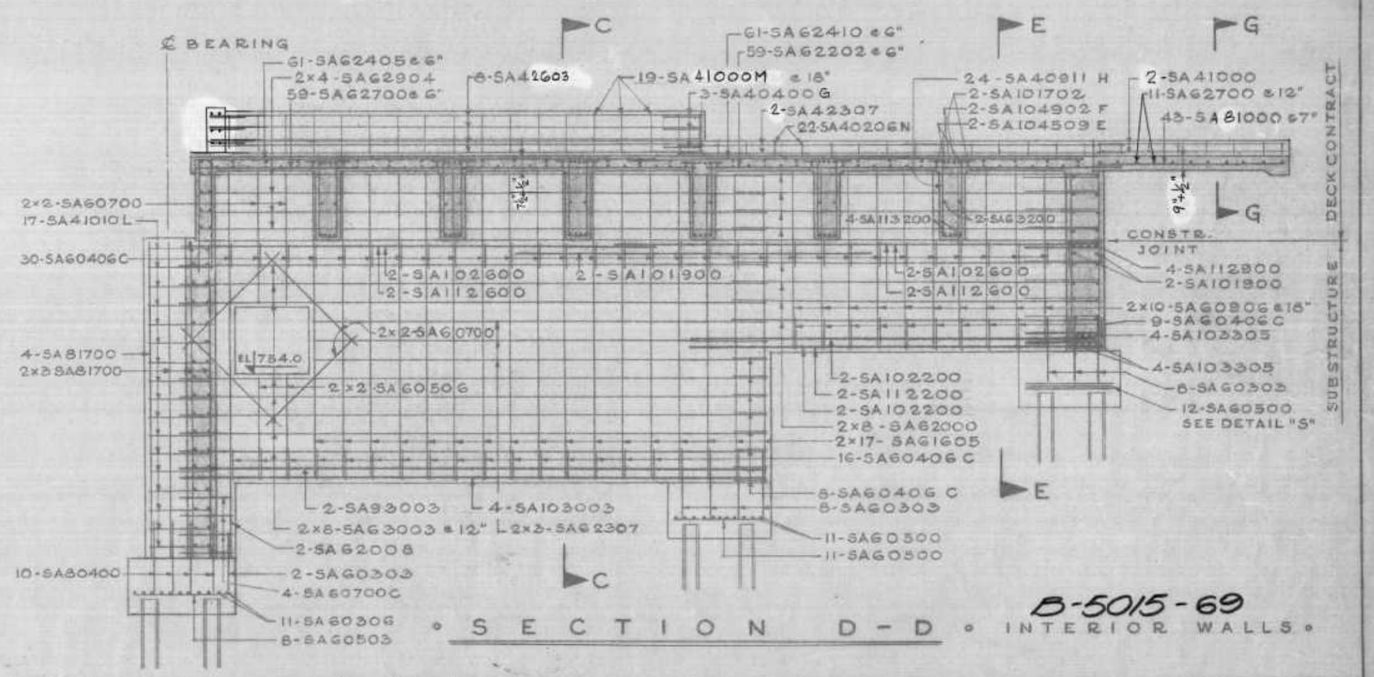
ELEVATION A-A
NORTH WALL



ELEVATION B-B
WEST AND EAST WALLS

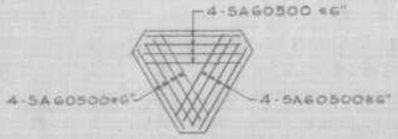


SECTION C-C



SECTION D-D
INTERIOR WALLS

B-5015-69



DETAIL "S"
3 PILES FOOTING

AS BUILT
ALS MAR/68

PROVINCE OF MANITOBA
D. J. SAMPSON
REGISTERED ENGINEER

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

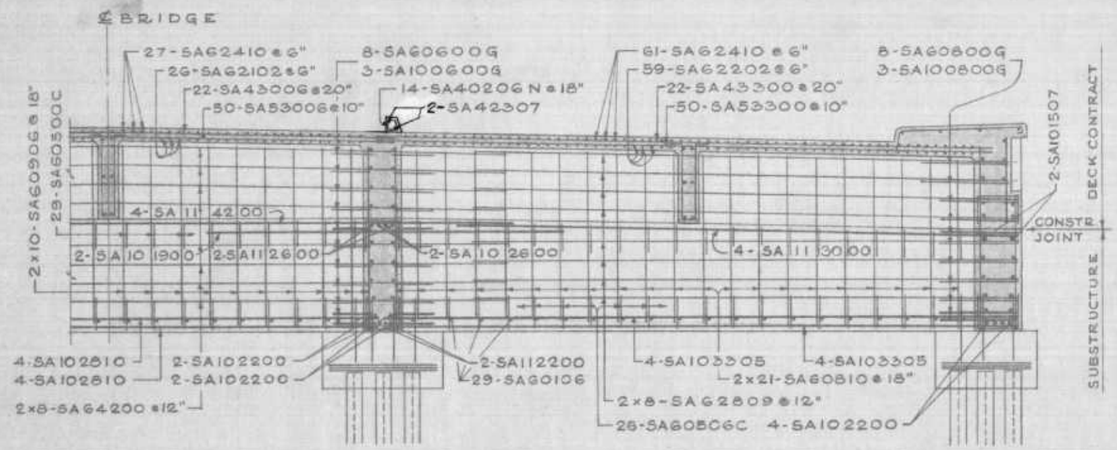
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

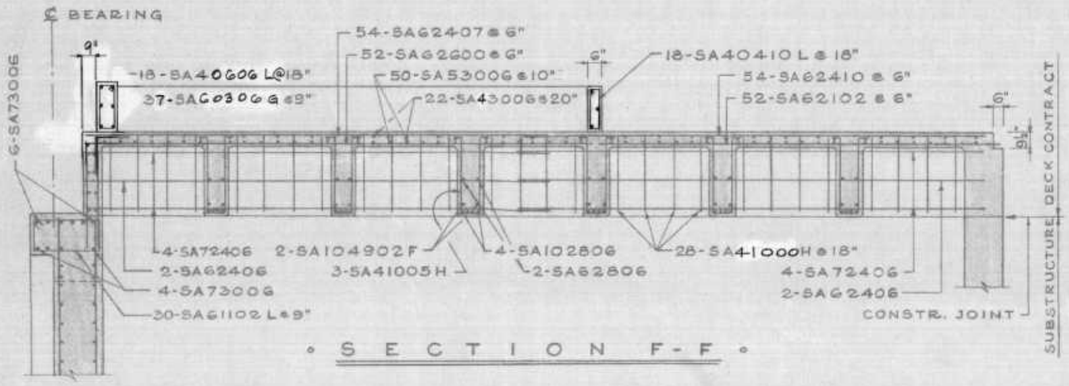
SOUTH ABUTMENT REINFORCING DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

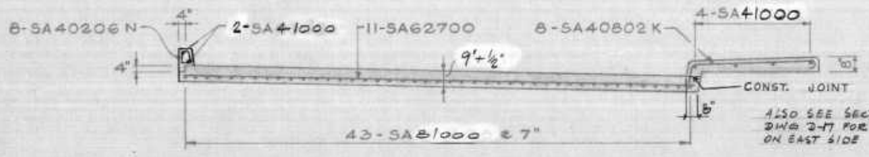
FILE No.	W-1008
DATE	MAY 1965
SCALE	1/4" = 1'-0"
DWN. BY	JB
CHKD. BY	
DWG. No.	D-10



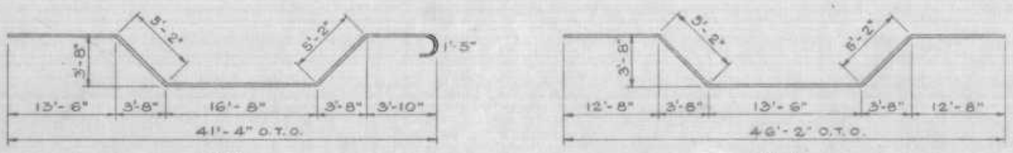
SECTION E-E
SOUTH WALL



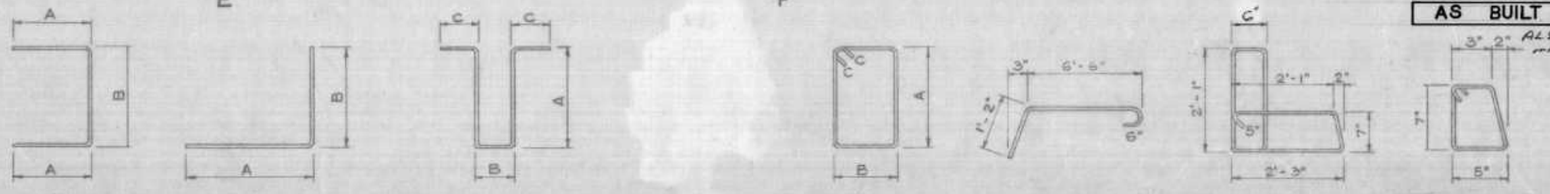
SECTION F-F



SECTION G-G
(DECK CONTRACT.)



"E" "F"



"C" "G" "H" "L" "K" "M" "N"

SOUTH ABUTMENT REINFORCING STEEL SCHEDULE

SUBSTRUCTURE

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
FOOTINGS.								
SA-80400	100	#8	4'-0"	STR.				1068.0
SA-60506	22	#6	5'-6"	"				181.7
SA-60503	88	#6	5'-3"	"				693.9
SA-60306	88	#6	2'-6"	"				462.6
SA-60500	116	#6	5'-0"	"				871.2
SA-60303	98	#6	3'-3"	"				478.4
NORTH WALL								
SA-61605	60	#8	16'-5"	STR.				2630.5
SA-61700	40	#8	17'-0"	"				1815.6
SA-70603	184	#7	6'-3"	"				2350.6
SA-70506	74	#7	5'-6"	"				831.9
SA-73006	10	#7	30'-6"	"				622.4
SA-63400	44	#6	34'-0"	"				2246.8
SA-63406	44	#6	34'-6"	"				1243.7
SA-63006	26	#6	30'-6"	"				1191.1
SA-61306	24	#6	13'-6"	"				486.6
SA-61608	4	#6	16'-8"	"				100.1
SA-60511	12	#6	5'-11"	"				106.7
SA-61602	60	#6	16'-2"	"				1456.8
SA-61609	28	#6	16'-9"	"				704.7
SA-60709	4	#6	7'-9"	"				46.6
SA-60600	10	#6	6'-0"	"				90.1
SA-60400C	32	#6	4'-0"	⊐	1'-5"	1'-0"		192.3
SA-60500C	14	#6	5'-0"	⊐	1'-6"	2'-0"		105.1
SA-61102 L	30	#6	11'-2"	⊐	3'-5"	1'-8"	6"	505.1
SA-41010 L	132	#4	10'-10"	⊐	3'-5"	1'-8"	4"	955.4
SA-41204L	34	#4	12'-4"	⊐	3'-5"	2'-5"	4"	280.2
WEST AND EAST WALLS								
SA-103603	4	#10	36'-3"	STR.				658.4
SA-101806	4	#10	18'-6"	"				318.4
SA-103304	8	#10	33'-4"	"				1147.5
SA-102200	8	#10	22'-0"	"				757.3
SA-101507	4	#10	15'-7"	"				268.2
SA-61610	44	#6	16'-10"	"				1112.6
SA-60910	22	#6	9'-10"	"				325.0
SA-63206	22	#6	32'-6"	"				1073.9
SA-61909	8	#6	19'-9"	"				273.3
SA-63304	4	#6	33'-4"	"				200.3
SA-62404	6	#6	24'-4"	"				219.3
SA-61504	6	#6	15'-4"	"				138.2
SA-62407	6	#6	24'-7"	"				221.5
SA-61507	4	#6	15'-7"	"				93.6
SA-60909	6	#6	9'-9"	"				87.9
SA-61306	6	#6	13'-0"	"				171.2
SA-62709	4	#6	27'-9"	"				166.7
SA-63603	4	#6	36'-9"	"				220.8
SA-61001	8	#6	10'-1"	"				121.1
SA-60503	16	#6	5'-3"	"				126.2
SA-60511	12	#6	5'-11"	"				106.7
SA-60403	12	#6	4'-3"	"				76.6
SA-60610	12	#6	6'-10"	"				123.2
SA-60905	10	#6	9'-5"	"				141.5
SA-60500	10	#6	5'-0"	"				75.1
SA-60700	10	#6	7'-0"	"				105.1
SA-61605	10	#6	16'-8"	"				250.3
SA-61301	12	#6	14'-1"	"				253.8
SA-61106	12	#6	11'-6"	"				207.3

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
SA-60811	12	#6	8'-11"	STR.				160.8
SA-60604	10	#6	6'-4"	"				99.2
SA-60910L	2	#6	9'-10"	⊐	2'-5"	2'-5"	6"	29.5
SA-60804L	6	#6	8'-4"	⊐	2'-0"	1'-8"	6"	75.1
SA-60406G	32	#6	4'-0"	⊐	2'-0"	2'-0"		132.2
SA-60500C	122	#6	5'-0"	⊐	1'-6"	2'-0"		916.2
INTERIOR WALLS								
SA-112600	8	#11	26'-0"	STR				1105.1
SA-112200	4	#11	22'-0"	"				467.5
SA-101900	4	#10	19'-0"	"				327.0
SA-102600	8	#10	26'-0"	"				895.0
SA-102200	8	#10	22'-0"	"				757.3
SA-103003	8	#10	30'-3"	"				1041.3
SA-93003	4	#9	30'-3"	"				411.4
SA-63003	32	#6	30'-3"	"				1453.9
SA-62307	12	#6	23'-7"	"				425.0
SA-62000	16	#6	20'-0"	"				480.6
SA-61605	68	#6	16'-5"	"				1679.0
SA-60506	8	#6	5'-6"	"				66.1
SA-60700	16	#6	7'-0"	"				168.2
SA-62008	4	#6	20'-8"	"				124.2
SA-60906	40	#6	9'-6"	"				570.8
SA-60700C	8	#6	7'-0"	⊐	2'-9"	1'-6"		84.1
SA-60406C	126	#6	4'-6"	⊐	1'-6"	1'-6"		551.6
SOUTH WALL								
SA-113000	8	#11	30'-0"	STR				1275.1
SA-114200	4	#11	42'-0"	"				892.6
SA-103305	16	#10	33'-5"	"				2,301.0
SA-102810	8	#10	28'-10"	"				892.6
SA-101900	4	#10	19'-0"	"				327.0
SA-100600G	12	#10	6'-0"	⌋	4'-0"	2'-0"		309.8
SA-100800G	6	#10	8'-0"	⌋	4'-0"	4'-0"		206.5
SA-60106G	58	#6	1'-6"	STR.				150.7
SA-64200	8	#6	42'-0"	"				504.7
SA-62809	16	#6	28'-9"	"				690.9
SA-60810	84	#6	8'-10"	"				1114.7
SA-60906	40	#6	9'-6"	"				570.8
SA-60500C	58	#6	5'-0"	⊐	1'-9"	1'-6"		435.6
SA-60506C	52	#6	5'-6"	⊐	2'-0"	1'-6"		429.6
SA-60600G	16	#6	6'-0"	⌋	4'-0"	2'-0"		144.2
SA-60800G	8	#6	8'-0"	⌋	4'-0"	4'-0"		96.1

DECK CONTRACT

MARK	Nº	SIZE	LENGTH	SKETCH	A	B	C	WEIGHT
NORTH WALL								
SA-63500	20	#6	35'-0"	STR.				1051.4
SA-62006	8	#6	30'-6"	"				367.7
SA-60306G	37	#6	3'-6"	⌋	2'-0"	1'-6"		199.8
SA-60400C	10	#6	4'-0"	⊐	1'-6"	1'-0"		60.0
EAST AND WEST WALLS								
SA-63206	8	#6	32'-6"	STR.				391.2
SA-63210	10	#6	32'-10"	STR.				482.0
SA-61206	4	#6	12'-6"	STR.				75.6
SA-61906	6	#6	19'-6"	"				176.4
SA-60404	10	#6	4'-4"	"				66.0
SA-60807	4	#6	8'-7"	"				52.4
SA-60506C	10	#6	5'-6"	⊐	2'-0"	1'-6"		84.0
SA-60400G	10	#6	4'-0"	⌋	2'-0"	2'-0"		60.0
INTERIOR WALLS								
SA-62904	16	#6	29'-4"	STR.				707.2
SA-62000	16	#6	20'-0"	"				480.0
SOUTH WALL								
SA-64200	8	#6	42'-0"	STR.				504.8
SA-62809	16	#6	28'-9"	"				694.4
SA-60600G	16	#6	6'-0"	⌋	4'-0"	2'-0"		144.0
SA-60800G	8	#6	8'-0	⌋	4'-0"	4'-0"		96.0
BEAMS, BEDDING, DECK, APPROACH SLABS								
SA-62406	12	#6	24'-6	STR				442.8
SA-113200	48	#11	32'-0"	STR.				8160.0
SA-102806	24	#10	28'-6"	"				2954.4
SA-104509E	24	#10	48'-9"	⌒	SEE	DET	AIL	4740.0
SA-104902F	12	#10	49'-2"	⌒	"	"	"	2540.4
SA-101300G	24	#10	13'-0"	⌐	9'-0"	4'-0"		1341.6
SA-101702	24	#10	17'-2"	STR.				1776.0
SA-72406	24	#7	24'-6"	"				1204.8
SA-81000	86	#8	10'-0"	"				2296.2
SA-62700	140	#6	27'-0"	"				5684.0
SA-63200	24	#6	32'-0"	"				1154.4
SA-62806	12	#6	28'-6"	"				516.0
SA-62405	122	#6	24'-5"	"				4489.6
SA-62410	176	#6	24'-10"	"				6371.2
SA-62407	54	#6	24'-7"	"				2003.4
SA-62102	52	#6	21'-2"	"				1053.6
SA-62202	118	#6	22'-2"	"				8929.4
SA-62600	52	#6	26'-0"	"				2033.2
SA-53300	100	#5	33'-0"	"				3440.0
SA-53006	50	#5	30'-6"	"				1595.0
SA-43300	44	#4	33'-0"	"				968.0
SA-43006	22	#4	30'-6"	"				448.8
SA-40911H	348	#4	9'-11"	⊔	4'-0"	1'-1"	5"	2122.8
SA-41001H	36	#4	10'-1"	⊔	4'-1"	1'-1"	5"	241.2
SA-41005H	36	#4	10'-5"	⊔	4'-3"	1'-1"	5"	252.0
SA-40907H	56	#4	9'-7"	⊔	4'-0"	9"	5"	364.0
SA-41000H	28	#4	10'-0"	⊔	4'-2"	9"	5½"	187.6
SIDEWALKS, CURBS, PLANTER.								
SA-40802K	114	#4	8'-2"	⌐	SEE	DET	AIL	627.0
SA-43000	8	#4	30'-0"	STR.				160.0
SA-42003	8	#4	20'-3"	"				108.8
SA-41000	12	#4	10'-0"	"				80.4
SA-41000M	38	#4	10'-0"	⌐	SEE	DET	AIL	254.6
SA-42603	16	#4	26'-3"	STR.				280.0
SA-40206N	44	#4	2'-6"	⊓	SEE	DET	AIL	74.8
SA-42307	4	#4	23'-7"	STR.				63.2
SA-40606L	18	#4	6'-6"	2'-2"	9"	4"		78.1
SA-42708	7	#4	27'-8"	STR				130.2
SA-40410L	18	#4	4'-10"	⊓	1'-10"	3"	4"	48.6
SA-42608	3	#4	26'-8"	STR				53.7
SA-40400G	12	#4	4'-0"	⌋	2'-0"	2'-0"		32.4
DECK CONTRACT TOTAL LBS.								70,595.1

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

AS BUILT

B-5015-70

NO	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

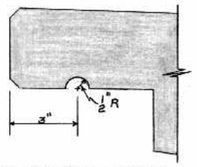
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

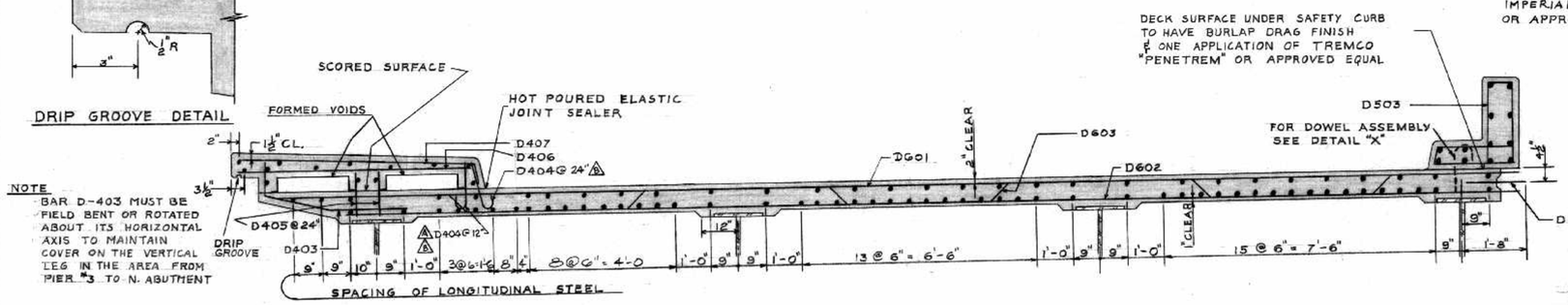
SOUTH ABUTMENT REINFORCING DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	1/4"=1'-0"
DWN. BY	JB
CHKD. BY	
DWG. No.	D-11

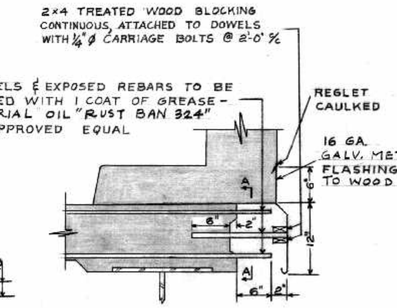


DRIP GROOVE DETAIL

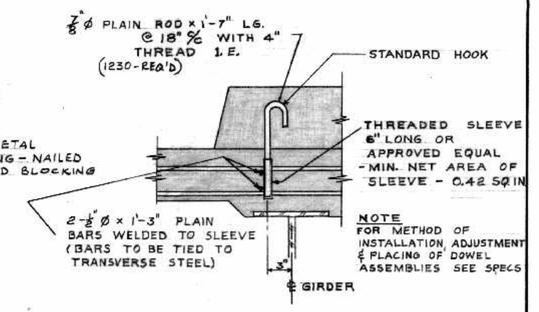


NOTE
BAR D-403 MUST BE FIELD BENT OR ROTATED ABOUT ITS HORIZONTAL AXIS TO MAINTAIN COVER ON THE VERTICAL LEG IN THE AREA FROM PIER #3 TO N. ABUTMENT

CROSS SECTION OF DECK
SHOWING REINFORCEMENT & NOTING TRANSVERSE STEEL ONLY
SCALE: 1/2" = 1'-0"

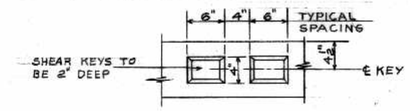


DETAIL OF SAFETY CURB FLASHING

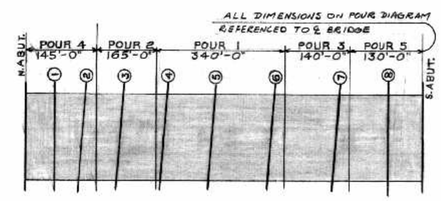


NOTE
FOR METHOD OF INSTALLATION, ADJUSTMENT & PLACING OF DOWEL ASSEMBLIES SEE SPECS

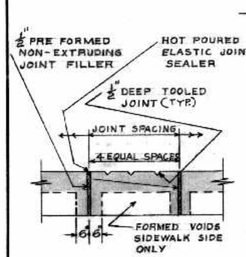
DETAIL "X"
SCALE: 1" = 1'-0"



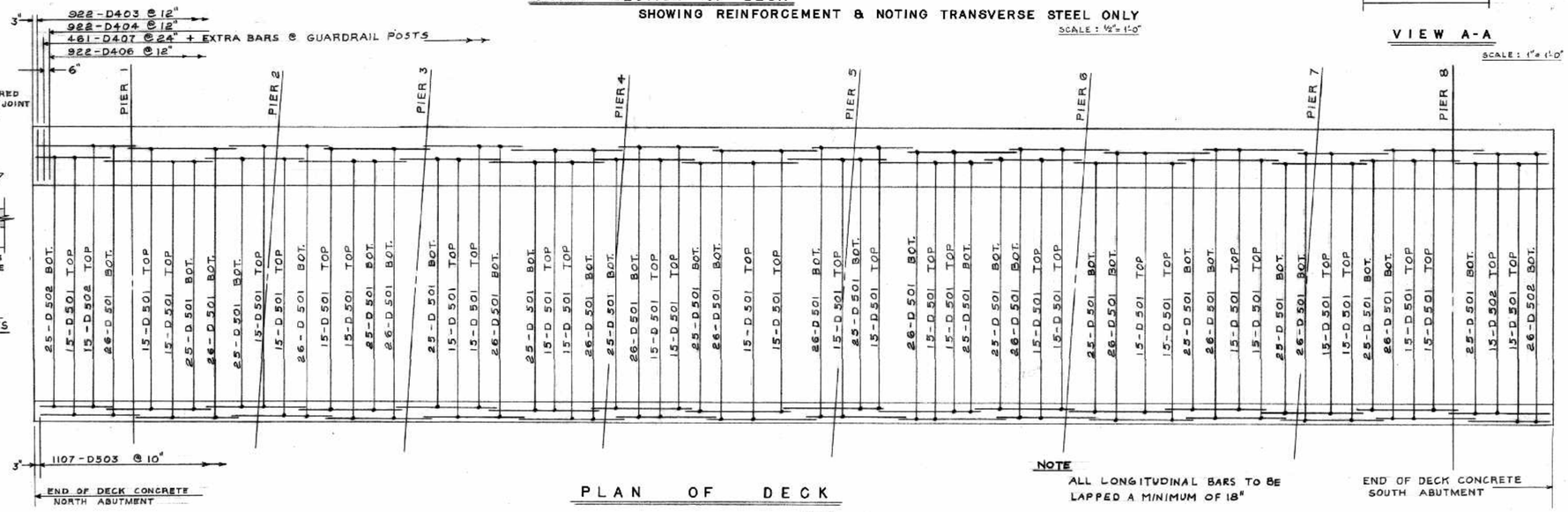
VIEW A-A
SCALE: 1" = 1'-0"



DECK POUR DIAGRAM
ONE DUAL LANE ROADWAY SHOWN
(2 ROADWAYS SIMILAR)

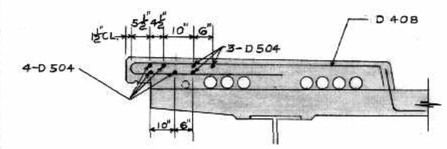


DETAIL OF SIDEWALK & SAFETY CURB JOINTS

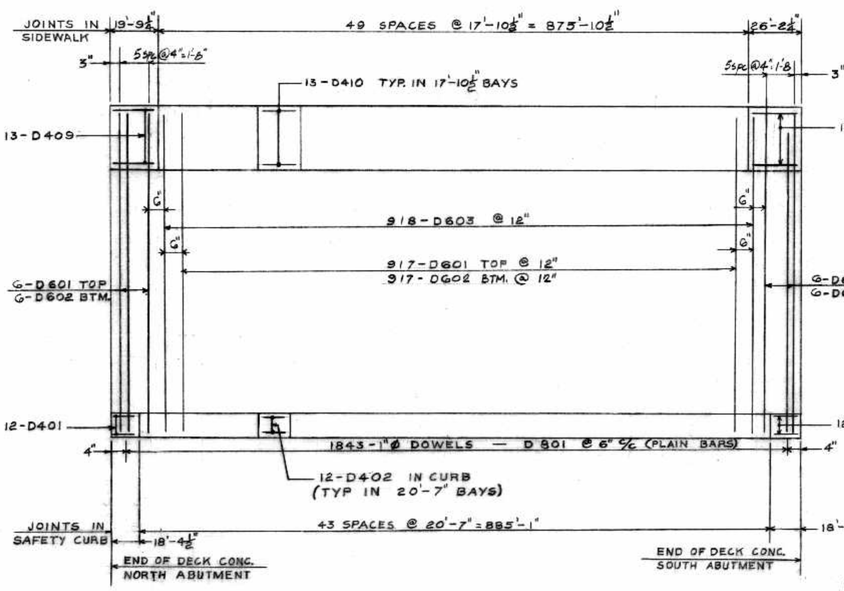


PLAN OF DECK
N.T.S.

NOTE
ALL LONGITUDINAL BARS TO BE LAPPED A MINIMUM OF 18"



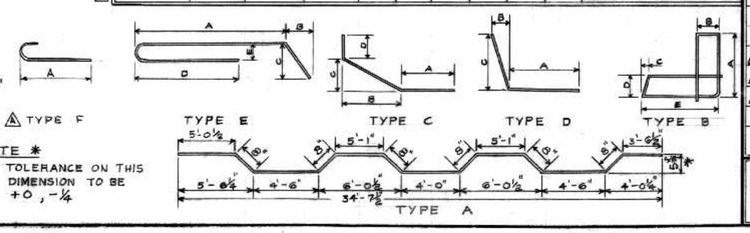
SECTION C-C
SCALE: 1/2" = 1'-0"



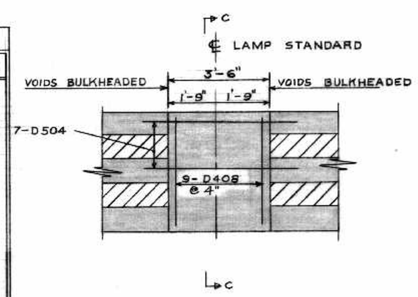
PLAN OF DECK
N.T.S.

DECK REINFORCING FOR TWO DUAL LANE ROADWAYS

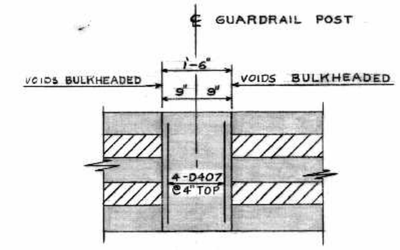
MARK NO.	SIZE	QUAN.	TYPE	LENGTH	A	B	C	D	E	WT. OF BAR	TOTAL WT.
D 401	#4	48	STR	18'-0"						12.0	576.0
D 402	#4	1052	STR	20'-3"						13.5	13,932.0
D 403	#4	1844	C	4'-10"	2'-0"	1'-10"	3"	1'-0"		3.2	5,900.8
D 404	#4	2764	F	1'-8"	1'-2"					1.1	3040.4
D 405	#4	1840	STR	1'-3"						.8	1472.0
D 406	#4	1844	STR	6'-8"						4.5	8,298.0
D 407	#4	1674	D	7'-0"	6'-6"	1"	6"			4.7	7,867.8
D 408	#4	198	E	11'-2"	6'-6"	1"	6"	4'-0 1/2"	4"	7.5	1,485.0
D 409	#4	26	STR	19'-5"						13.0	338.0
D 410	#4	1274	STR	17'-6"						11.7	14,905.8
D 411	#4	26	STR	25'-10"						17.2	447.2
D 501	#5	2430	STR	60'-0"						62.6	152,118.0
D 502	#5	162	STR	44'-0"						45.9	7,435.8
D 503	#5	2214	B	10'-4"	2'-4"	9"	1 1/2"	7"	2'-3"	10.8	23,911.2
D 504	#5	154	STR	6'-0"						6.3	970.2
D 601	#6	1858	STR	34'-6"						51.9	96,430.2
D 602	#6	1858	STR	32'-4"						48.6	90,298.8
D 603	#6	1836	A	35-8"						53.7	98,593.2
D 801	#8	3686	STR	1'-4"	PLAIN	BARS				3.6	13,269.6
										TOTAL	541,290.0



NOTE *
TOLERANCE ON THIS DIMENSION TO BE +0, -1/4



PLAN OF SIDEWALK AT LAMP STANDARDS
(22 LOCATIONS THUS)



PLAN OF SIDEWALK AT GUARDRAIL POSTS
(188 LOCATIONS THUS)

NOTE
CROSS-SECTION AND PLANS OF REINFORCING SHOWN FOR ONE DUAL LANE ROADWAY. REINFORCING IN DECK FOR BOTH DUAL LANE ROADWAYS IS IDENTICAL.

B-5015-71
AS BUILT ALS MAR/68

NO	DATE	BY	DESCRIPTION
B	FEB/68	M S	CHAINAGES OF PIERS 4 & 5 TO BE REVISED PER DWG D-1
A	MAR 2-68	J.D.H.	REVISED REBAR SPACING - D404
A	Aug 11-66	J.D.H.	REVISED REBARS

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

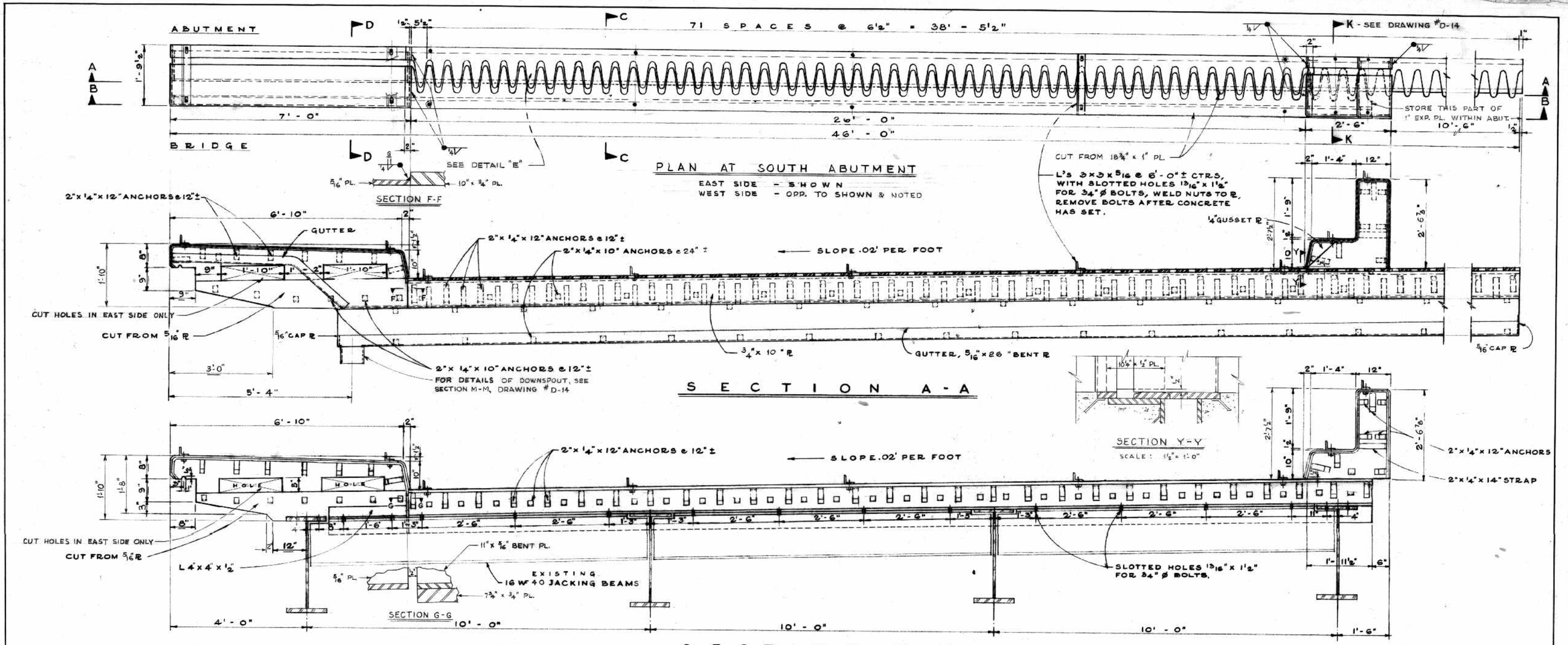
ST. VITAL BRIDGE PROJECT

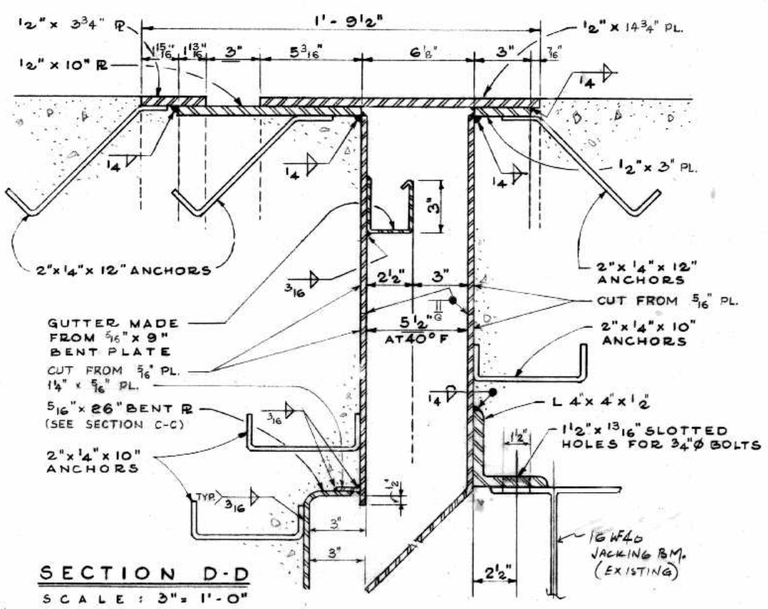
PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

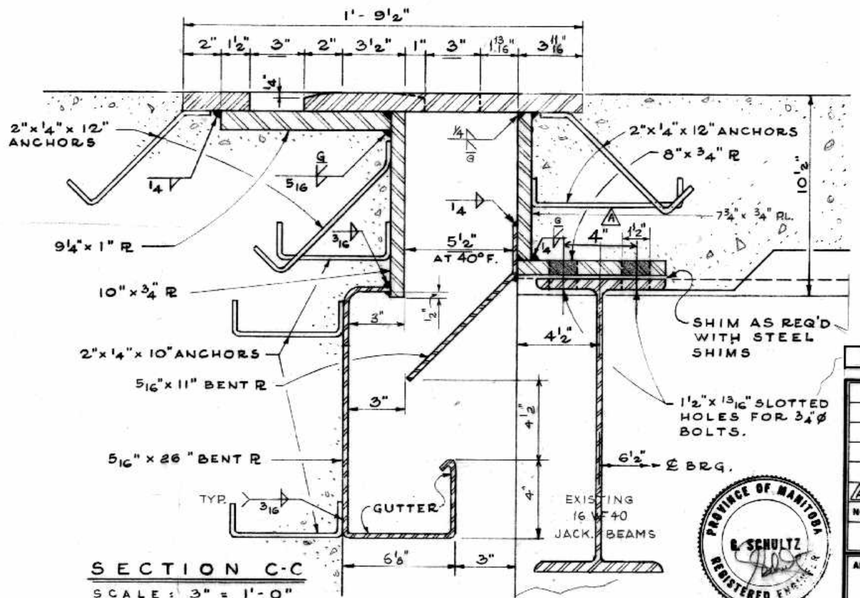
DECK REINFORCING

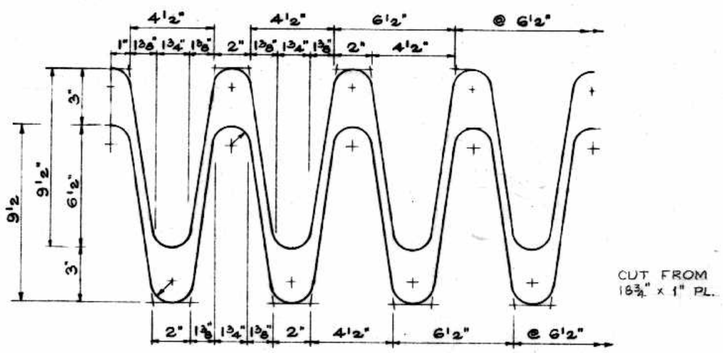
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	G
DWG. No.	D-12









DETAIL "E"

SCALE: 3" = 1'-0"

AS BUILT ALS MAR/68

B-5015-72

NO.	DATE	BY	DESCRIPTION
A	AUG 1/65	LS	DIMENSION ADDED

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

PROVINCE OF MANITOBA — B. SCHULTZ — REGISTERED ENGINEER

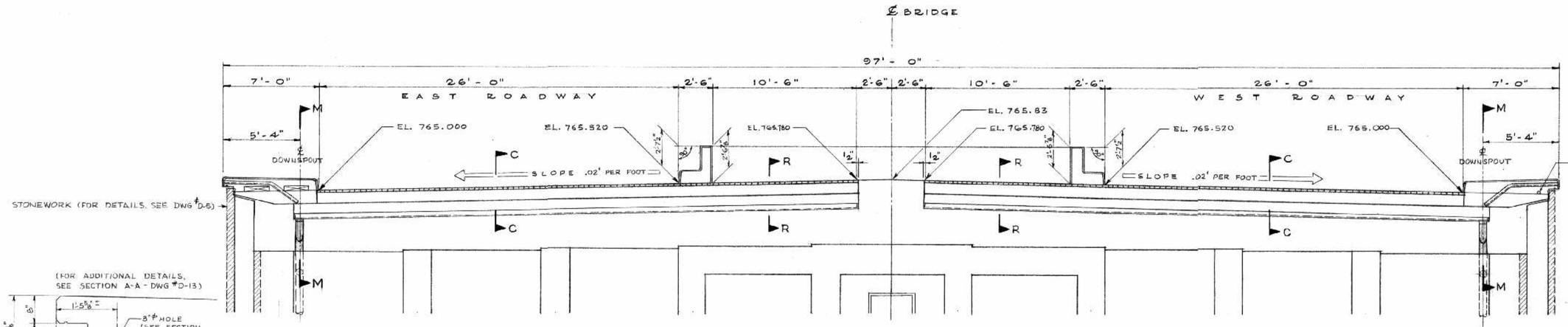
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

EXPANSION JOINT DETAILS

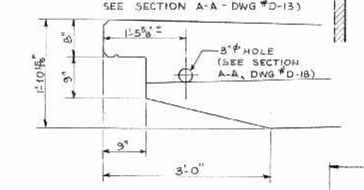
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	3/4" = 1'-0"
DWN. BY	J.D.H.
CHKD. BY	
DWG. No.	D-13

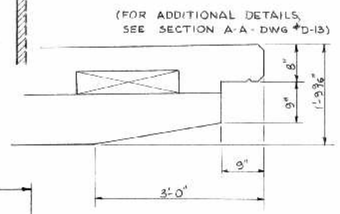


SOUTH ABUTMENT (FOR PLAN - SEE DRAWING #D-13)

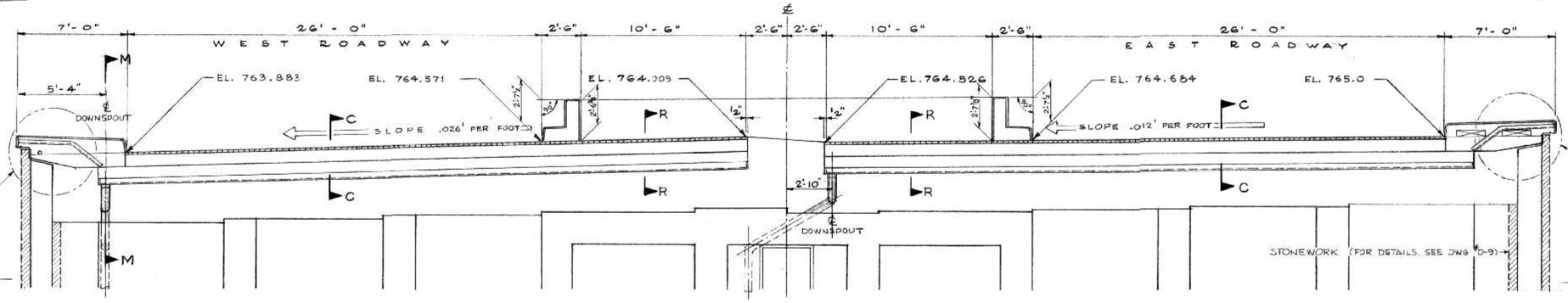
SCALE : 1/4" = 1'-0"



DETAIL "S" (FOR ABUTMENT)
SCALE : 3/4" = 1'-0"

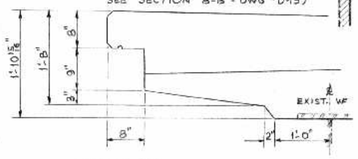


DETAIL "W" (FOR ABUTMENT)
SCALE : 3/4" = 1'-0"

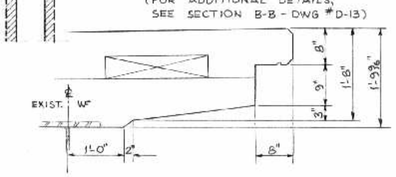


NORTH ABUTMENT (PLAN SIMILAR TO SOUTH ABUTMENT)

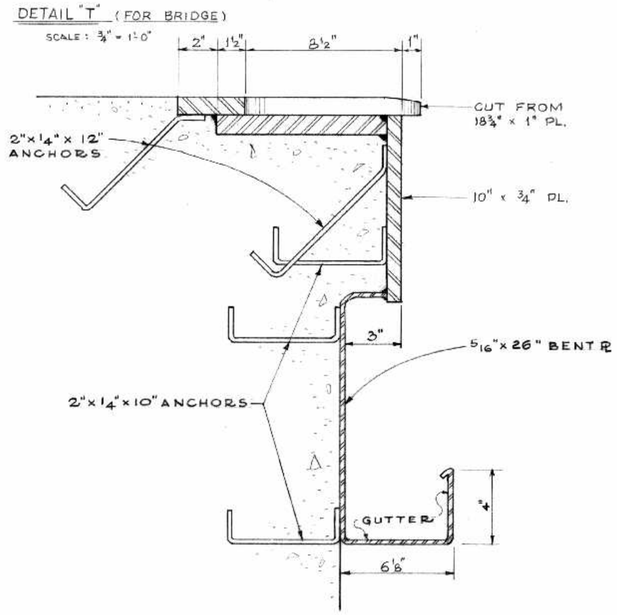
SCALE : 1/4" = 1'-0"



DETAIL "T" (FOR BRIDGE)
SCALE : 3/4" = 1'-0"



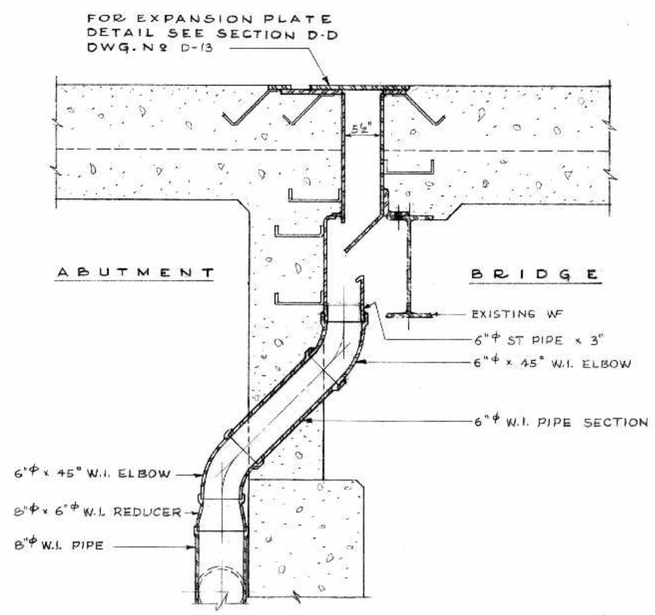
DETAIL "X" (FOR BRIDGE)
SCALE : 3/4" = 1'-0"



SECTION R-R

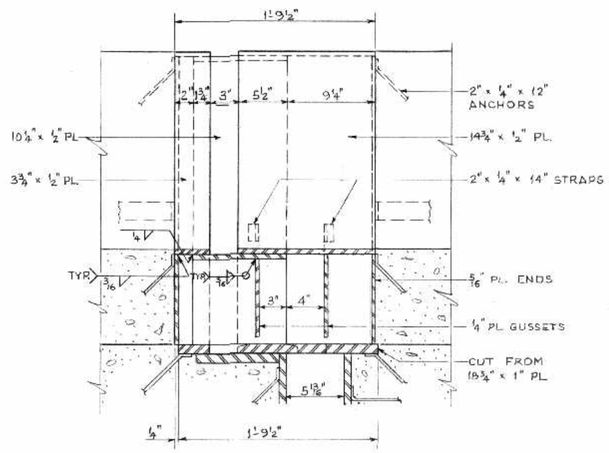
SCALE : 3" = 1'-0"

(FOR ADDITIONAL DETAILS, SEE SECTION C-C - DWG #D-13)



SECTION M-M

SCALE : 1" = 1'-0"



SECTION K-K

SCALE : 1½" = 1'-0"

NOTE

FOR SECTIONS C-C & K-K, SEE DWG #D-13.

B-5015-73

AS BUILT
ALS MAR/68

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — G. SCHULTZ — REGISTERED ENGINEER

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

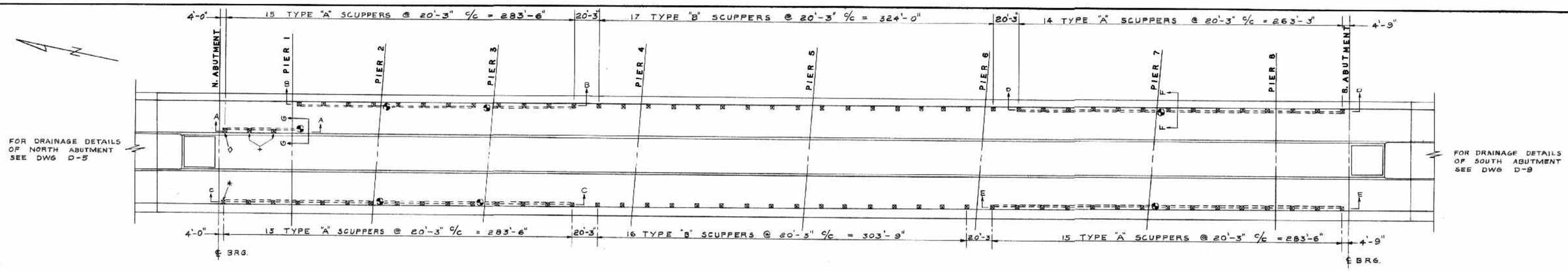
ST. VITAL BRIDGE PROJECT

PROVINCE OF MANITOBA — D.J. SAMPSON — REGISTERED ENGINEER

EXPANSION JOINT DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

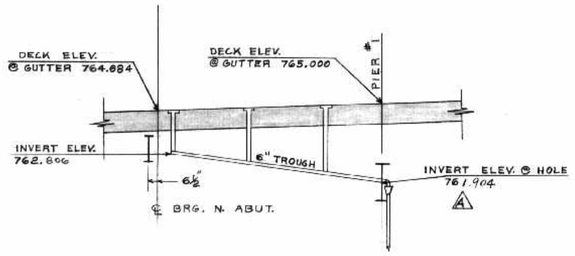
FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	J.D.H.
CHKD. BY	
DWG. No.	D-14



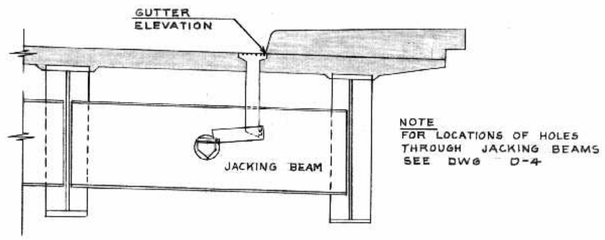
⊠ — DENOTES SCUPPER
⊙ — DENOTES DOWNSPOUT

DECK DRAINAGE LAYOUT

SCALE 1" = 40'-0"



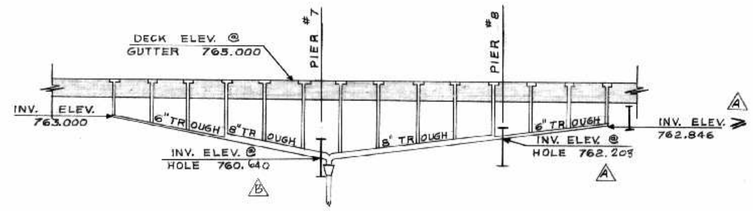
SECTION A-A



NOTE
FOR LOCATIONS OF HOLES THROUGH JACKING BEAMS SEE DWG D-4

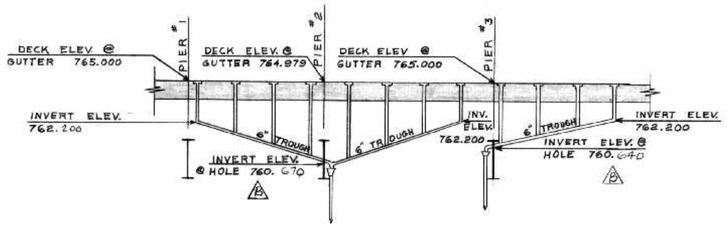
SECTION F-F

SCALE 3/8" = 1'-0"

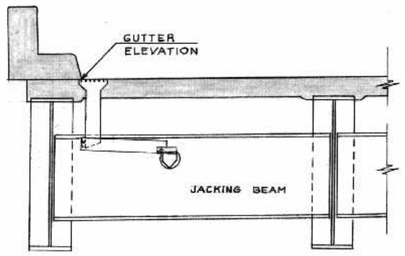


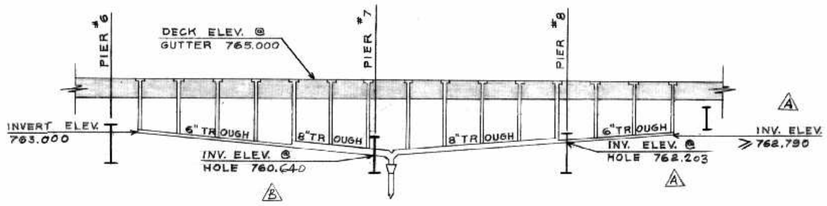
SECTION D-D

NOTE
ALL INVERT ELEVATIONS REFER TO TROUGH INVERT ELEVATIONS



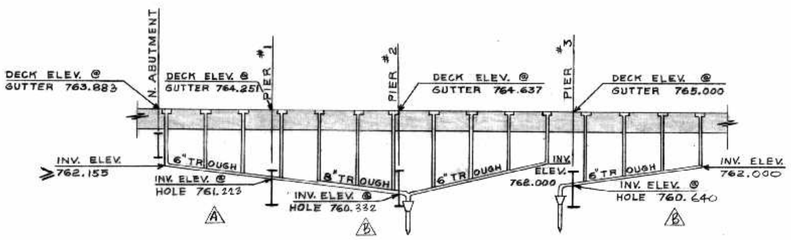
SECTION B-B





SECTION E-E

NOTE
EXISTING STRUCTURAL STEEL & CLEARANCES TO SAME TO BE CHECKED BY THE CONTRACTOR & THE ENGINEER BEFORE FABRICATION OF DRAINAGE SYSTEM.



SECTION C-C

SECTION G-G

PIER #1 EAST

SCALE 3/8" = 1'-0"

AS BUILT A.L.S. MAR/68

B-5015-74

NO.	DATE	BY	DESCRIPTION
C	FEB/68	M.S.	CHAINAGES OF PIERS 4 & 5 TO BE REVISED PER DWG D-1
B	AUG/66	GS	TROUGH ELEV. CHANGED.
A	AUG/66	GS	TROUGH ELEV. CHANGED, NOTE ADDED

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — E. SCHULTZ — REGISTERED ENGINEER

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

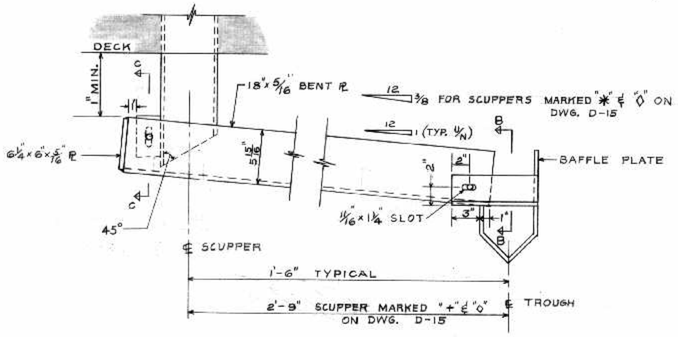
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

DECK DRAINAGE LAYOUT AND DETAILS

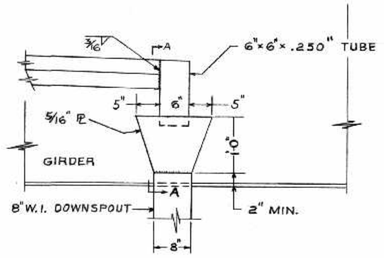
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-15



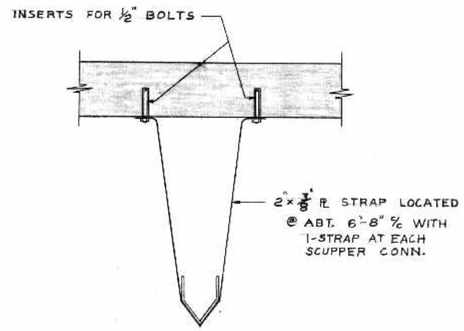
SCUPPER – TROUGH CONNECTION

SCALE 1½" = 1'-0"



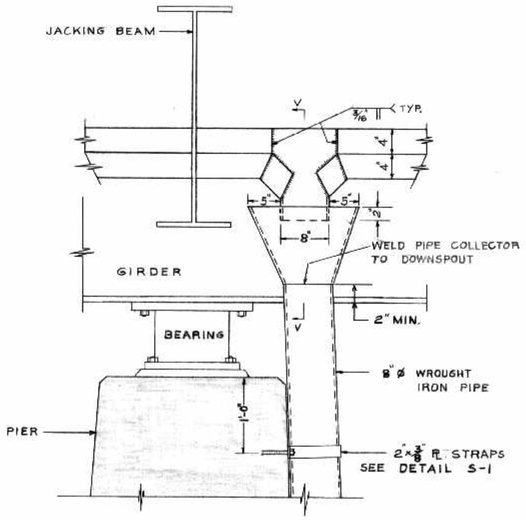
COLLECTOR DETAIL FOR 6" SINGLE TROUGH

SCALE ¾" = 1'-0"



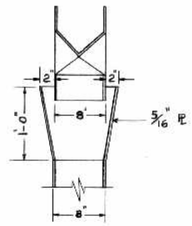
TROUGH STRAP DETAIL

N.T.S.



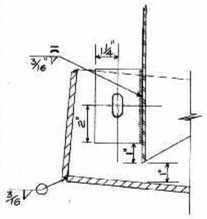
COLLECTOR DETAIL (8" TROUGH SHOWN)

SCALE 1" = 1'-0"



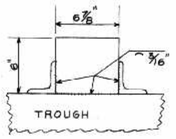
SECTION V-V

SCALE 1" = 1'-0"



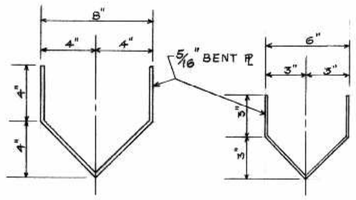
SECTION D-D

SCALE 3" = 1'-0"



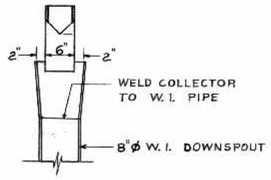
BAFFLE PLATE DETAIL

SCALE 1½" = 1'-0"



8" TROUGH DETAIL

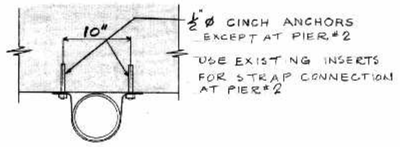
6" TROUGH DETAIL



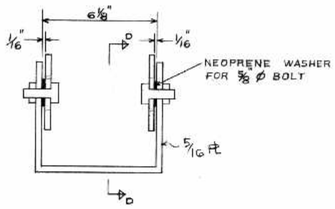
SECTION A-A

¾" = 1'-0"

NOTE
FIELD SPLICES OF TROUGHS TO BE FULL STRENGTH WELDED BUTT SPLICES.

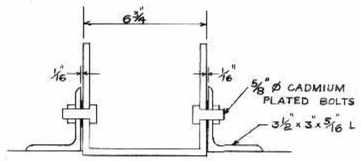


DETAIL S-1



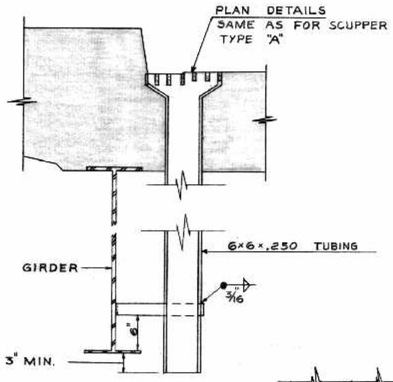
SECTION C-C

SCALE 3" = 1'-0"



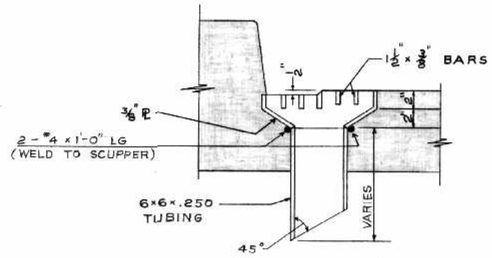
SECTION B-B

SCALE 3" = 1'-0"



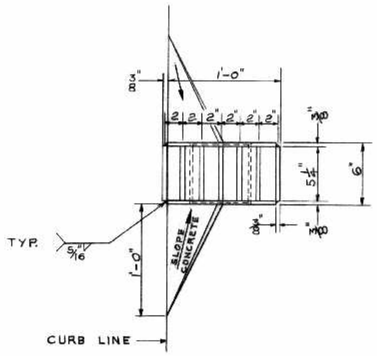
SCUPPER TYPE "B"

SCALE 1" = 1'-0"



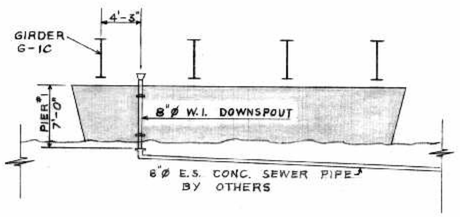
SCUPPER TYPE "A"

SCALE 1½" = 1'-0"

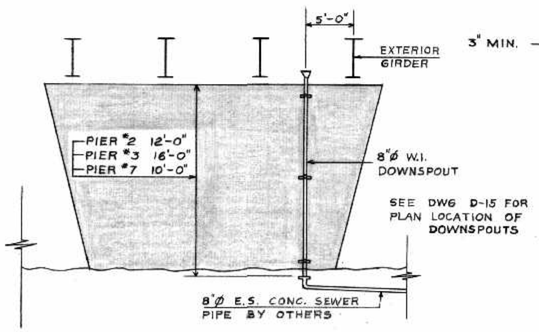


PLAN TYPE "A" SCUPPER

SCALE 1½" = 1'-0"

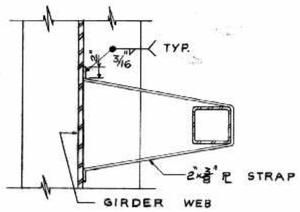


ELEVATION OF DOWNSPOUT AT PIER #1



SCALE ⅛" = 1'-0"

ELEVATION OF DOWNSPOUT AT PIERS 2, 3 & 7 (EAST & WEST SIDES SIMILAR)



TYPE "B" SCUPPER STRAP

SCALE 1" = 1'-0"

AS BUILT ALS MAR/68

B-5015-75

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

PROVINCE OF MANITOBA — B. SCHULTZ — REGISTERED ENGINEER

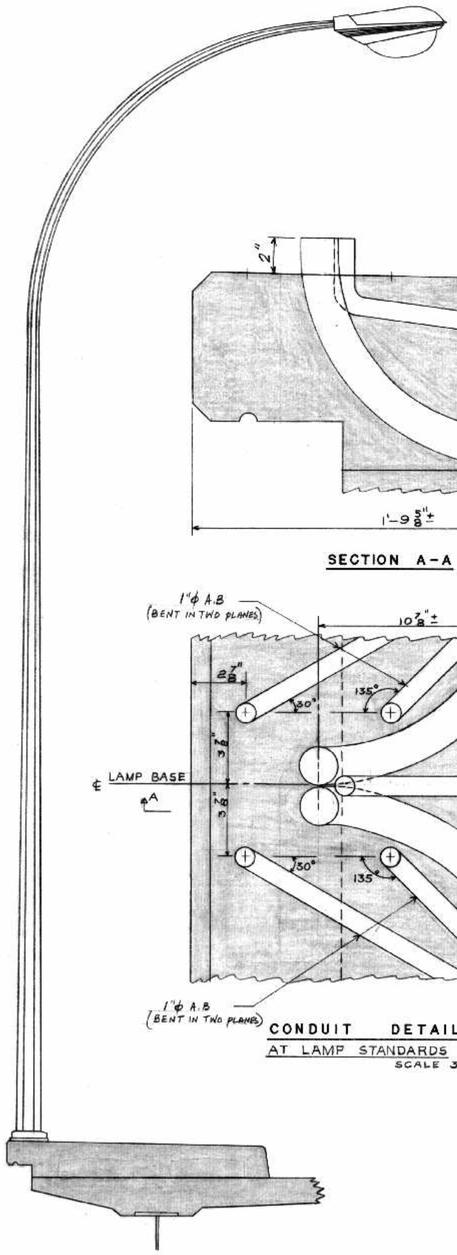
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

DECK DRAINAGE DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

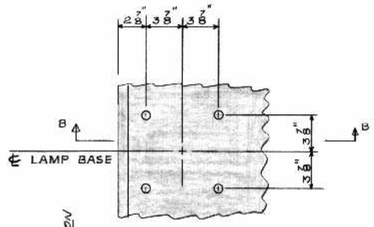
FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	
DWG. No.	D-16



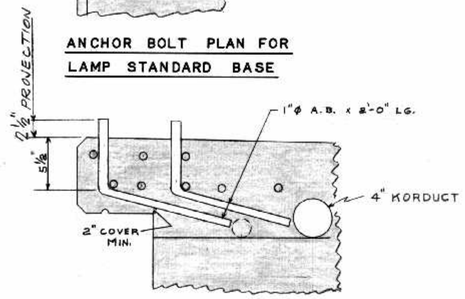
SECTION A-A

CONDUIT DETAIL AT LAMP STANDARDS
SCALE 3" = 1'-0"

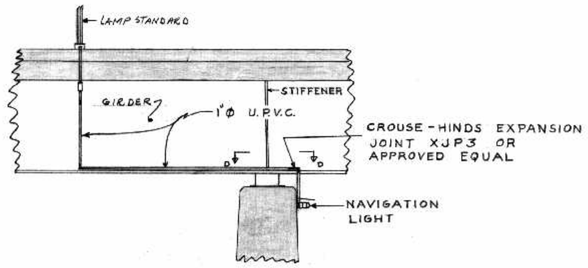
SECTION SHOWING LAMP STANDARD



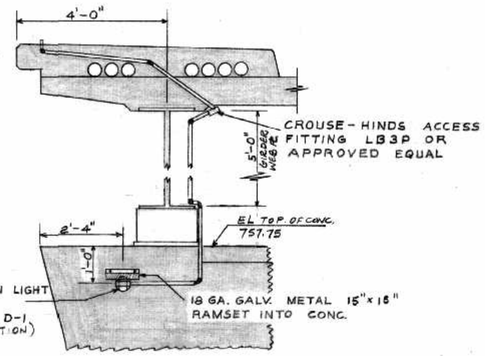
ANCHOR BOLT PLAN FOR LAMP STANDARD BASE



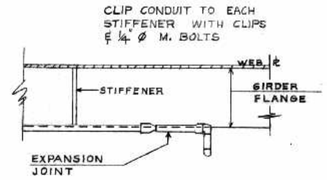
SECTION B-B
SCALE 1 1/2" = 1'-0"



NAVIGATION LIGHT CONDUIT SHOWN ON INSIDE OF GIRDER
N.T.S.

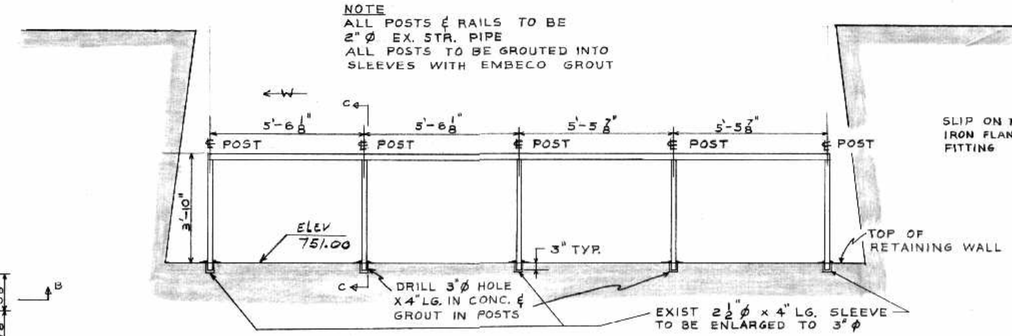


SECTION SHOWING NAVIGATION LIGHT CONNECTION
SCALE 1/2" = 1'-0"

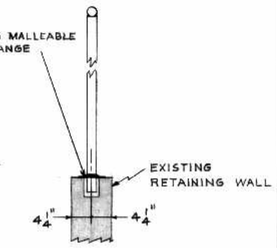


VIEW D-D

NOTE
ALL POSTS & RAILS TO BE 2" ϕ EX. STR. PIPE
ALL POSTS TO BE GROUTED INTO SLEEVES WITH EMBECO GROUT

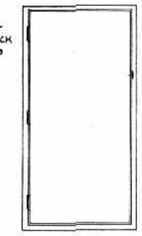


PIPE HANDRAIL ON RETAINING WALL ON PIER #8
SCALE 3/8" = 1'-0"

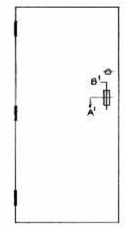


SECTION C-C
SCALE 3/4" = 1'-0"

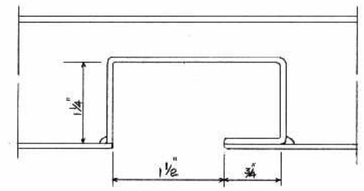
HARDWARE PER DOOR
1 1/2 PR BB 189 4 1/2 x 4 HINGES, 1 ONLY DEADLOCK SIMILAR SCHLAGE B260 (CYLINDER OUTSIDE, THUMB TURN INSIDE)



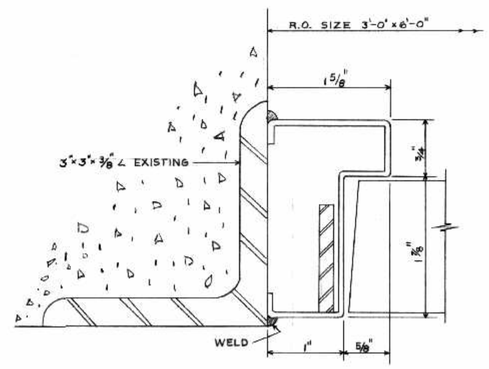
FRAME ELEV.



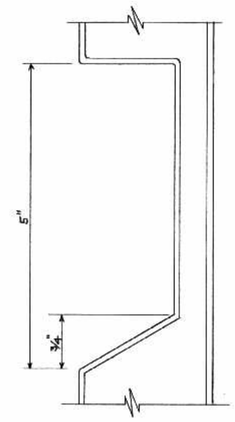
DOOR ELEV.



SECTION A'



FRAME SECTION



SECTION B'

ABUTMENT DOOR DETAILS (2-REQ'D)
SCALE - FULL SIZE

AS BUILT ALS 07/08/68

B-5015-77

NO.	DATE	BY	DESCRIPTION

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

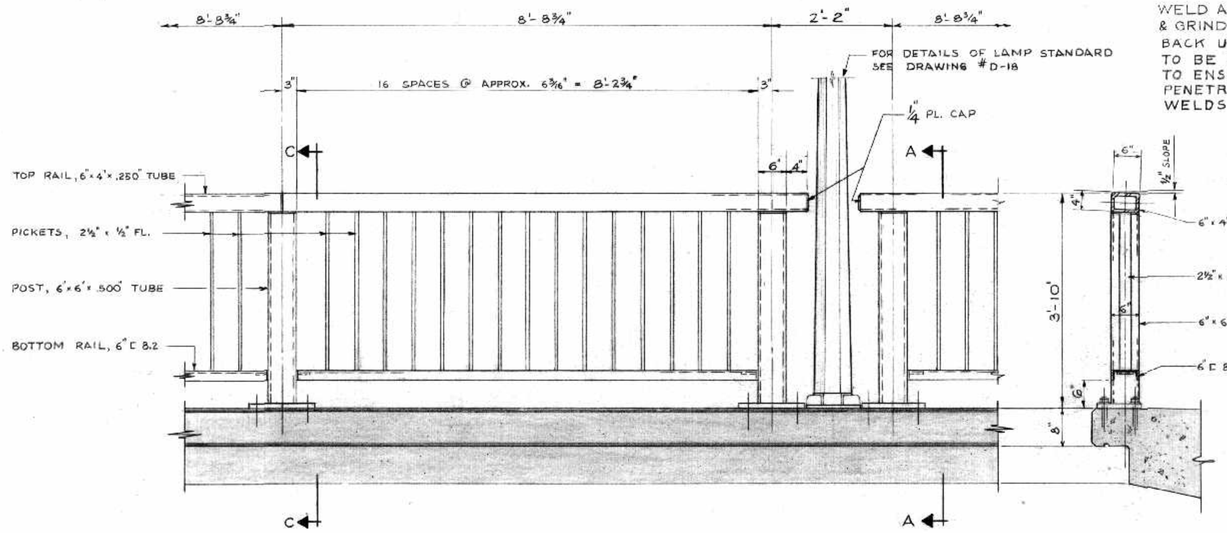
ELECTRICAL AND MISCELLANEOUS DETAILS

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	
DWG. No.	D-18

PROVINCE OF MANITOBA D. J. SAMPSON REGISTERED ENGINEER

PROVINCE OF MANITOBA E. SCHULTZ REGISTERED ENGINEER



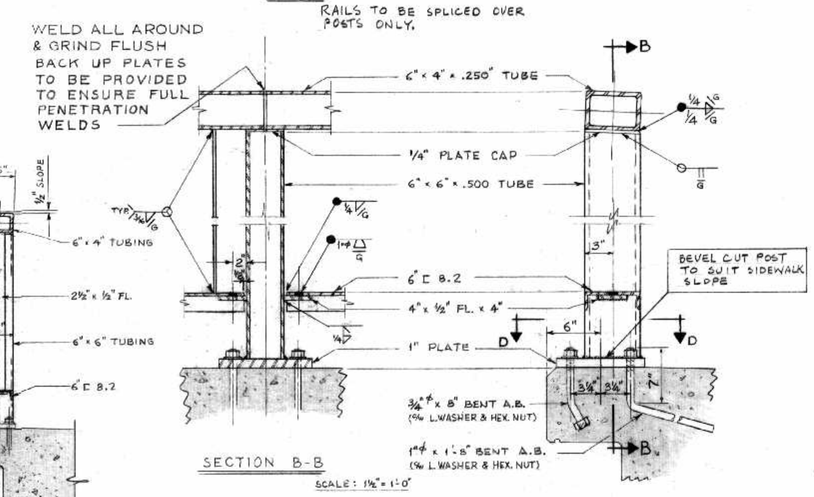
TYPICAL SIDEWALK GUARDRAIL

SCALE : ¾" = 1'-0"

SECTION A-A

NOTE

RAILS TO BE SPLICED OVER POSTS ONLY.

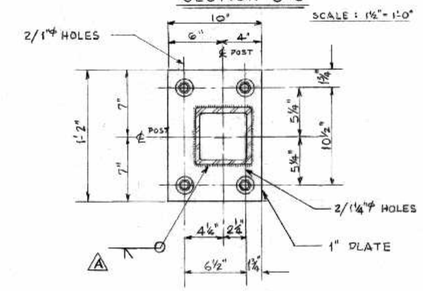


SECTION B-B

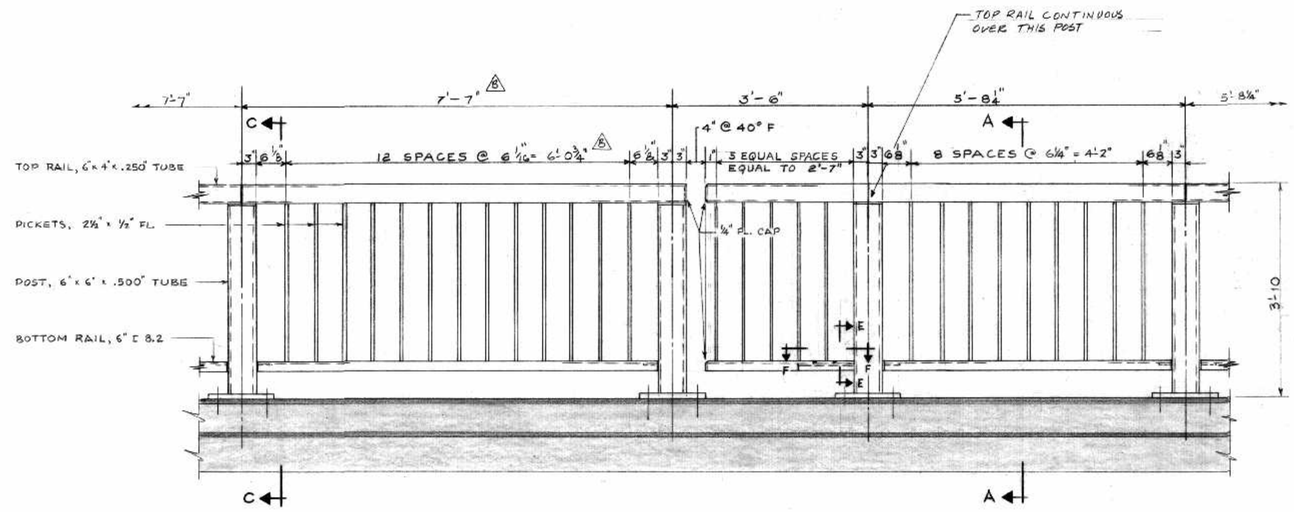
SCALE : 1½" = 1'-0"

SECTION C-C

SCALE : 1½" = 1'-0"

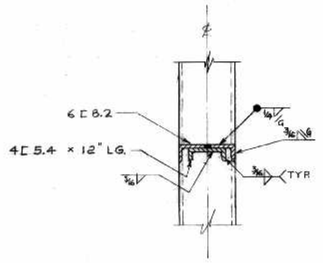


SECTION D-D

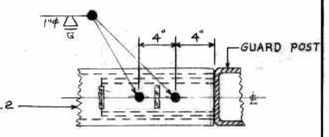


SIDEWALK GUARDRAIL AT ABUTMENTS

SCALE : ¾" = 1'-0"



SECTION E-E



SECTION F-F

NOTES

- FOR SPACING OF GUARDRAIL POSTS SEE DWG D-1
- GUARDRAIL POSTS TO BE VERTICAL THROUGHOUT ENTIRE LENGTH OF BRIDGE

AS BUILT ALS MAR/68

B-5015-78

NO.	DATE	BY	DESCRIPTION
B	SEPT 21	GS	GUARDRAIL SPACING REVISED
A	SEPT 9	GS	POST BASE & WELD REVISED

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — G. SCHULTZ — REGISTERED ENGINEER

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

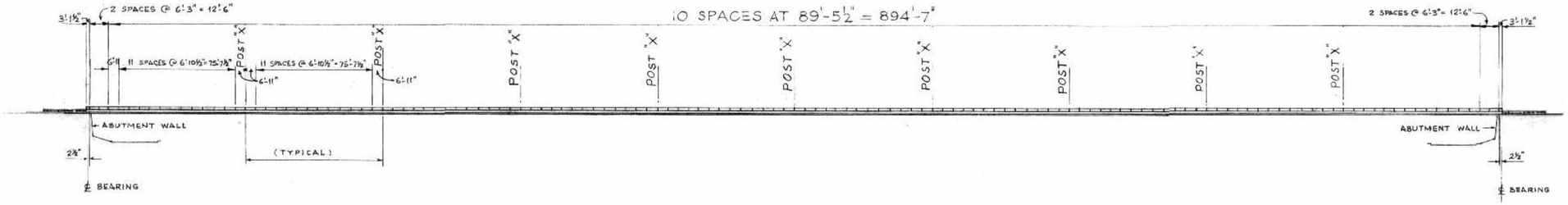
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

SIDEWALK GUARDRAIL DETAILS

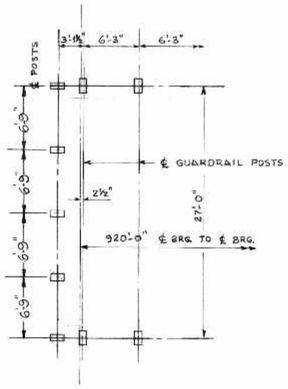
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-19

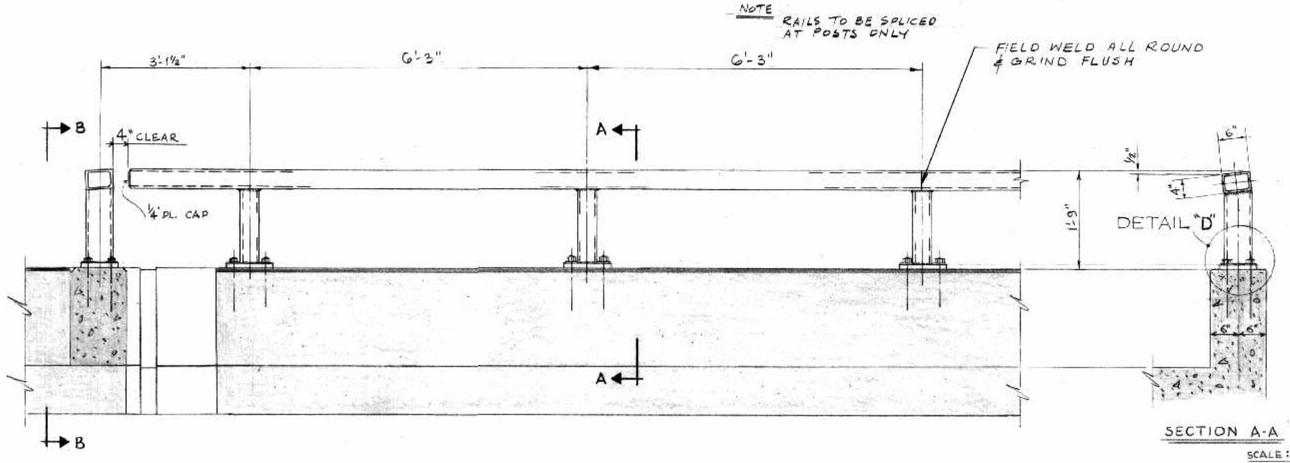


ELEVATION OF SAFETY CURB GUARDRAIL

SCALE: 1" = 40'-0"

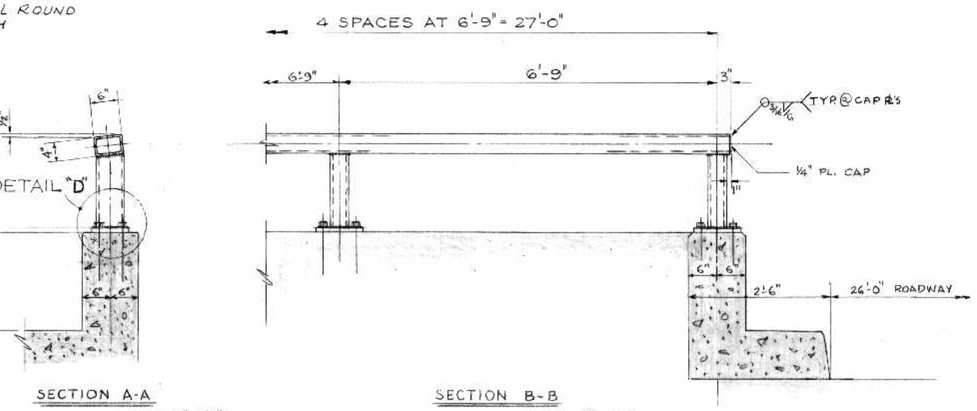


POSITIONING OF GUARDRAIL POSTS AT ABUTMENTS



SAFETY CURB GUARDRAIL AT ABUTMENTS

N.T.S.



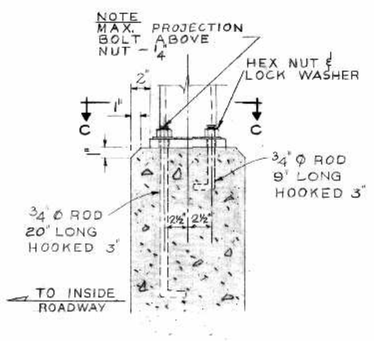
SECTION A-A

SCALE: ¾" = 1'-0"

SECTION B-B

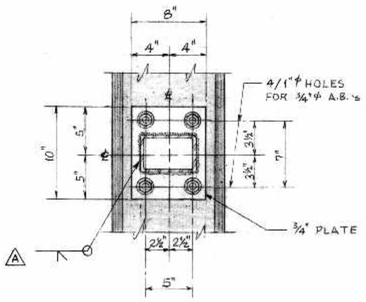
SCALE: ¾" = 1'-0"

NOTE
POSTS TO BE IN CORRECT ALIGNMENT AND AT CORRECT ELEVATION BEFORE FIELD WELDING RAILS



DETAIL "D"

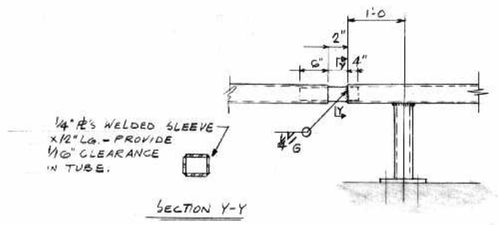
SCALE: 1½" = 1'-0"



SECTION C-C

SCALE: 1½" = 1'-0"

(TYPICAL FOR ALL POSTS)



DETAIL POST "X"

N.T.S.

NOTE
ALL RAILS 6 × 4 × .1875 TUBE
ALL POSTS 6 × 4 × .250 TUBE

AS BUILT ALS mar/68

B-5015-79

NO.	DATE	BY	DESCRIPTION
1	Aug 18 68	J.D.H.	POST TO BASE PL. WELD REVISED

REVISIONS

APPROVED BY

DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — G. SCHULTZ — REGISTERED ENGINEER

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

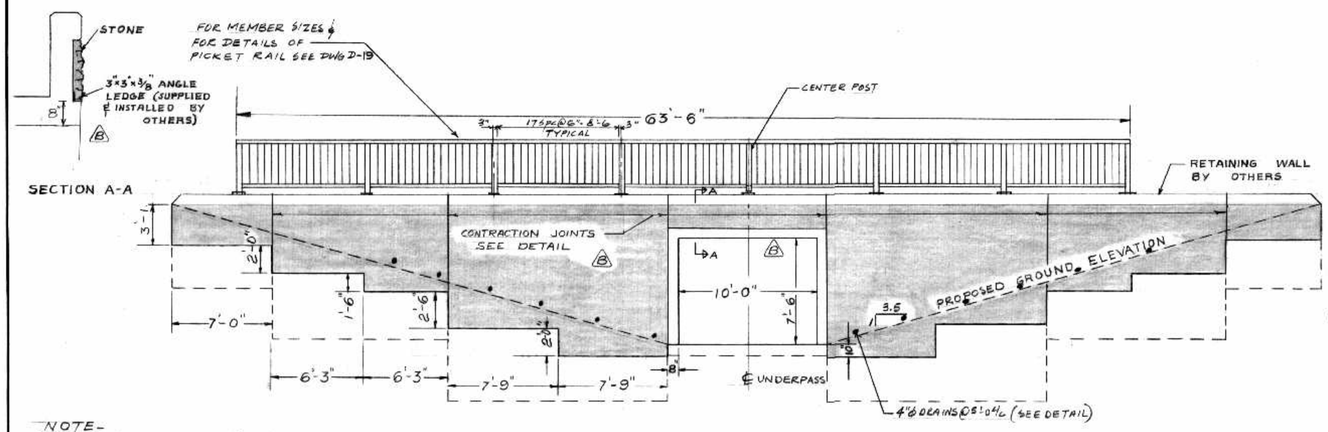
ST. VITAL BRIDGE PROJECT

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

SAFETY CURB GUARDRAIL DETAILS

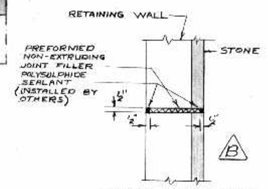
T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-20

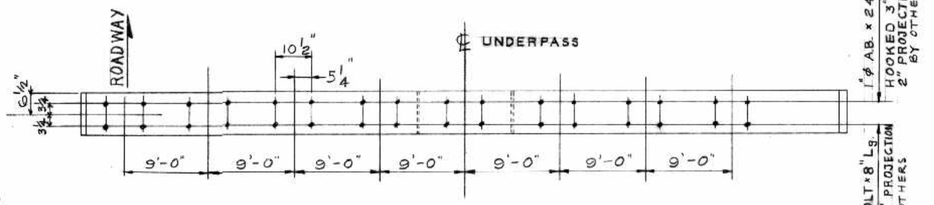


NOTE- STONEWORK SHOWN SHADED. CONTRACTOR TO INSTALL DOVETAIL ANCHORS IN EXISTING ANCHOR SLOTS @ 16" B.W.

NORTH UNDERPASS STA. 9 + 60 WEST ELEVATION
(EAST ELEVATION SIMILAR)

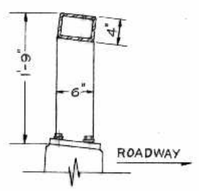


NORTH UNDERPASS
CONTRACTION JOINT DETAIL

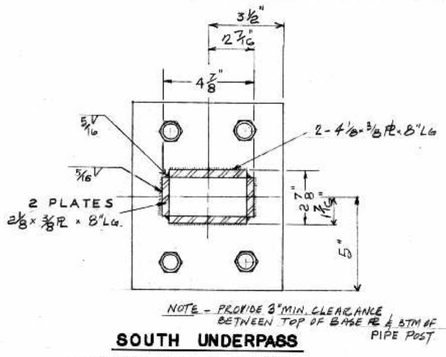


NORTH UNDERPASS
ANCHOR BOLT LAYOUT FOR GUARDRAIL

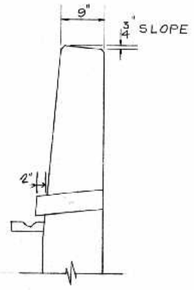
NOTE
CONTRACTOR TO CHECK LOCATION & ELEVATIONS OF ANCHOR BOLTS BEFORE FABRICATION OF GUARDRAILS.



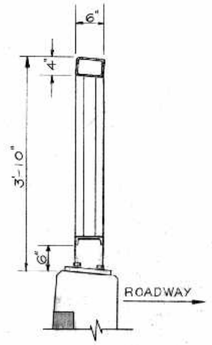
SOUTH UNDERPASS
TYPICAL CROSS SECTION



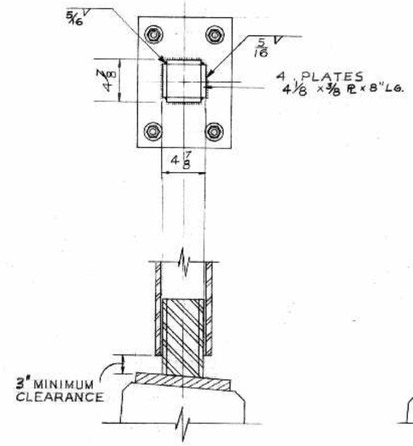
SOUTH UNDERPASS
CENTER POST DETAIL



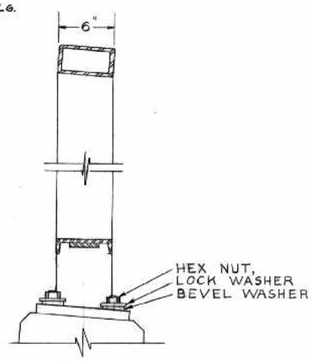
SOUTH UNDERPASS
SECTION THRU
RETAINING WALL



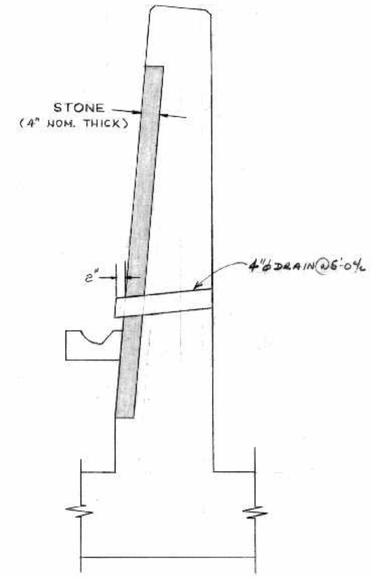
NORTH UNDERPASS
PICKET CROSS SECTION



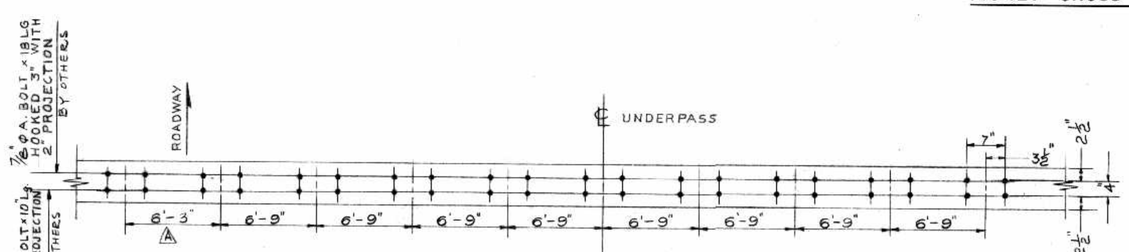
NORTH UNDERPASS
CENTER POST DETAIL



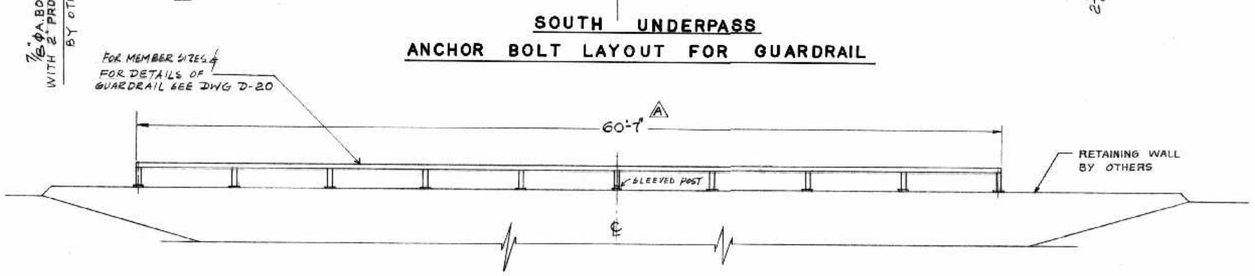
NORTH UNDERPASS
TYPICAL POST SECTION



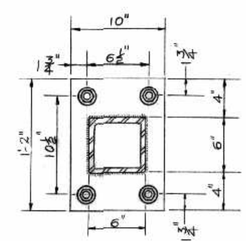
SECTION THRU NORTH UNDERPASS
RETAINING WALL



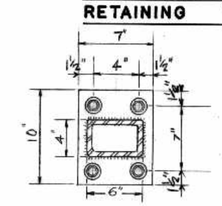
SOUTH UNDERPASS
ANCHOR BOLT LAYOUT FOR GUARDRAIL



SOUTH UNDERPASS STA. 30 + 00
WEST ELEVATION
(EAST ELEVATION SIMILAR)



NORTH UNDERPASS
BASE PLATE DETAIL



SOUTH UNDERPASS
BASE PLATE DETAIL

AS BUILT ALS MAR/68

B-5015-80

NO.	DATE	BY	DESCRIPTION
2	SEPT 28 1967	ALS	NORTH UNDERPASS CONTRACTION JOINTS SHOWN
1	AUG 1966	GS	DIMENSION REVISED

REVISIONS

APPROVED BY
DEPUTY DIRECTOR OF STREETS & TRANSIT

PROVINCE OF MANITOBA — E. SCHULTZ — REGISTERED ENGINEER

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

ST. VITAL BRIDGE PROJECT

GUARDRAIL & STONEWORK DETAILS FOR PEDESTRIAN UNDERPASSES

PROVINCE OF MANITOBA — D. J. SAMPSON — REGISTERED ENGINEER

T. LAMB, McMANUS & ASSOCIATES LTD.
CONSULTING ENGINEERS
EDMONTON CALGARY WINNIPEG

FILE No.	W-1008
DATE	MAY 1965
SCALE	NOTED
DWN. BY	JB
CHKD. BY	GS
DWG. No.	D-21