

EASTERN LIMIT OF PARISH OF HEADINGLY
 WESTERN LIMIT OF PARISH OF ST. CHARLES

MANITOBA
 2928.45
 RED & WHITE 2"x4" MARKER

HYDRO
 1854.7

RIGHT-OF-WAY
 2290.1

WEST END WATER
 POLLUTION CONTROL
 CENTRE

TOP OF DYKE SHOWN (X-HATCHED)
 WAS DEEDED

TOP OF DYKE (SHOWN SOLID)
 WAS SURFACED WITH
 1/2" STONE CENTRE 12"
 FINISHED BY SEAL COAT
 APPLICATION

NOTE
 THE CONTOURS SHOWN ARE ORIGINAL CONTOURS

AS CONSTRUCTED

REVISIONS:		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
1	NOV 1972	REVISED TO DATE	CHARLESWOOD SEWAGE LAGOON
			GENERAL SITE AND CONTOUR PLAN
DRAWN BY: <i>R. J. Clark</i>		APPROVED: <i>[Signature]</i> ENGINEER OF DESIGN	
CHECKED BY: <i>[Signature]</i>		ENGINEER OF WASTE DISPOSAL	
DESIGNED BY: <i>[Signature]</i>		DIRECTOR AND CHIEF ENGINEER	
LAYOUT BY: <i>[Signature]</i>		DATE: MAY 13/65	DRAWING NO. 1822 265.08.01
		SCALE: 1" = 400'	SHEET 12 OF 14

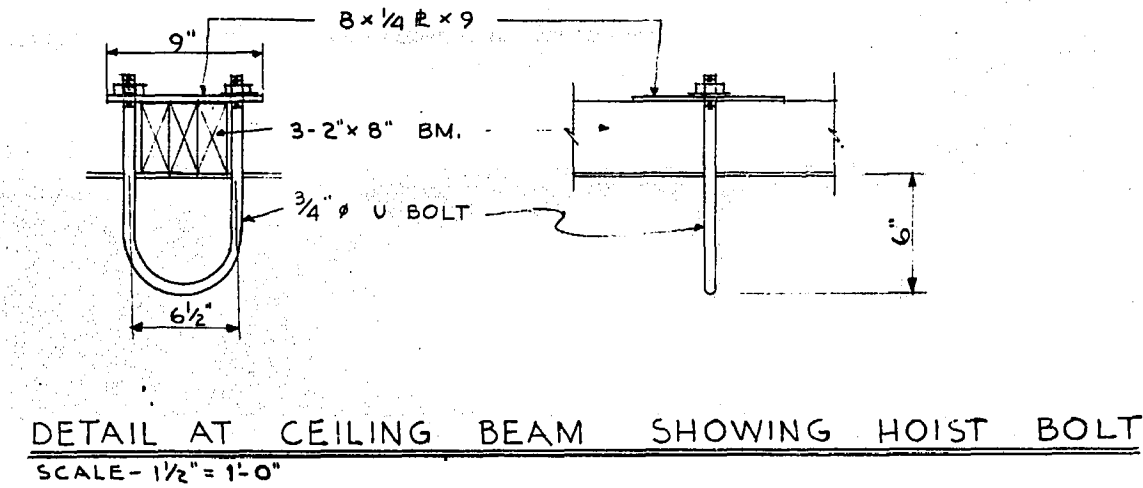
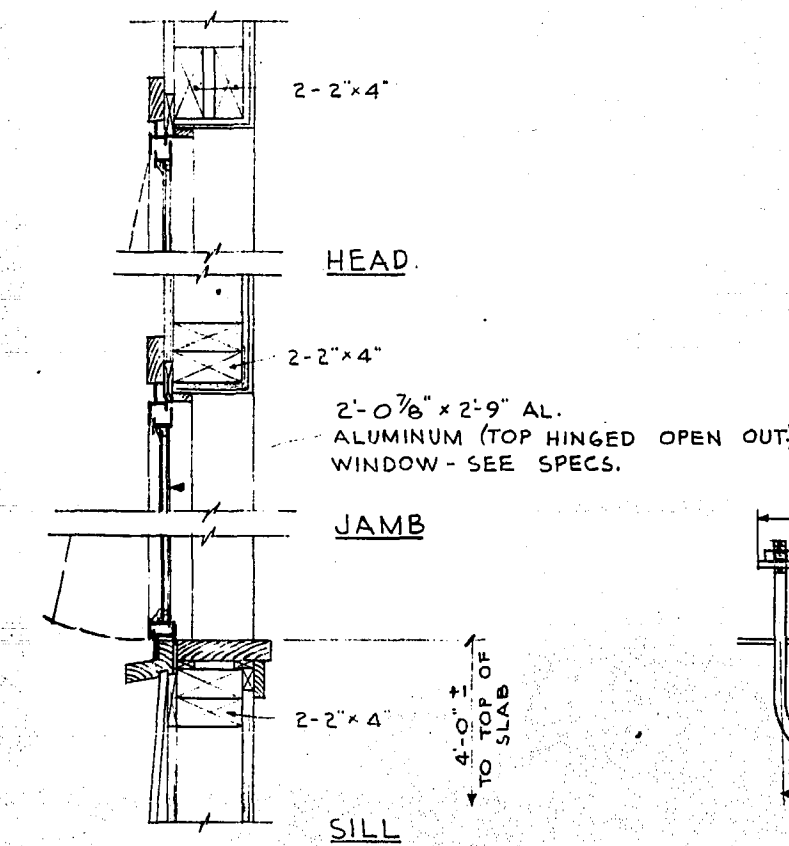
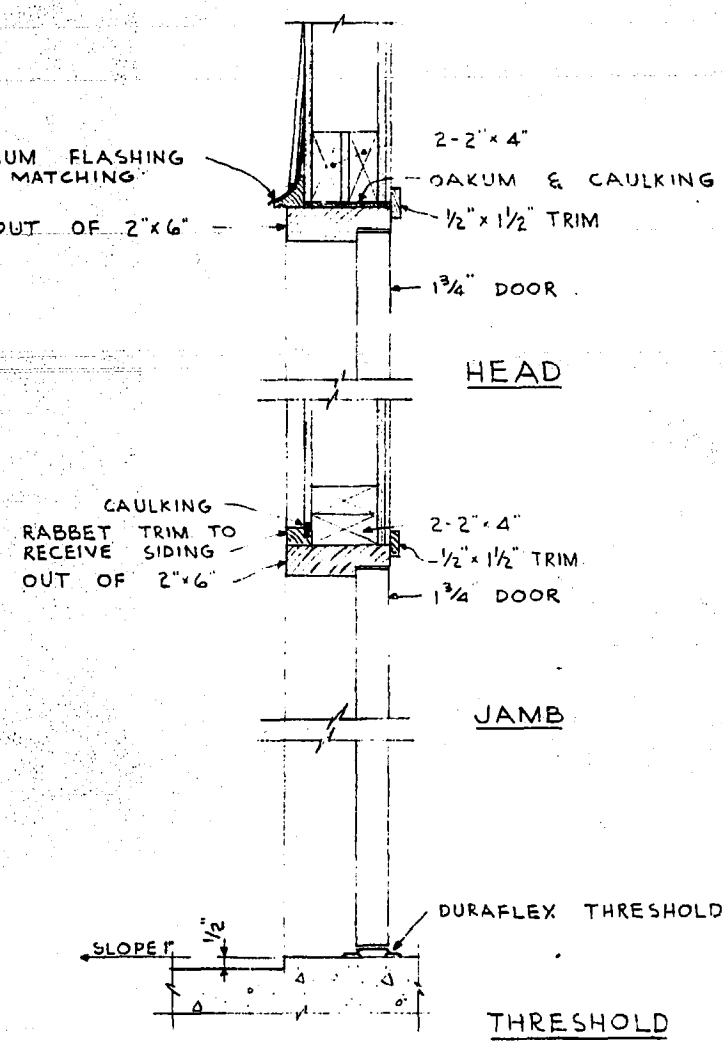
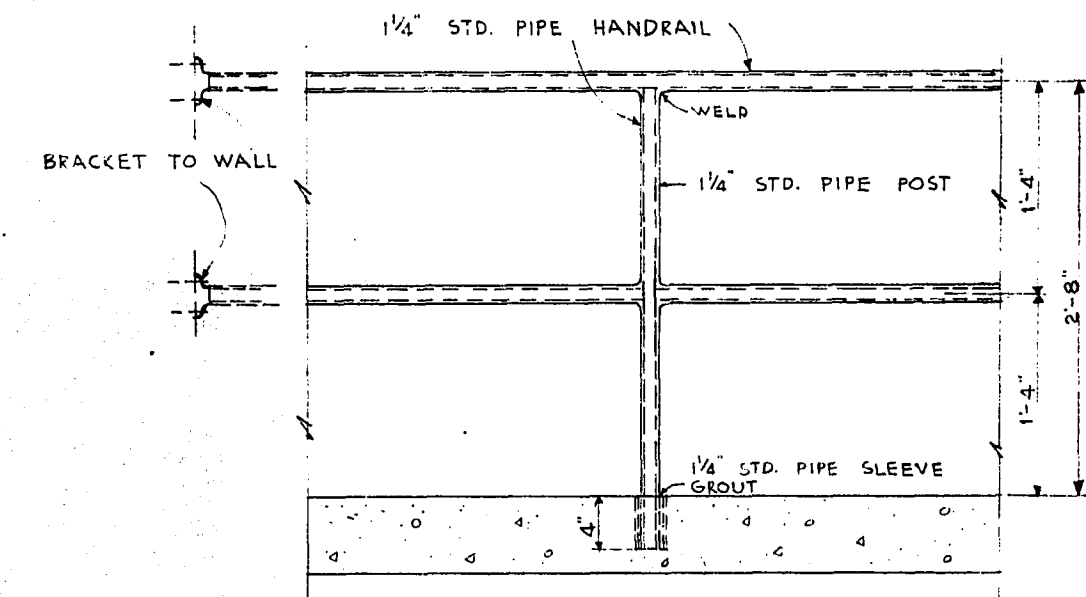
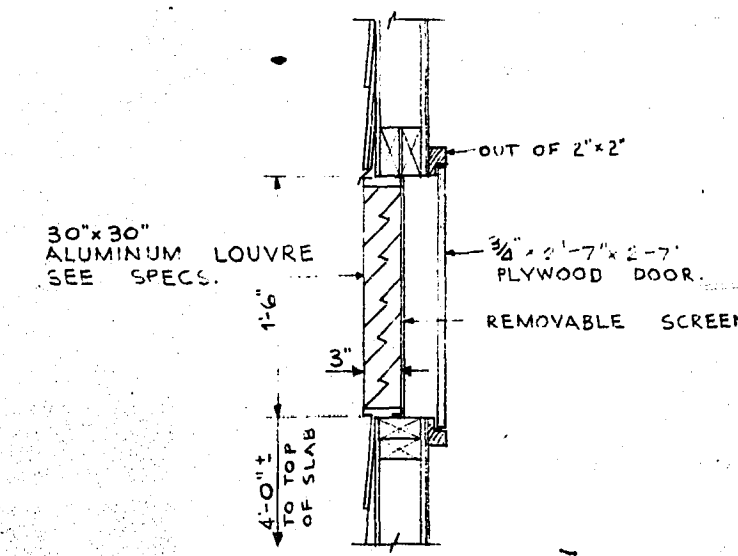
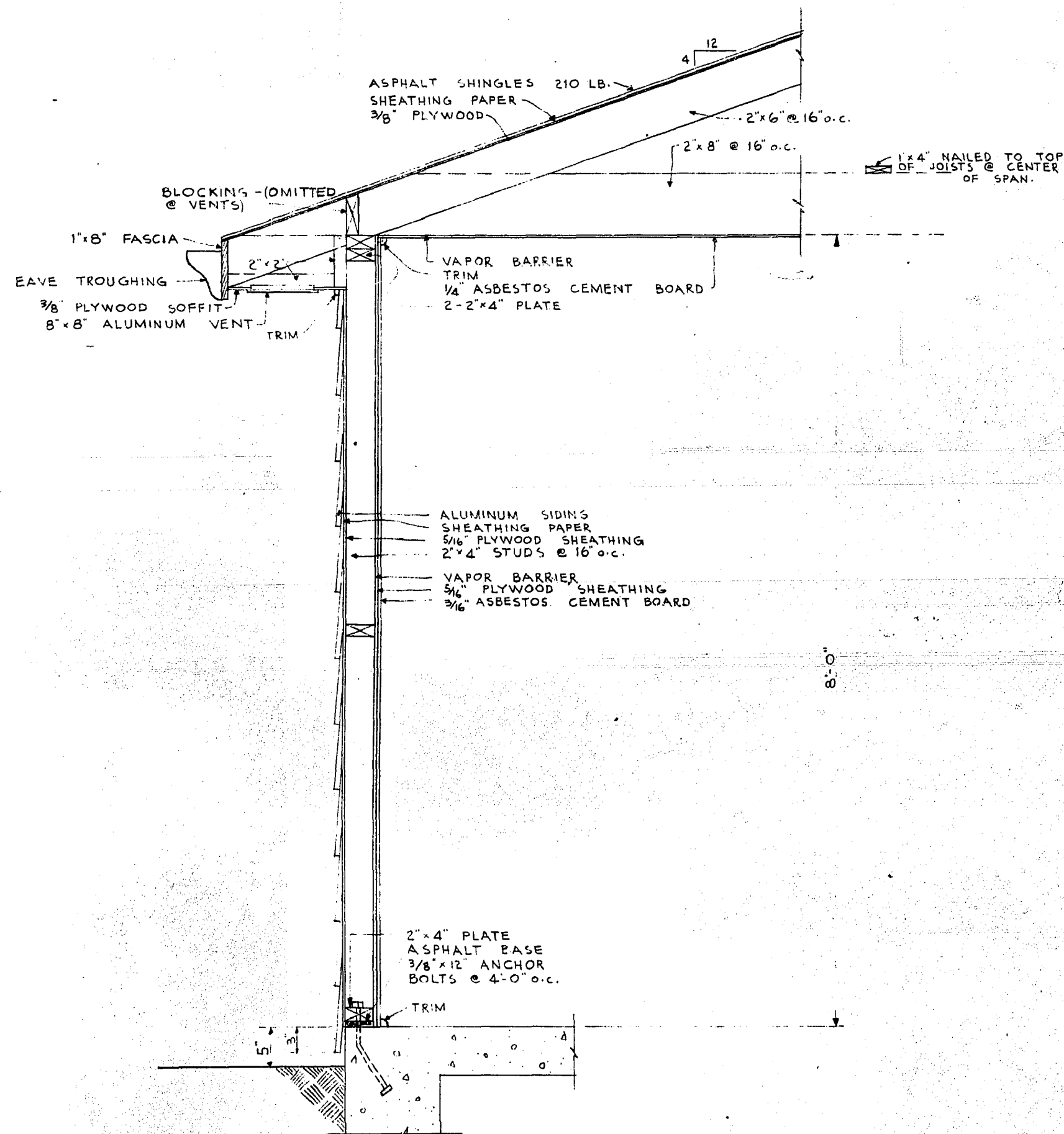
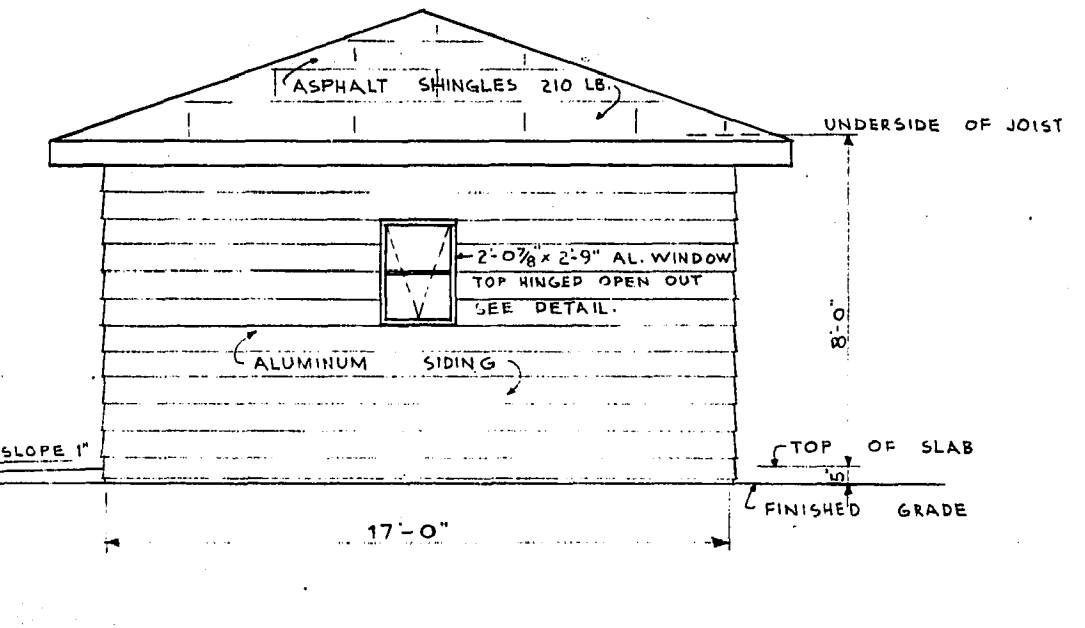
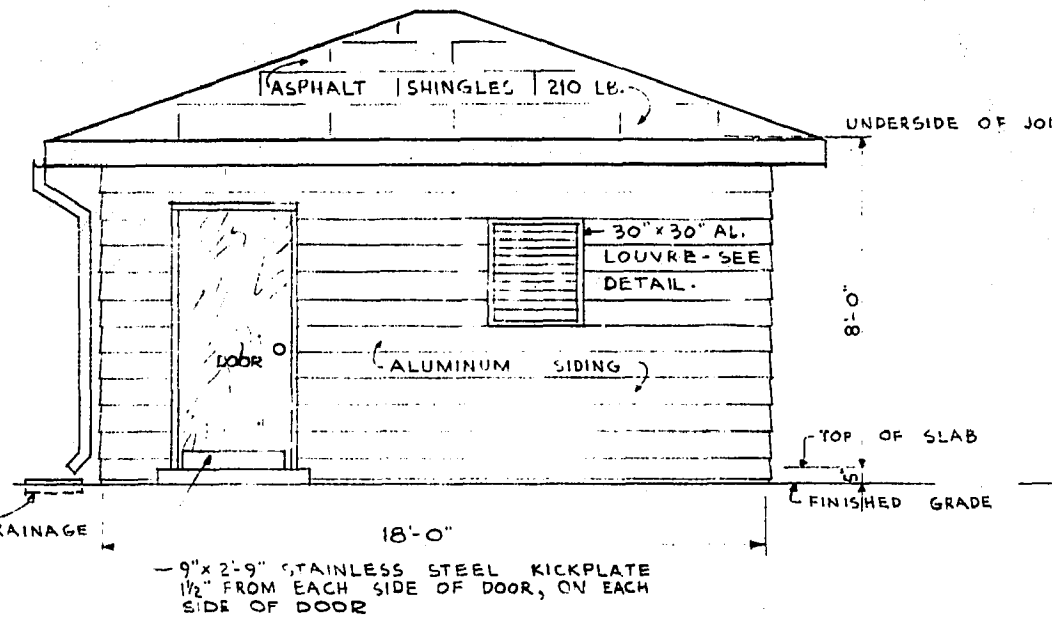
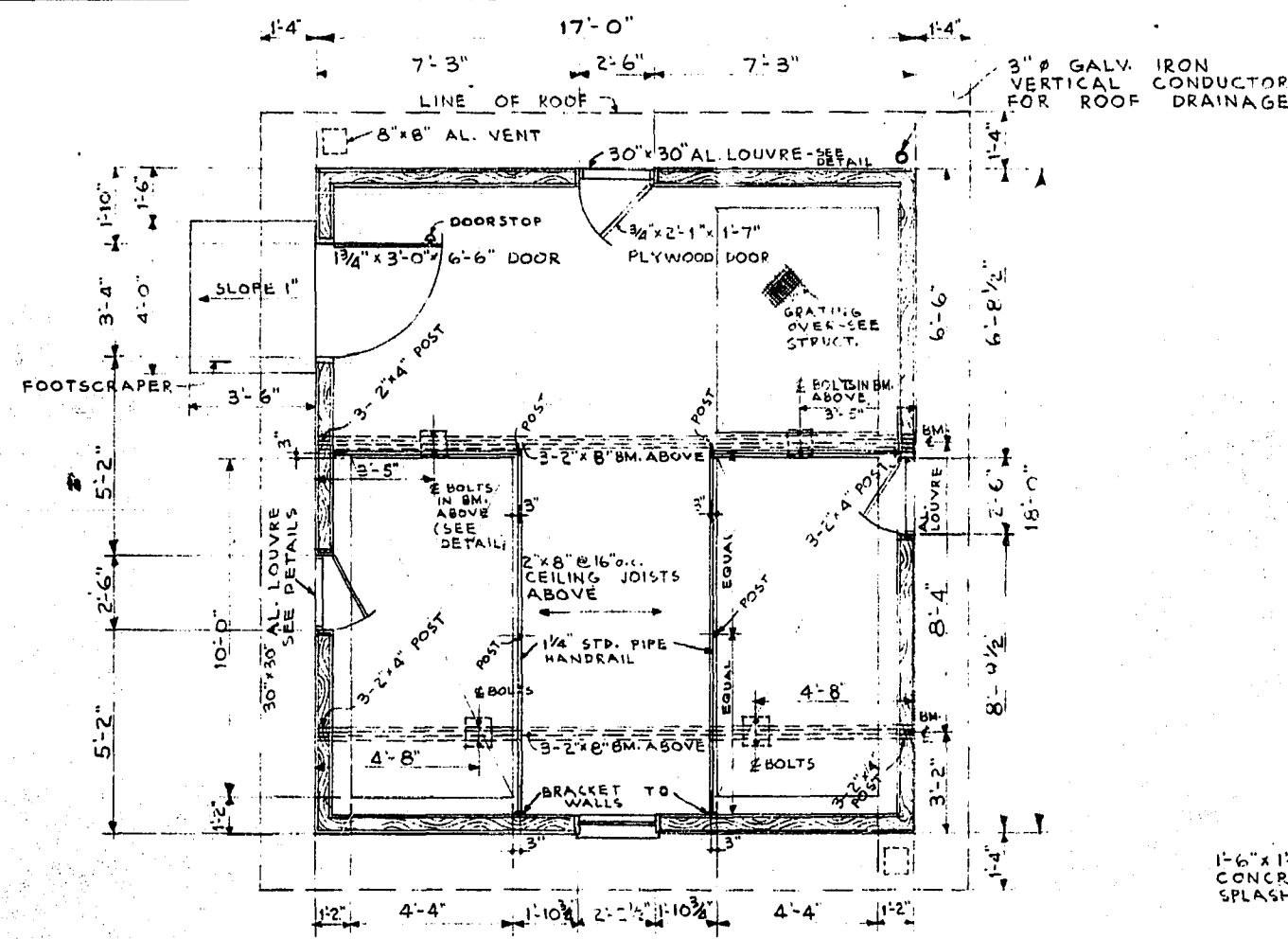
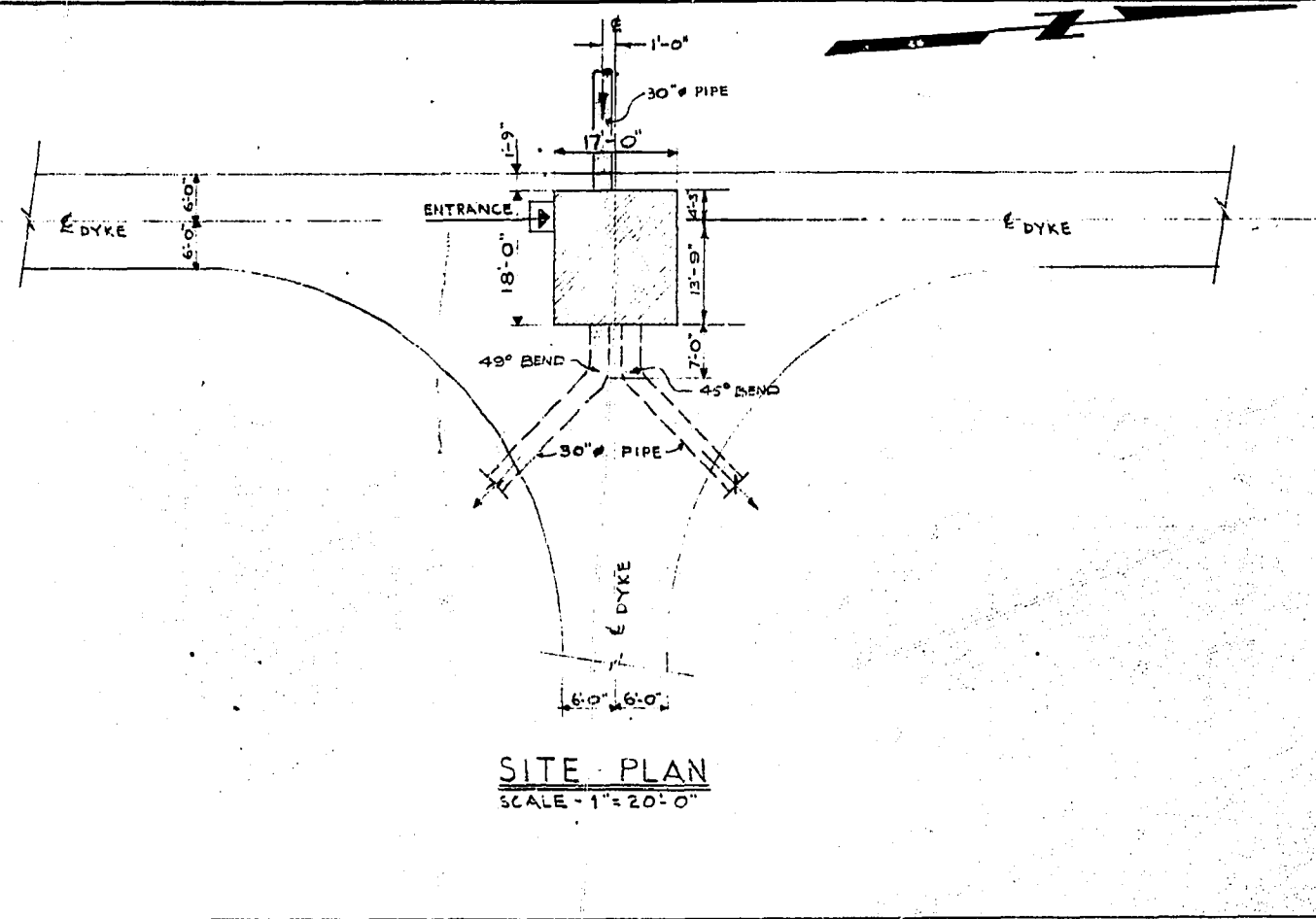
CSL-01

File # MS 10865

REF. or DRAWING NO. CSL-4

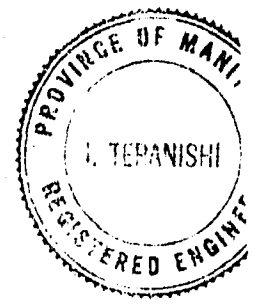
DETAILS ARCHITECT. SITE PLAN,
FLOOR PLAN, ELEVATIONS,
SECTION & DET.

EFFLUENT GATE CHAMBER

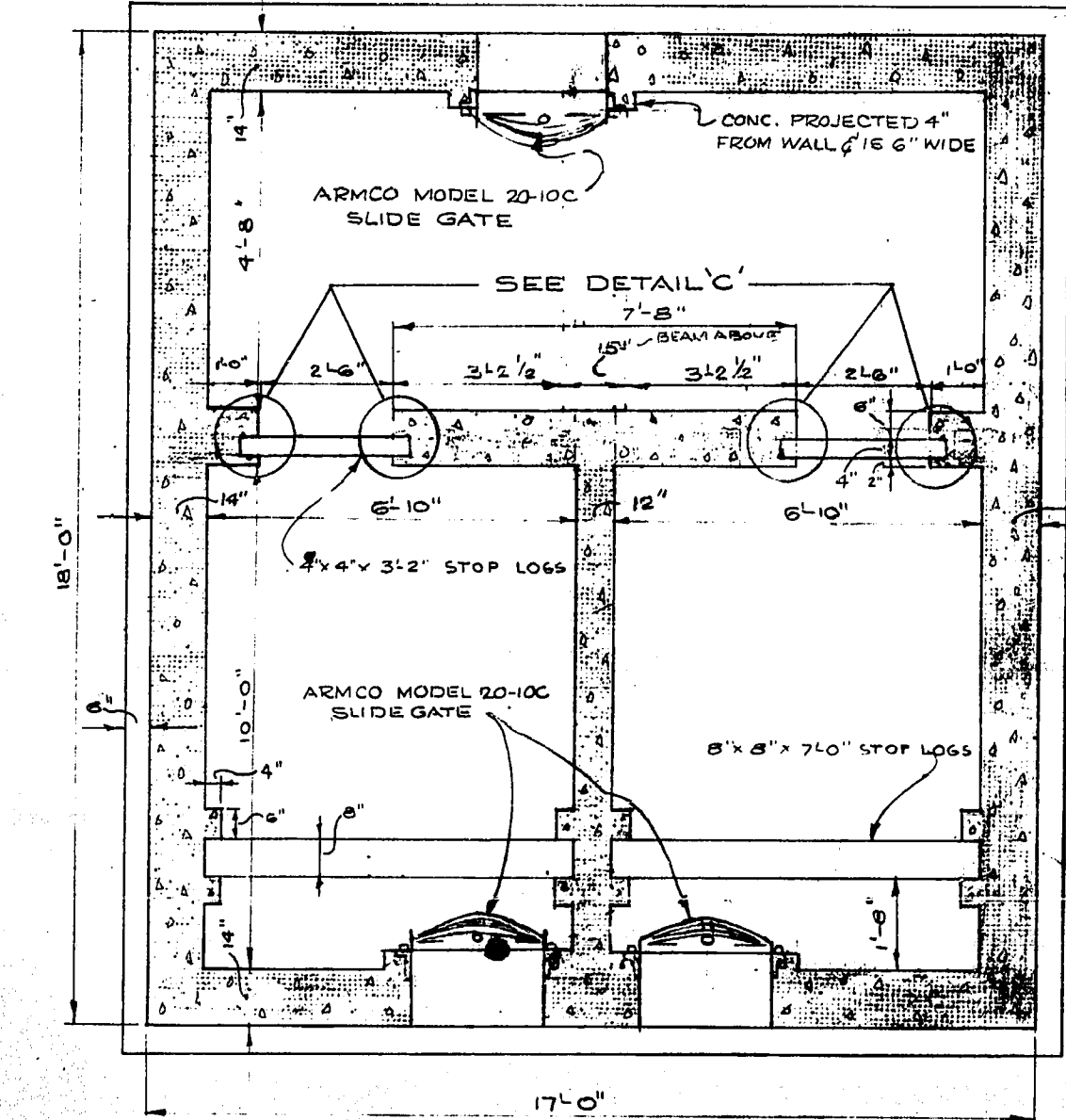
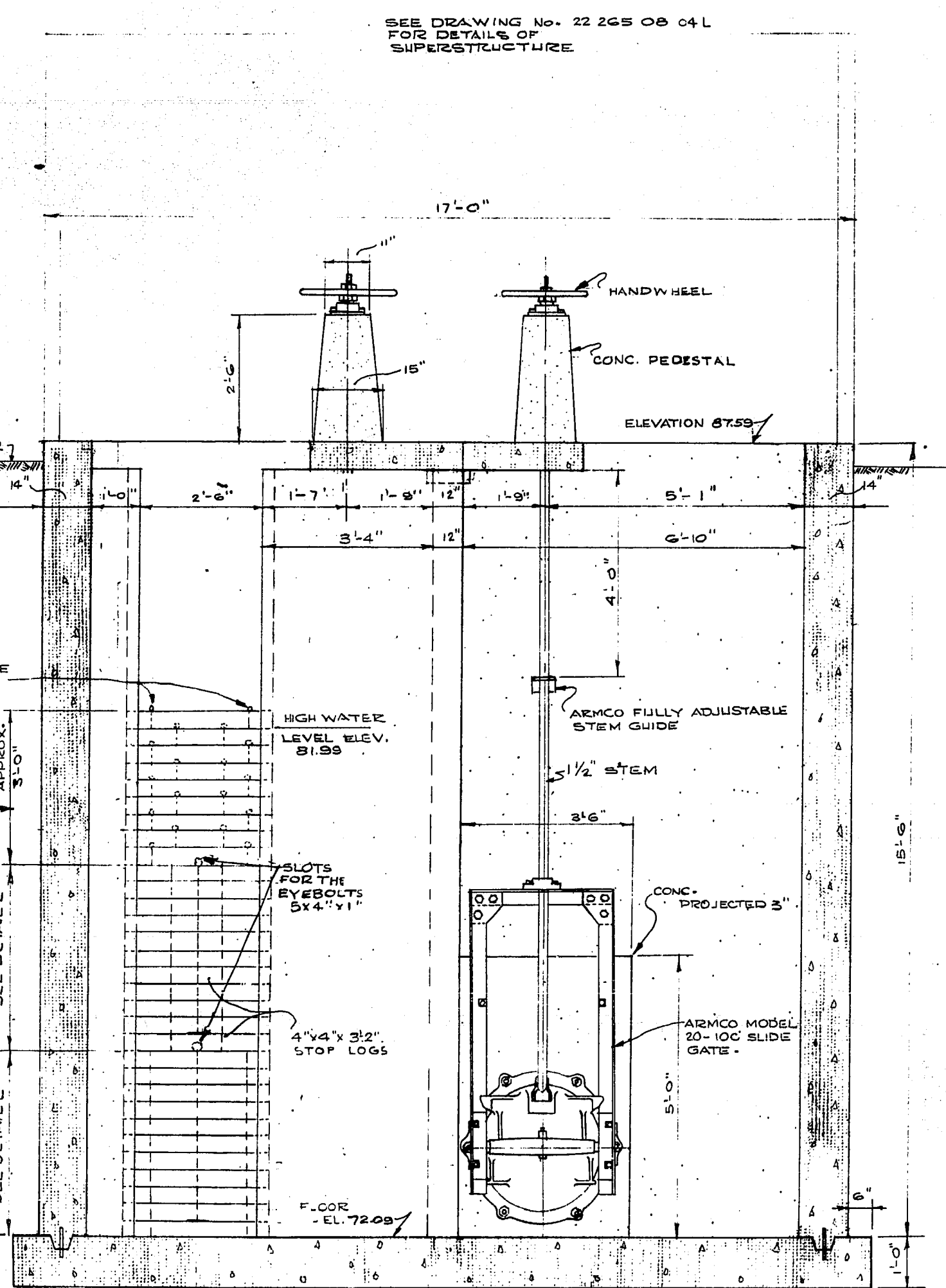
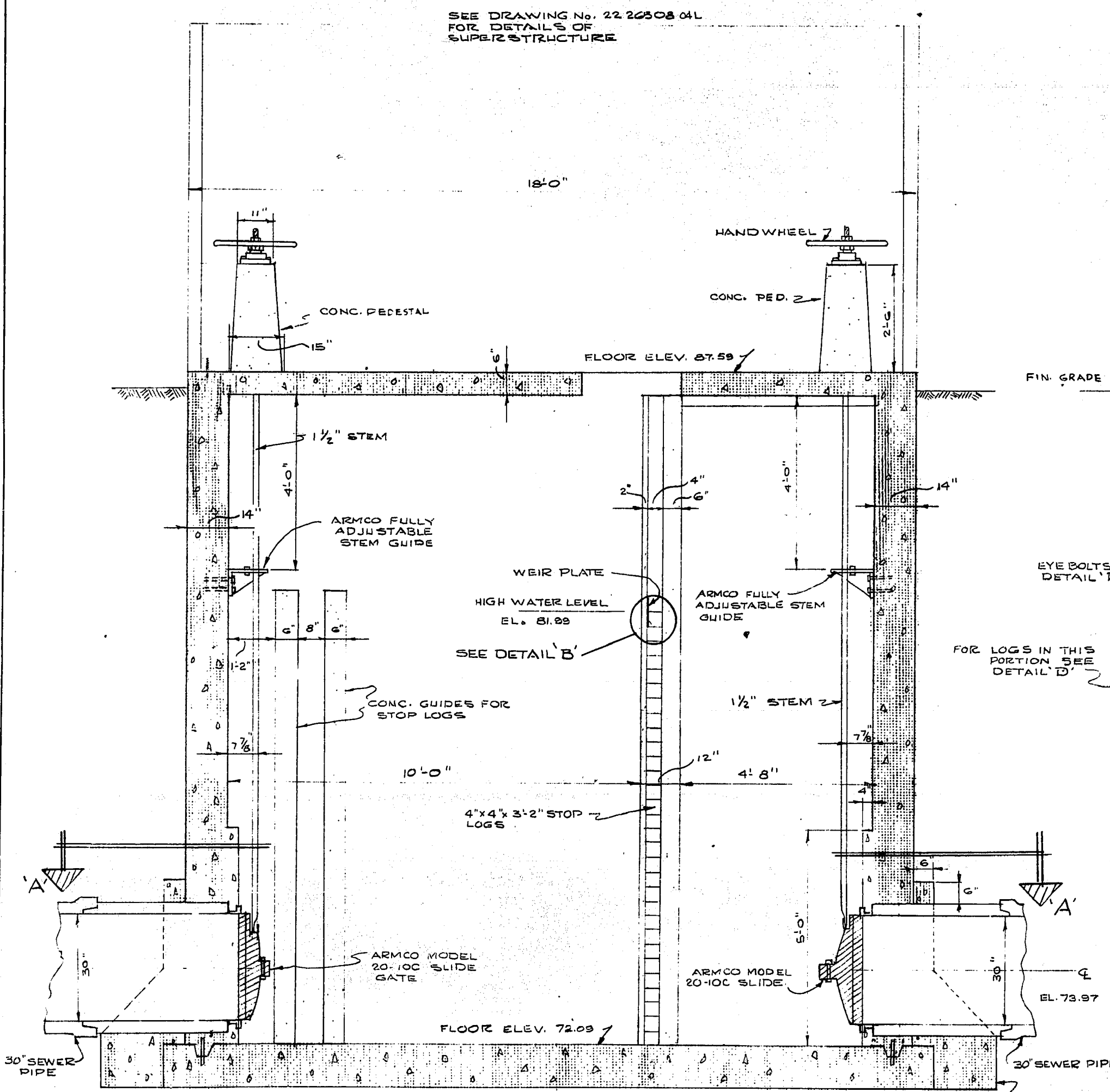
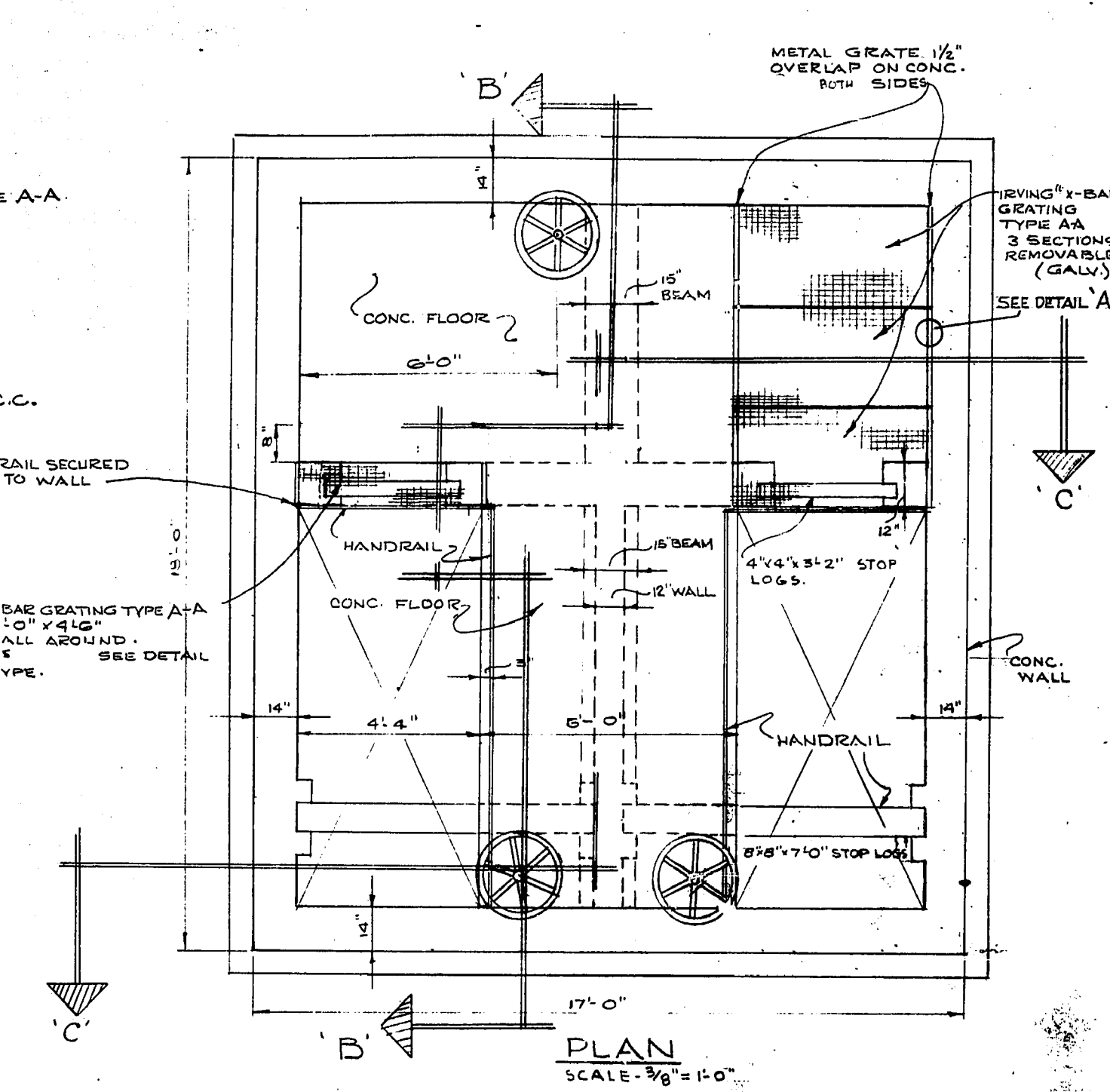
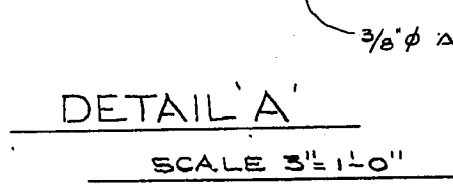
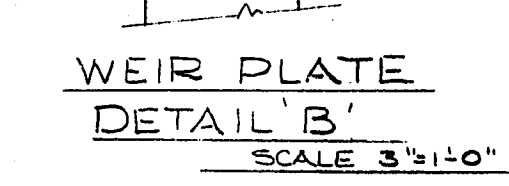
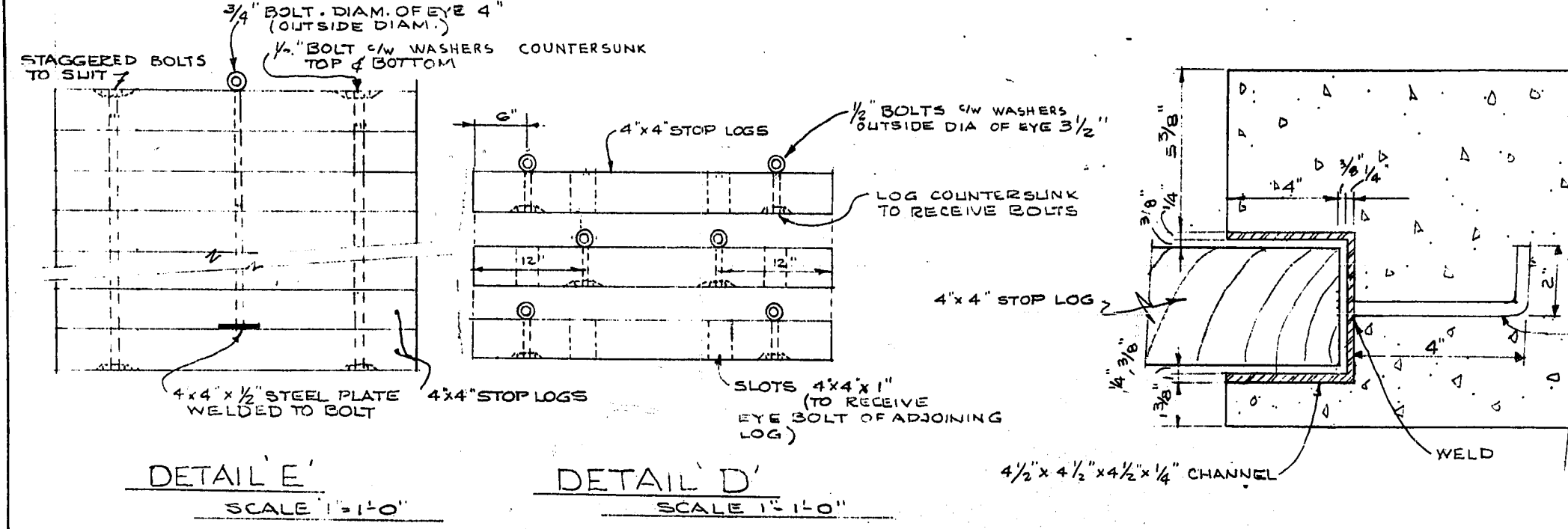


AS CONSTRUCTED

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
1	10/1/63	CHANGED SIZE OF DOOR AND LOUVRE DETAIL	
		CHARLESWOOD SEWAGE LAGOON	
		ARCHITECTURAL SITE PLAN, FLOOR PLAN, ELEVATIONS, SECTION & DETAILS.	
		EFFLUENT GATE CHAMBER	
		UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG	APPROVER <i>W. B. ...</i> ENGINEER OF DESIGN
			<i>A. ...</i> ENGINEER OF WASTE DISPOSAL
			<i>R. ...</i> DIRECTOR AND CHIEF ENGINEER
DRAWN BY: D.B.		DATE: MAY 13, 1965	SCALE: AS SHOWN
TRACED BY:		DRAWING NO. AB-22-265-08-04L	SHEET 4 OF 14
CHECKED BY: G.B.S.			CSL-4
DESIGNED BY: I.T.			
LAND BY:			

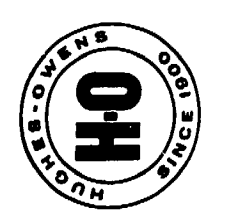
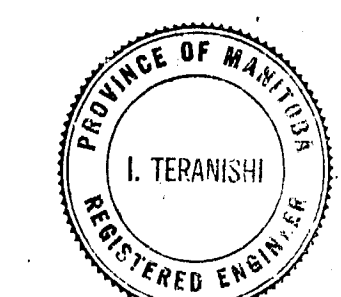


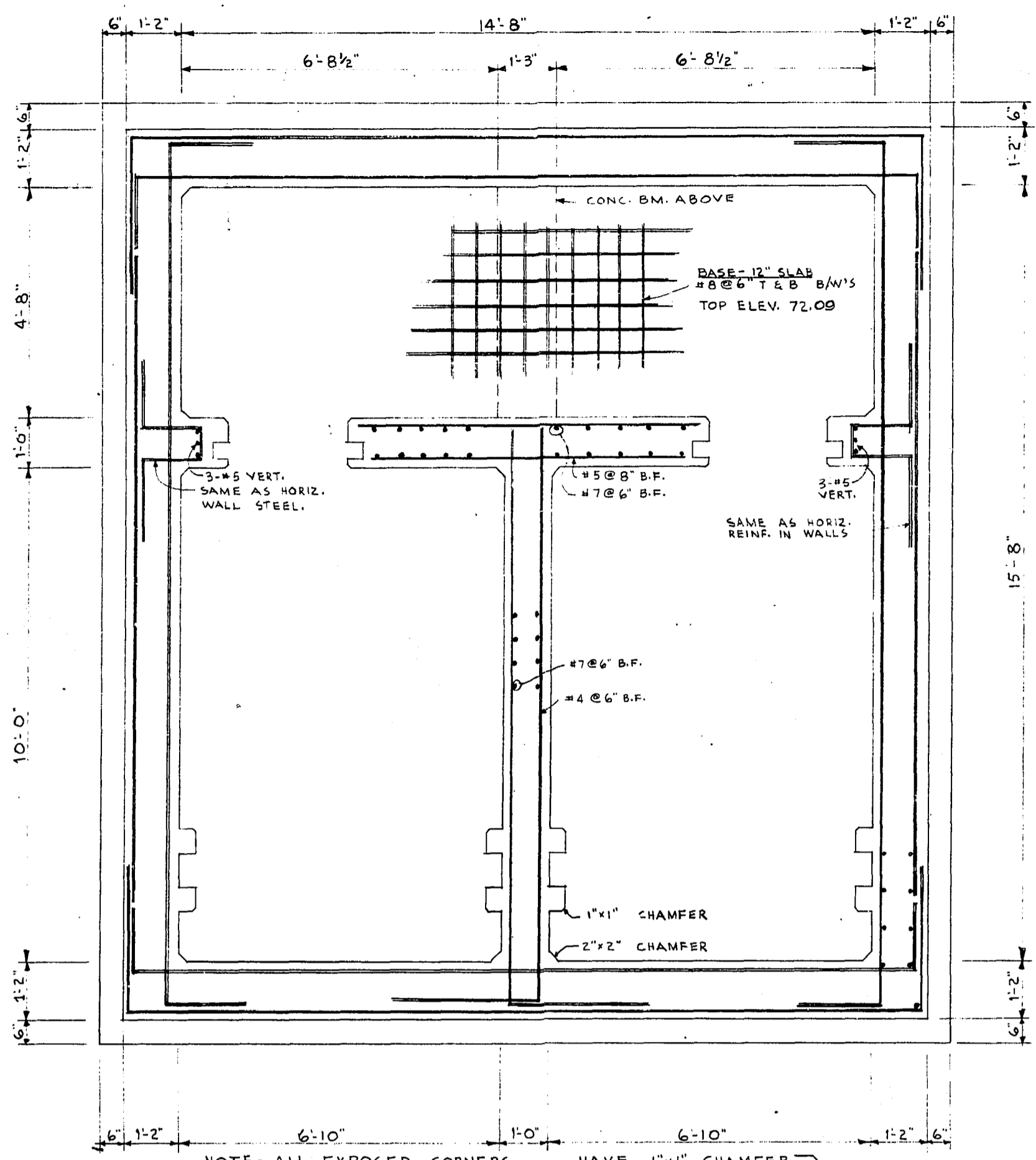
REF. OF DRAWING No. CSL-5
 DETAILS EFFLUENT GATE
 CHAMBER. DET.



AS CONSTRUCTED

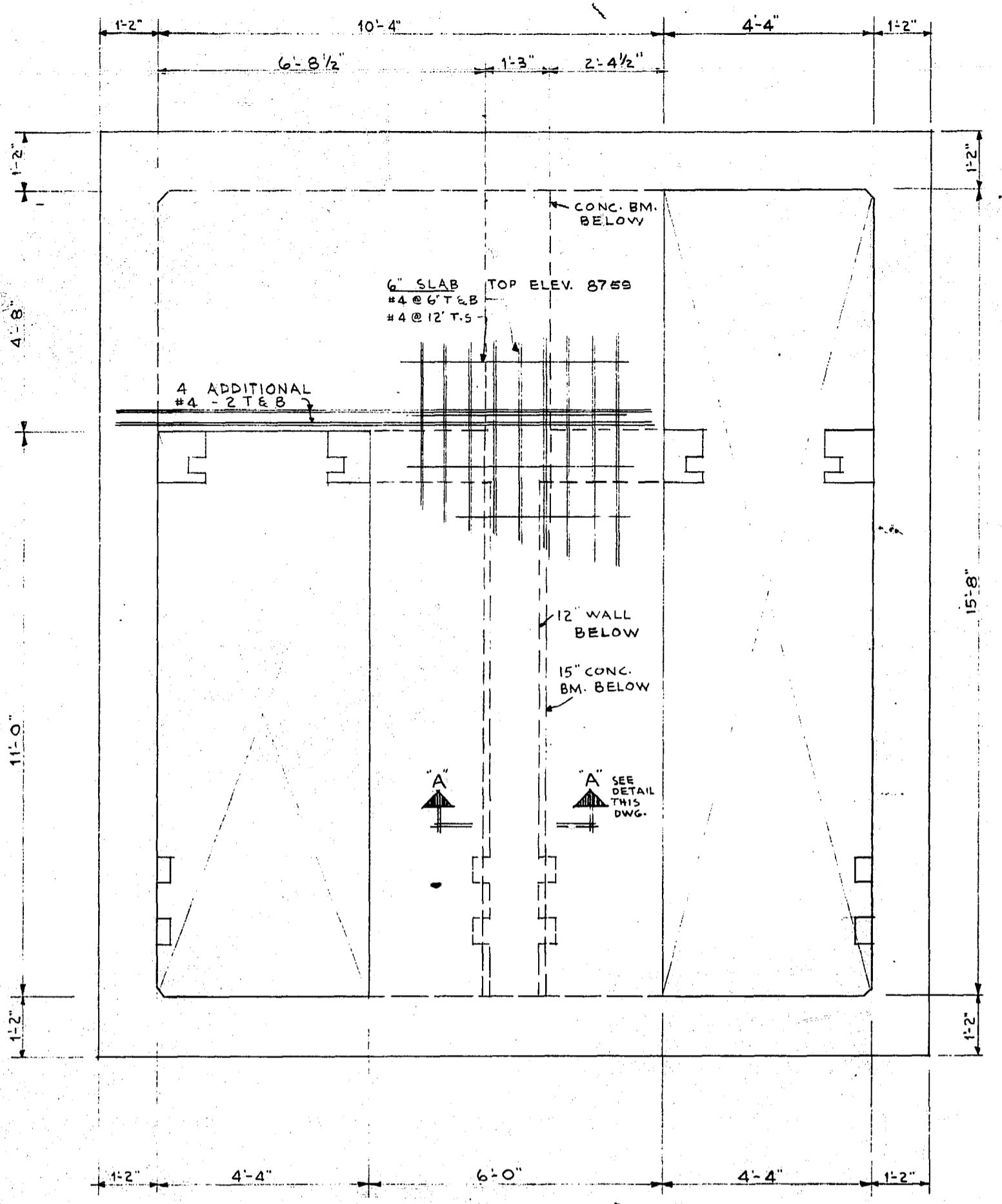
REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
1	10/13/63	REVISED TO SHOW DIMENSIONS FOR 20" SLIDE GATES AND SECTION A-A	
			CHARLESWOOD SEWAGE LAGOON
			EFFLUENT GATE CHAMBER DETAILS
DRAWN BY: <i>S.L. Bledsoe</i>		APPROVED: <i>W. J. ...</i> ENGINEER OF DESIGN	
CHECKED BY: I.T.		APPROVED: <i>R. ...</i> ENGINEER OF WASTE DISPOSAL	
DESIGNED BY: I.T.		APPROVED: <i>...</i> DIRECTOR AND CHIEF ENGINEER	
DATE: MAY 13, 1965		DRAWING NO.: AB-22-265-DB-051	SCALE: AS SHOWN
DRAWN BY:		SHEET 5 OF 14	





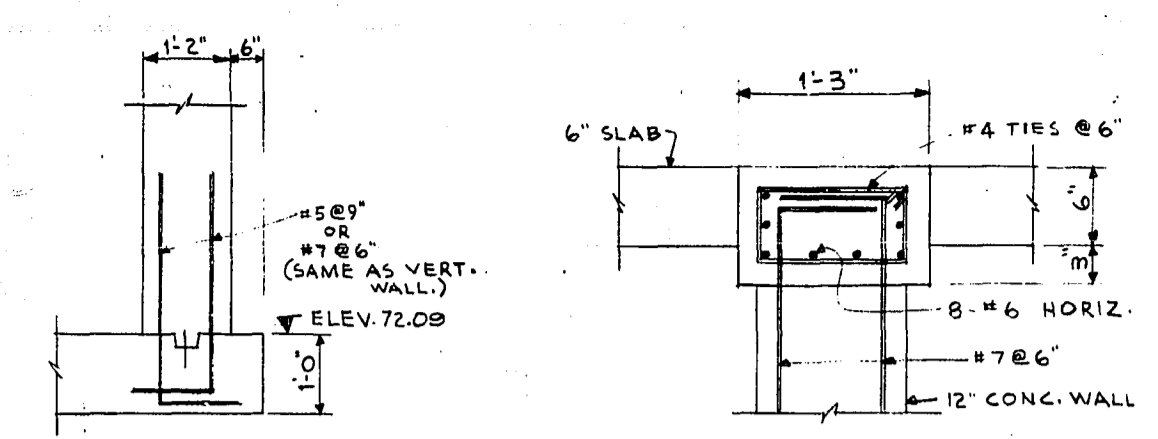
NOTE - ALL EXPOSED CORNERS ALL RE-ENTRANT CORNERS HAVE 1" x 1" CHAMFER HAVE 2" x 2" CHAMFER

BASE PLAN
SCALE - 1/2" = 1'-0"



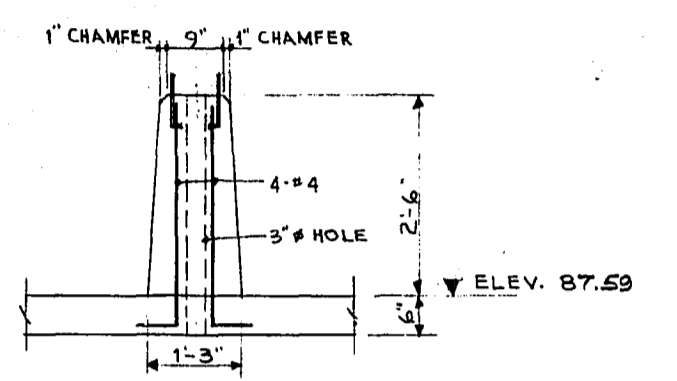
NOTE - ADDITIONAL REINF. SHOWN ONLY. FOR OTHER REINF. SAME AS NORTH & SOUTH WALLS.

EAST WALL ELEVATION
SCALE - 1/2" = 1'-0"

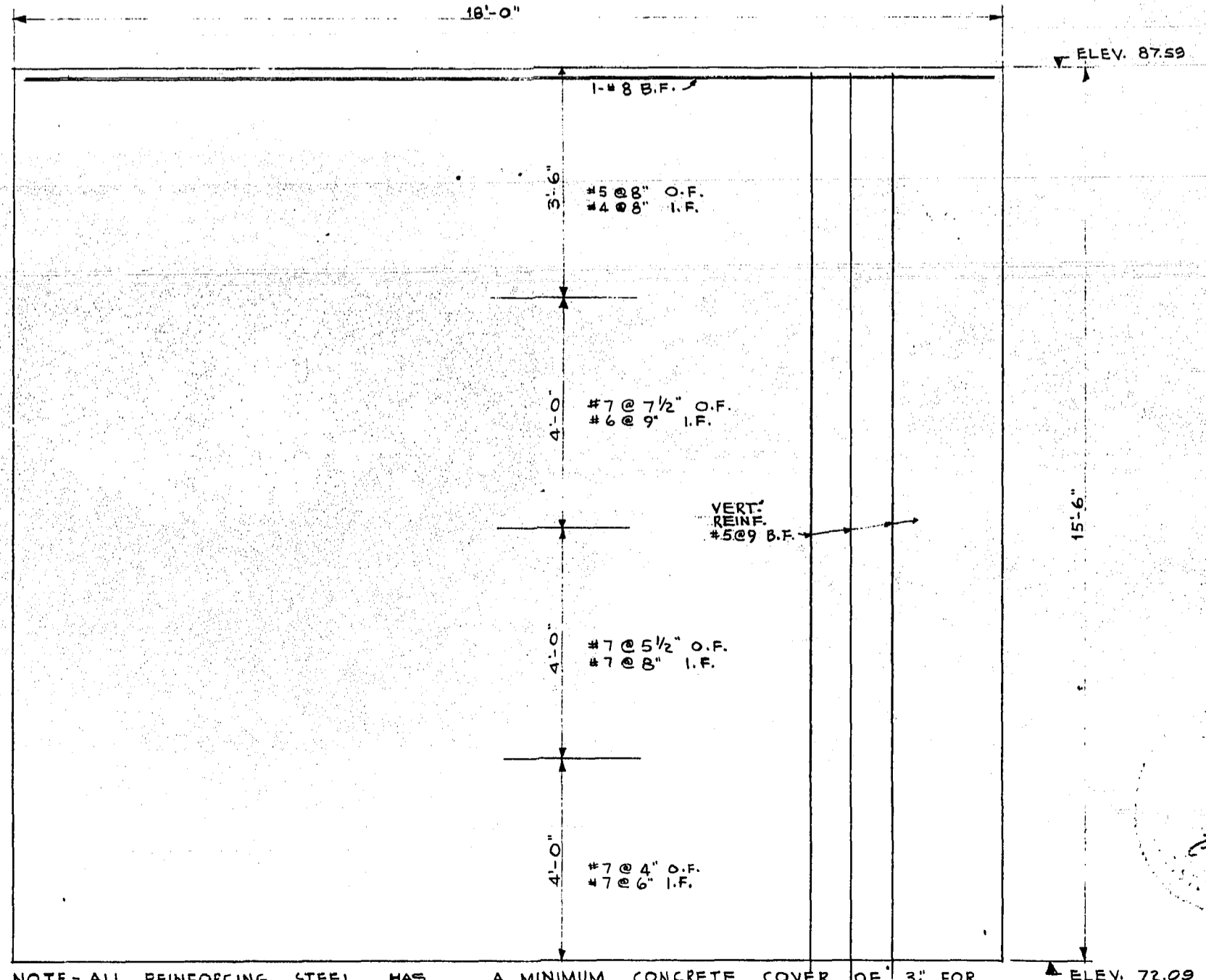


DETAIL OF FOOTING
SCALE - 1/2" = 1'-0"

SECTION A-A
SCALE - 1" = 1'-0"

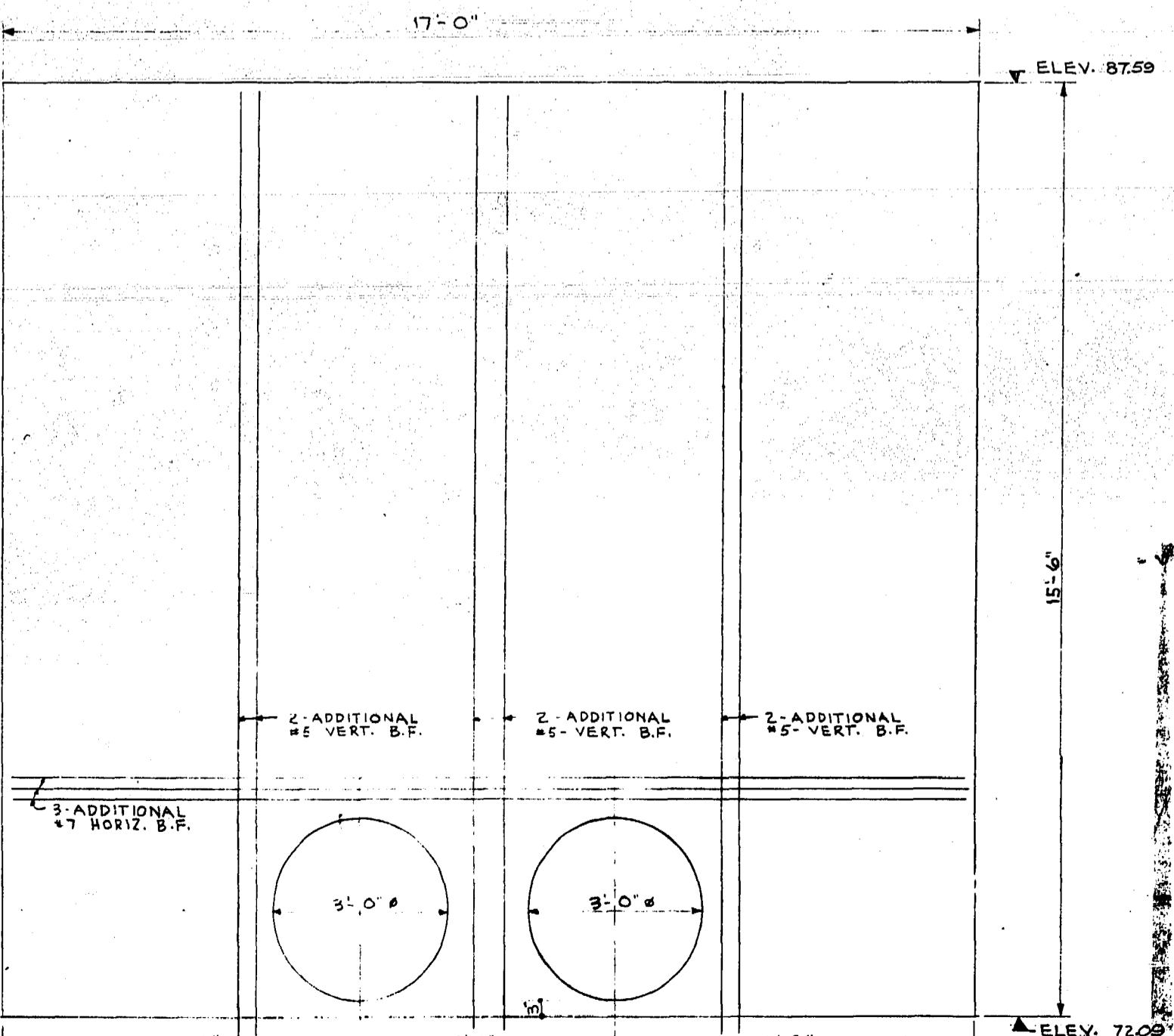


DETAIL OF CONCRETE PEDISTAL
SCALE - 1/2" = 1'-0"



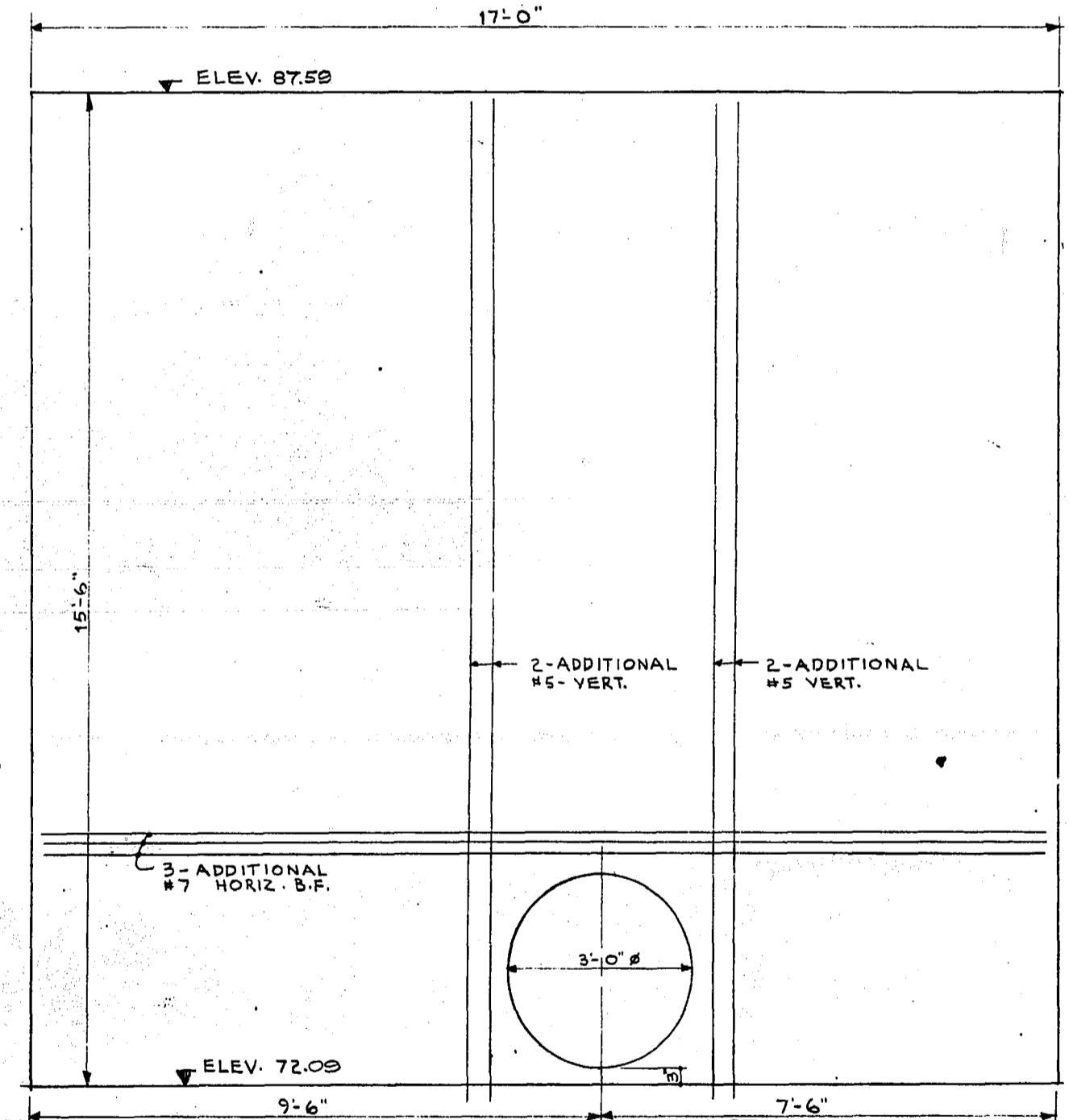
NOTE - ALL REINFORCING STEEL HAS A MINIMUM CONCRETE COVER OF 3/4" FOR TOP SLAB, 3" FOR BASE & 2" FOR WALLS. ALL CONCRETE 3000# P.S.I. @ 28 DAYS.

WALL ELEVATION FOR NORTH & SOUTH WALLS
SCALE - 1/2" = 1'-0"



NOTE - ADDITIONAL REINF. SHOWN ONLY. FOR OTHER REINF. SAME AS NORTH & SOUTH WALLS.

EAST WALL ELEVATION
SCALE - 1/2" = 1'-0"

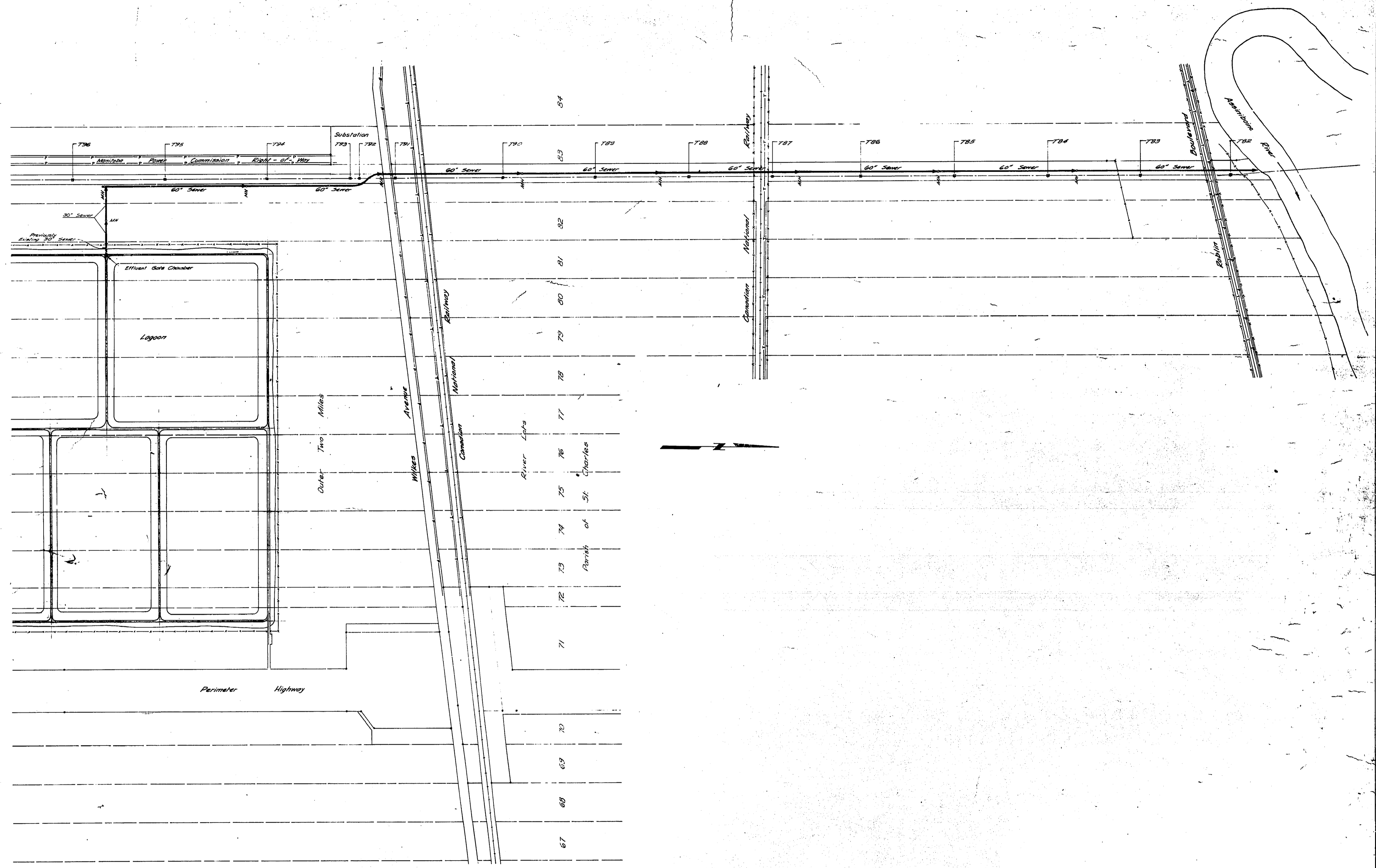


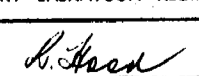
NOTE: FOR OTHER REINF. SEE ELEVATION FOR NORTH & SOUTH WALLS.

WEST WALL ELEVATION AS CONSTRUCTED
SCALE - 1/2" = 1'-0"

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
			CHARLESWOOD SEWAGE LAGOON
			EFFLUENT GATE CHAMBER
			STRUCTURAL
DRAWN BY: D.B.		APPROVED: <i>J. L. ...</i>	
TRACED BY: ...		ENGINEER OF DESIGN	
CHECKED BY: G.T.		ENGINEER OF WASTE DISPOSAL	
DESIGNED BY: G.T.		DIRECTOR AND CHIEF ENGINEER	
DATE: MAY 13, 1965		APPROVED: <i>R. ...</i>	
DRAWING NO. AB-22-265-08-06L		SCALE: AS SHOWN	
LAYOUT BY:		SHEET 6 OF 14	

REF. or DRAWING No. **CSL-22**
DETAILS GEN. LAYOUT
 SCALE: 1" = 400'

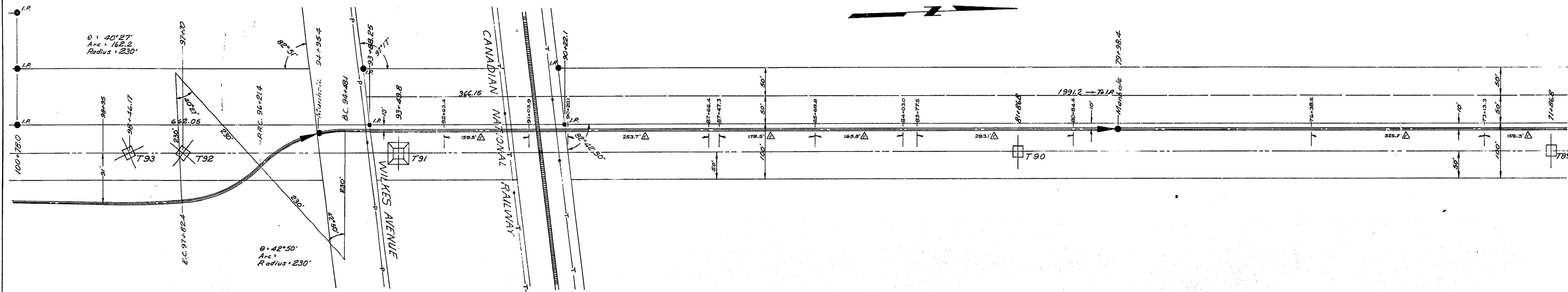


REVISIONS			THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION		
No.	DATE	DETAILS	CHARLESWOOD LAGOON EFFLUENT PIPE LINE		
			GENERAL LAYOUT SCALE: 1" = 400' (AS CONSTRUCTED)		
			UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG		APPROVED ENGINEER OF DESIGN
			 APPROVED		ENGINEER OF WASTE DISPOSAL
			DATE: 1 / 2 / 65		DIRECTOR AND CHIEF ENGINEER
			DRAWING No. AB 22-265-08C-01		SCALE: AS SHOWN
			LAYOUT BY:		SHEET 1 OF 5

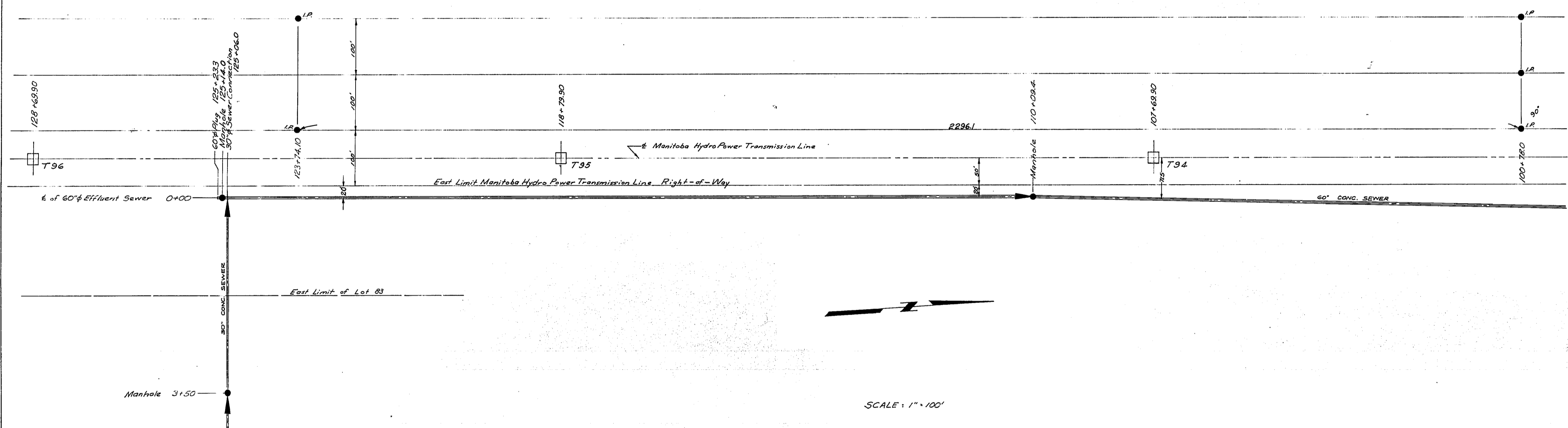


CSL-22

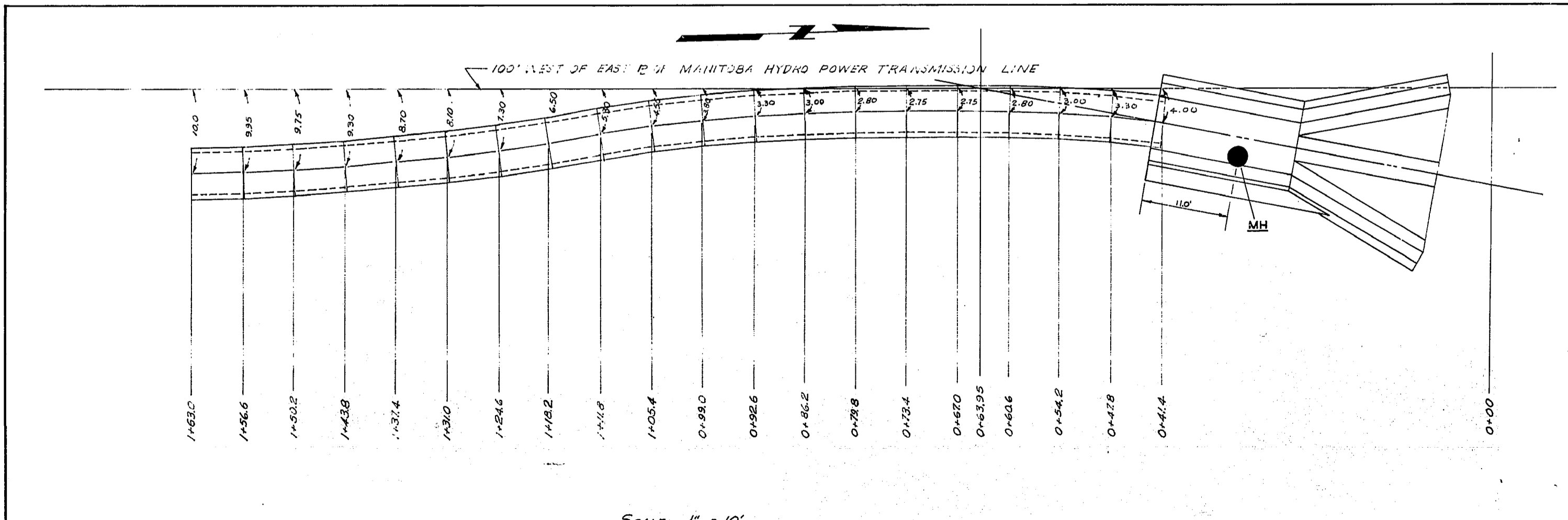
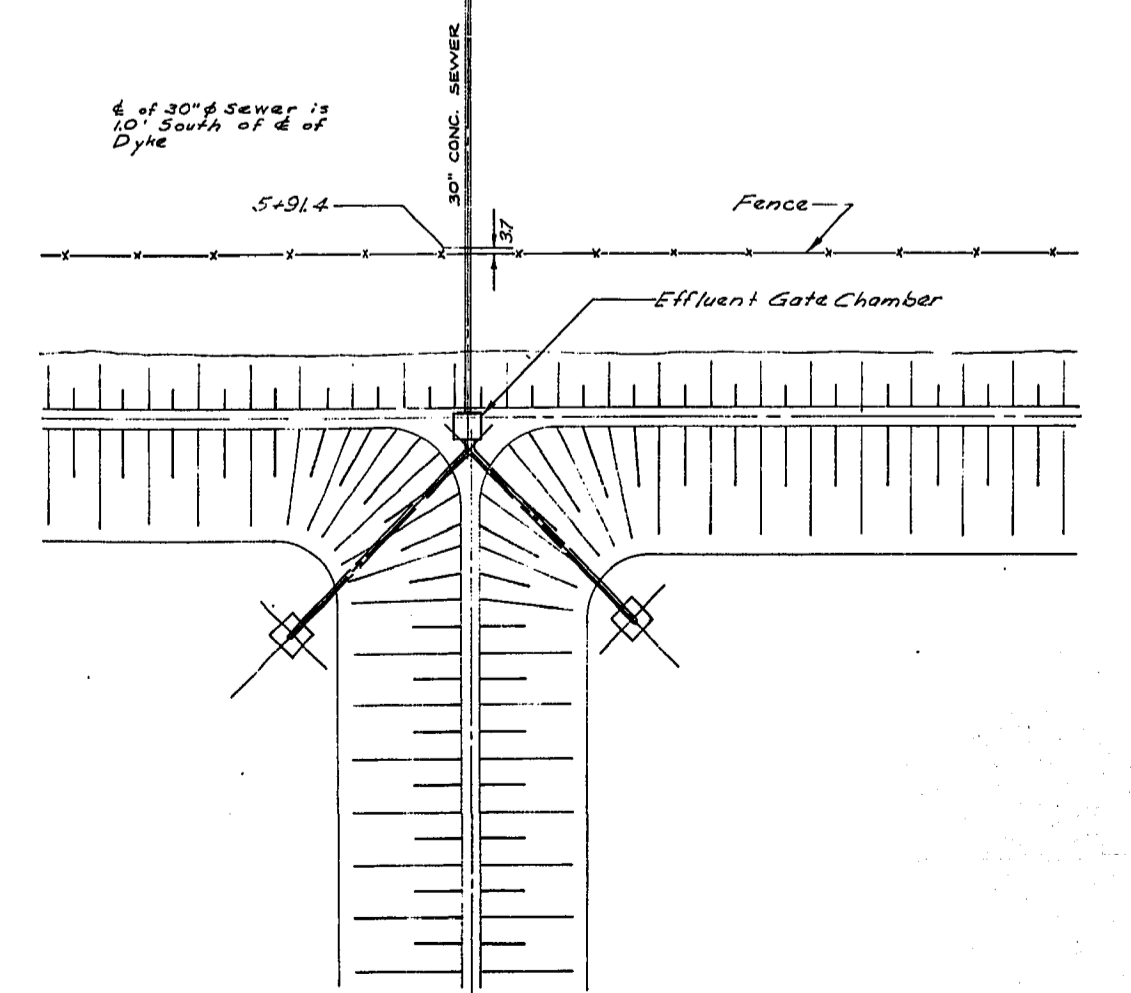
REF. OF DRAWING NO. **CSL-24**
DETAILS CHARLESWOOD LAGOON
EFFLUENT PIPE LINE



SCALE: 1" = 100'



SCALE: 1" = 100'



SCALE: 1" = 10'

TABLE OF MANHOLE INVERT ELEVATIONS

MANHOLE STATION	TOP ELEVATION	INVERTS				FINAL TOP ELEV.
		NORTH	SOUTH	EAST	WEST	
125+140		765.93	765.93	767.18		784.72
110+000		764.62 ⁵	764.62 ⁵			781.63
94+95.4		763.30 ⁵	763.30 ⁵			782.20 ⁶
79+98.4		762.08 ⁴	762.08 ⁴			782.43
3+50	*			770.99	770.99	786.13

NOTES:
 * Manhole @ 43+50 on 30" Sewer Line.
 All chainages are referred to the center line of the 60" Effluent Sewer.
 Δ - Depth of crushed rock base beneath pipe.

DESCRIPTION	SYMBOL
SANITARY SEWER & MH.	—●—
STORM SEWER & MH.	—○—
CATCH BASINS	—□—
WATER MAIN	—◇—
GATE VALVE, CROSS OR TEE	—T—
FIRE HYDRANT (OFF LINE WITH VALVE)	—H—
FIRE HYDRANT (ON LINE)	—F—
SEWAGE FORCE MAIN	—X—
CURB STOP	—C—
CURB	—K—
SIDEWALK	—S—
DIRECTION OF DRAINAGE	—>—
AREA PAVED	—//—

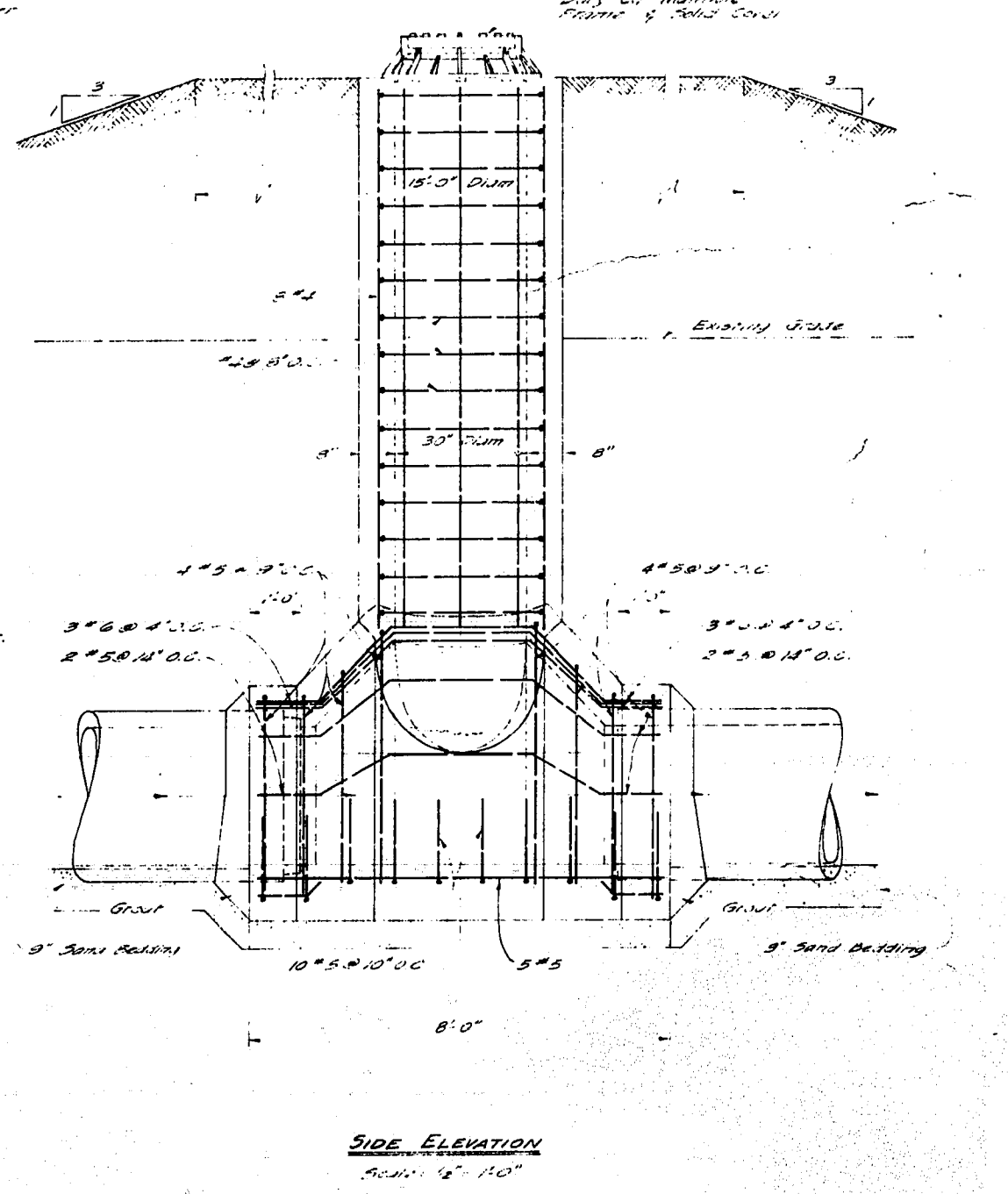
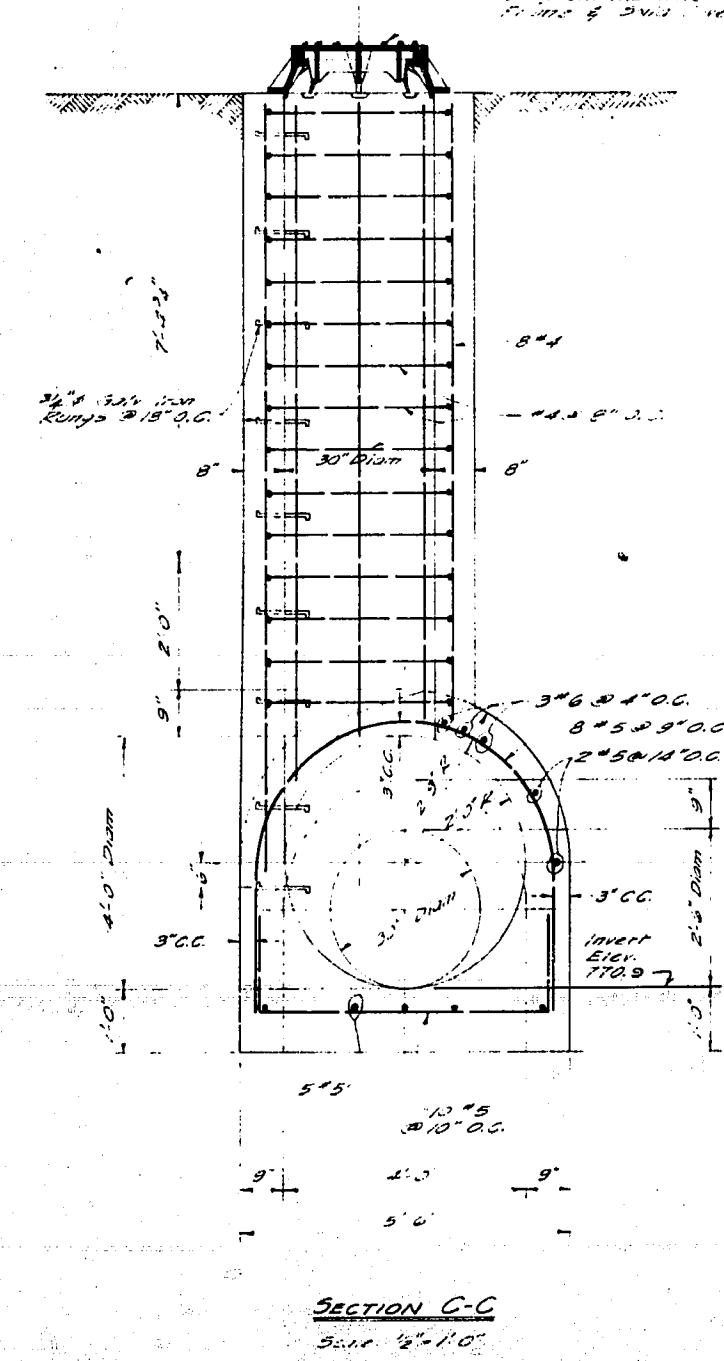
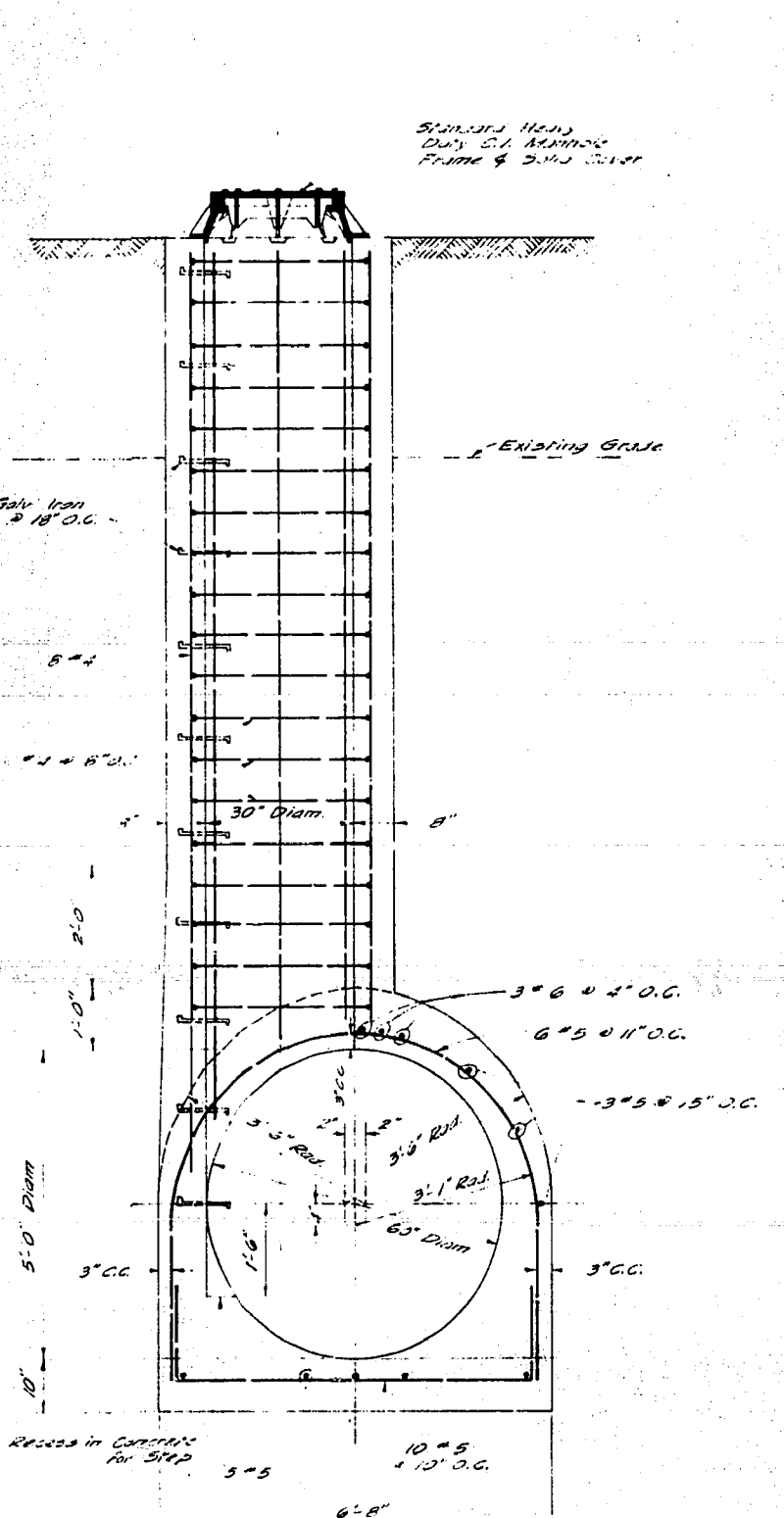
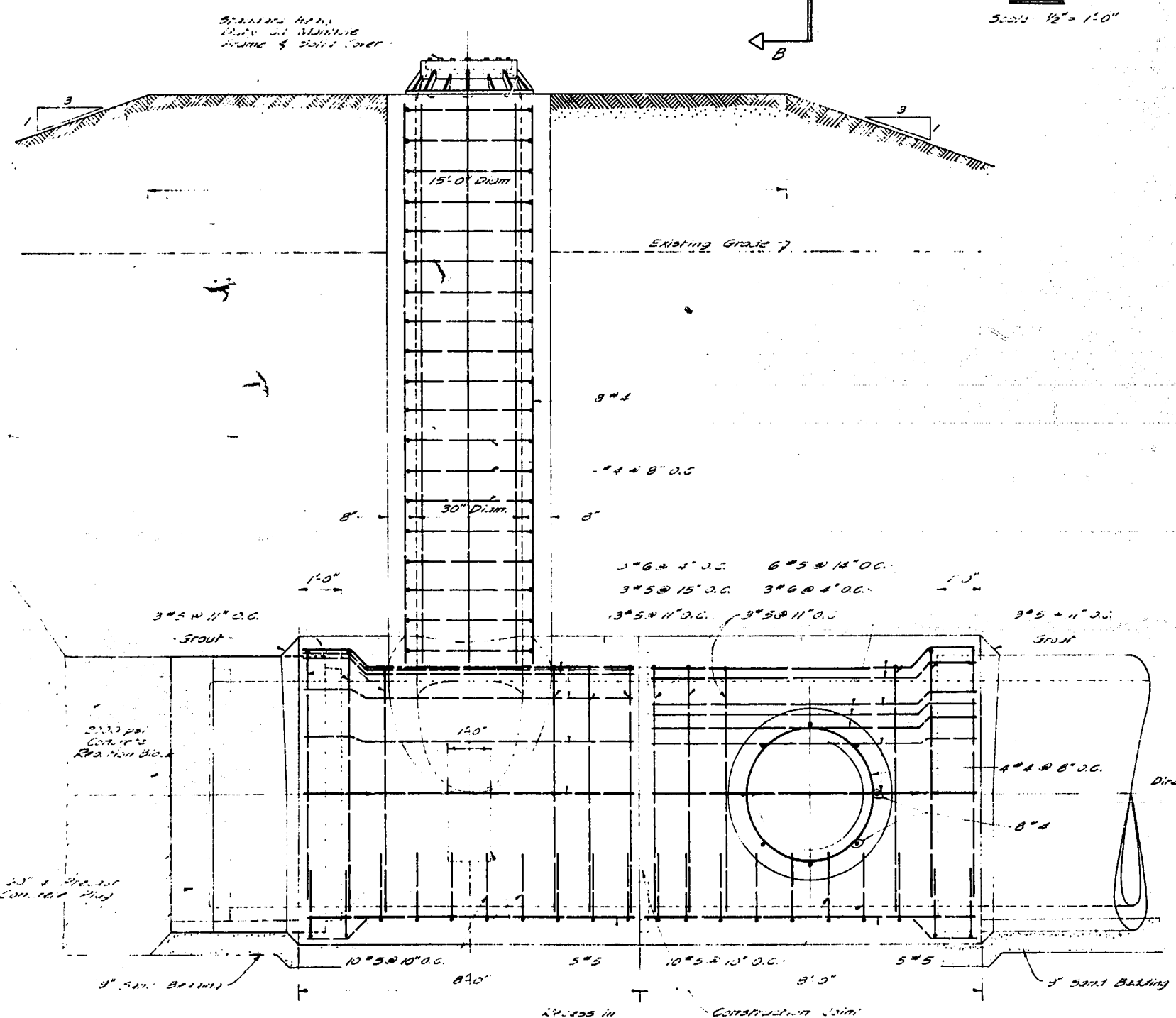
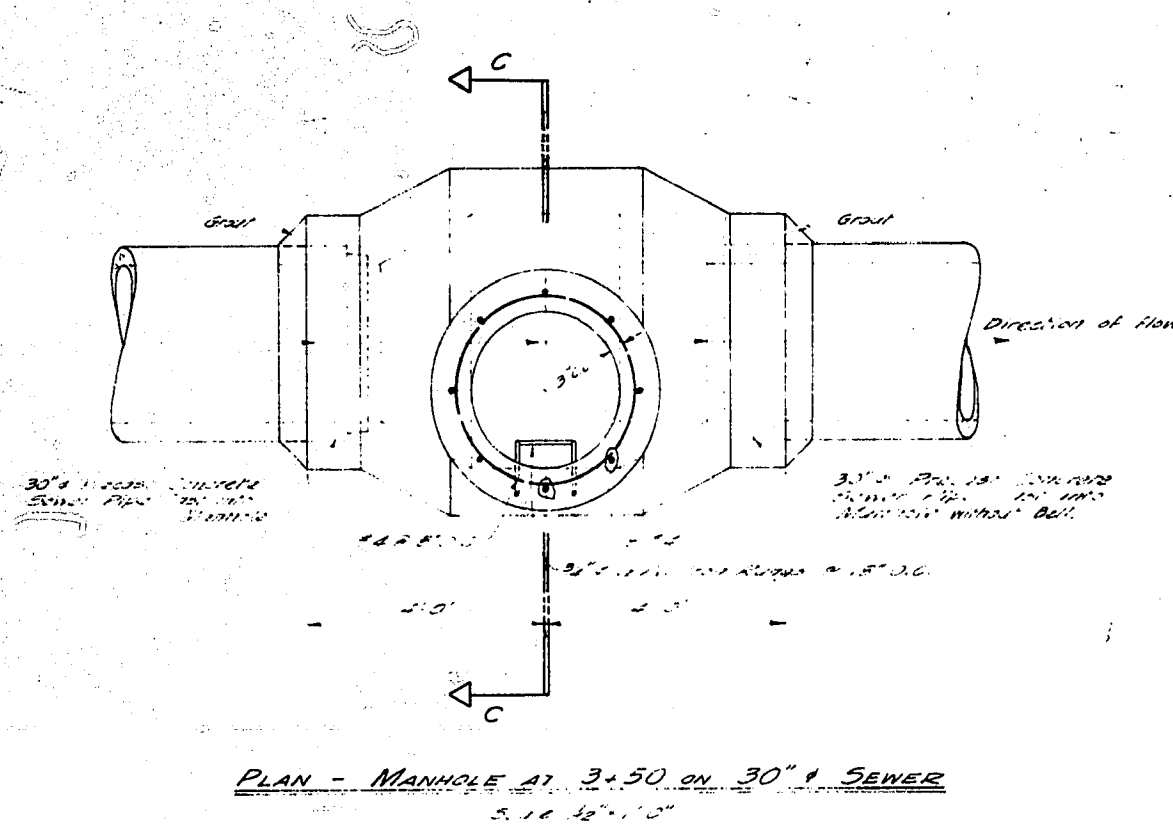
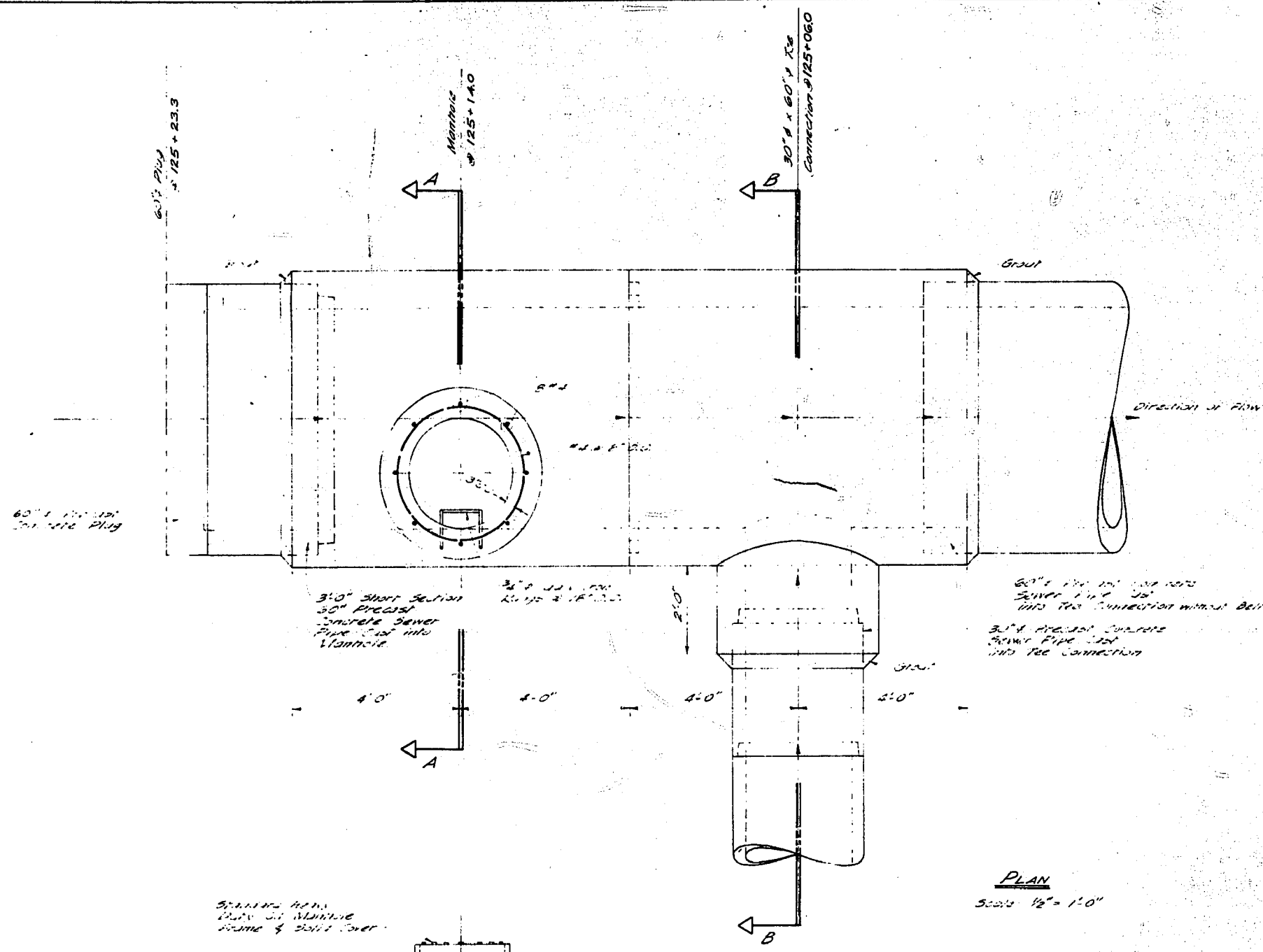
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
 WATERWORKS AND WASTE DISPOSAL DIVISION

CHARLESWOOD LAGOON EFFLUENT PIPE LINE
 (AS CONSTRUCTED)

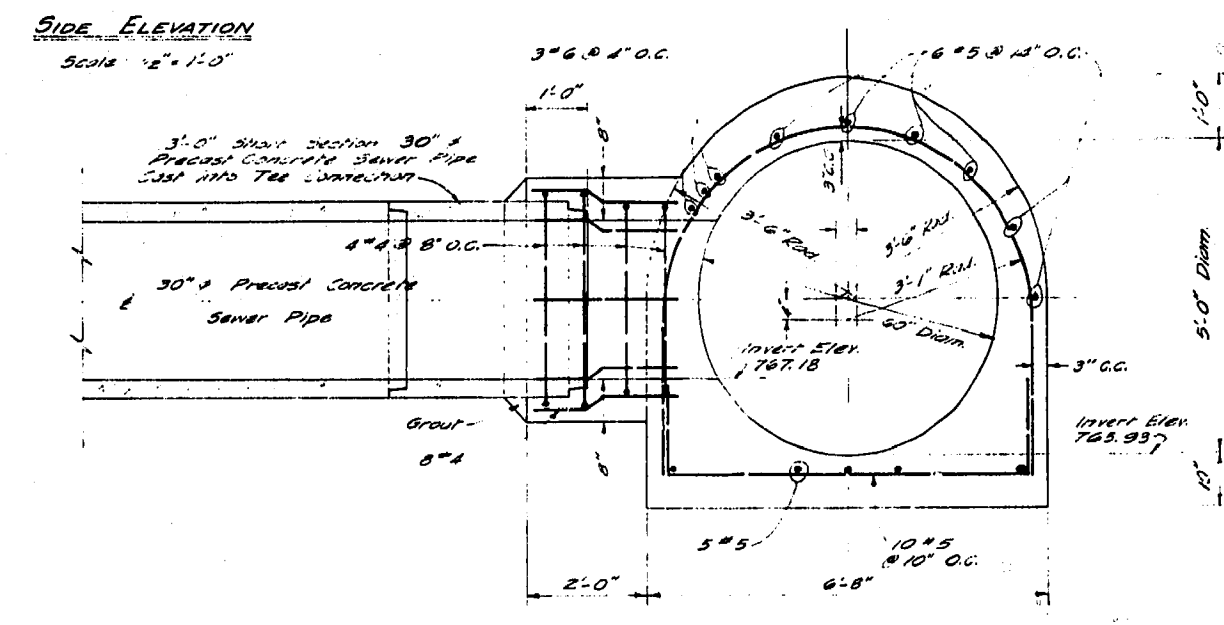
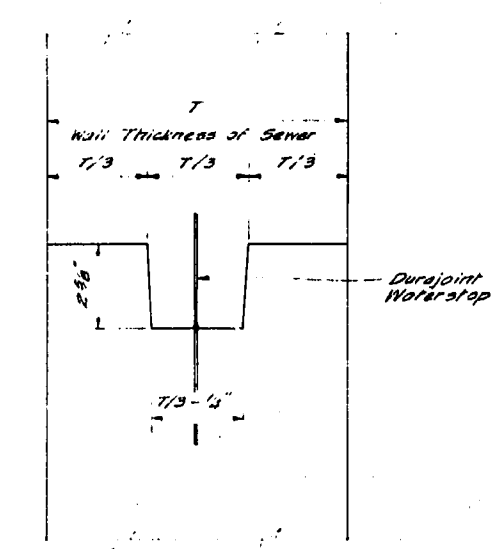
DRAWN BY: E.B.
 TRACED BY: J.H.
 CHECKED BY: J.H.
 SHEET 3 OF 5
 SCALE: AS SHOWN

UNDERWOOD McLELLAN & ASSOCIATES LIMITED
 CONSULTING PROFESSIONAL ENGINEERS
 CALGARY REGINA SASKATOON WINNIPEG
 APPROVED BY: [Signature]
 DATE: 1/2/65
 DWG. No. AB22-265-08C-03

REF. OF DRAWING No. **CSL-25**
DETAILS STAND. MANHOLE
DETAILS



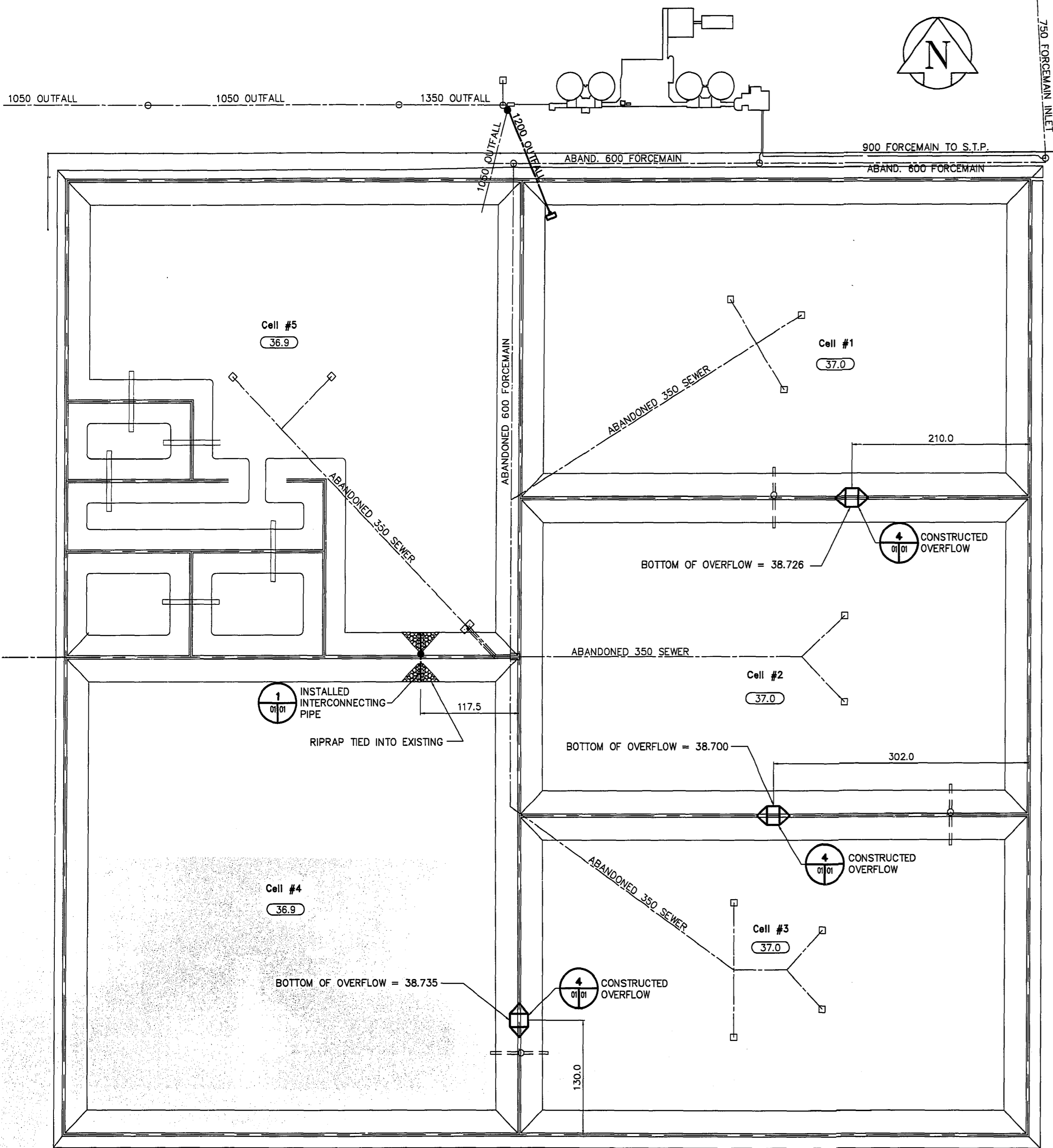
NOTE: TYPICAL MANHOLE ON 30" SEWER
 Similar to shown 4'-0" diameter, but with joints in precast 30" sewer in 2002 data.



60" SEWER

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
No.	DATE	DETAILS	CHARLEWOOD LAKE EFFLUENT PIPELINE
		STANDARD MANHOLE DETAILS (AS CONSTRUCTED)	
		UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG	APPROVED ENGINEER OF DESIGN
			ENGINEER OF WASTE DISPOSAL
		APPROVED <i>S. Head</i>	DIRECTOR AND CHIEF ENGINEER
DRAWN BY	TRACED BY	DATE	SCALE AS SHOWN
CHECKED BY	DESIGNED BY	1/2/65	AB 22-265-08C-04
LAYOUT BY			SHEET 4 OF 5

CSL-25

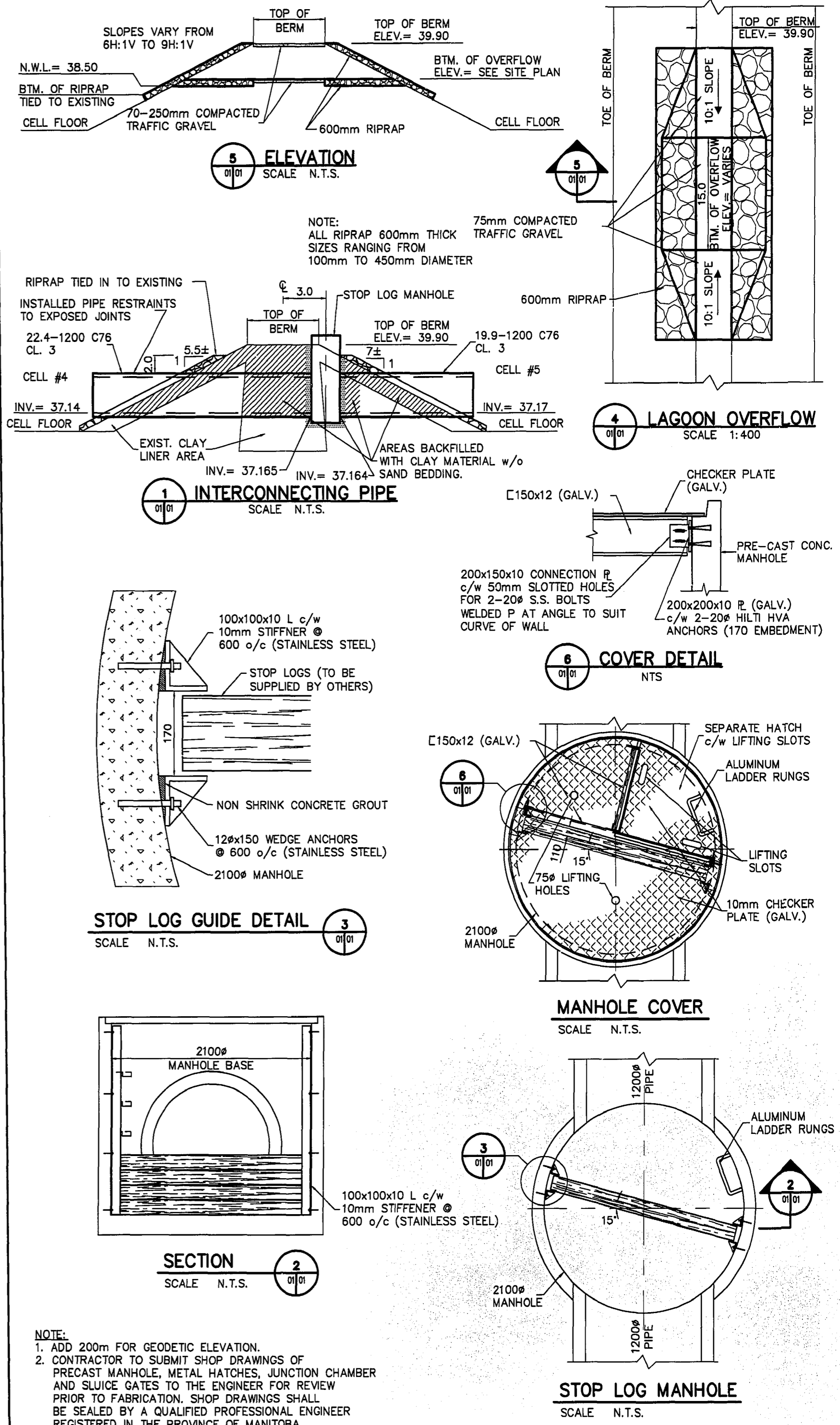


REID, CROWTHER & PARTNERS LIMITED
WINNIPEG
AS CONSTRUCTED
SIGNED: *[Signature]* DATE: July 14/98

SITE PLAN
SCALE 1:3000

BENCH MARK:
W. side of Perimeter Hwy. (P.T.H. No. 100) along service Rd., Btwn. Wilkes Ave., & Four Mile Rd., 19mm x 6.1m I.B. in Valve Box, 192.3m S. of C.L. of main gate to Charleswood Sewage Lagoon & 51.8m W. of W. edge of conc. pav't. of S. bound traffic lane (P.T.H. No. 100) & 457.2m N. of C.L. of 1st. Intersection of service roads, & (P.T.H. No. 100), S. of Wilkes Ave.

HIGHWAY
PERIMETER



5 ELEVATION
SCALE N.T.S.

4 LAGOON OVERFLOW
SCALE 1:400

1 INTERCONNECTING PIPE
SCALE N.T.S.

3 STOP LOG GUIDE DETAIL
SCALE N.T.S.

5 COVER DETAIL
SCALE N.T.S.

MANHOLE COVER
SCALE N.T.S.

2 SECTION
SCALE N.T.S.

STOP LOG MANHOLE
SCALE N.T.S.

NOTE:
1. ADD 200m FOR GEODETIC ELEVATION.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF PRECAST MANHOLE, METAL HATCHES, JUNCTION CHAMBER AND SLUICE GATES TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE SEALED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	150 mm W.M.	WATERMAIN	150 mm W.M.	WATERMAIN	150 mm W.M.
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	CONCRETE	300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	PROPERTY LINE	250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.
○	MANHOLE	●	SURVEY BAR	+	VALVE	+	VALVE	+
□	CATCH BASIN	232.750	ELEVATION	(32.750)	×	×	×	×
▽	CURB INLET	2500	TREE	—	—	—	—	—
+	JUNCTIONS	—	SIDEWALK RAMP	—	—	—	—	—
—	CULVERT	—	CONCRETE SIDEWALK	—	—	—	—	—
—	GAS	—	FENCE	—	—	—	—	—

LOCATION APPROVED UNDERGROUND STRUCTURES
SUPV. U/G STRUCTURES DATE COMMITTEE
NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

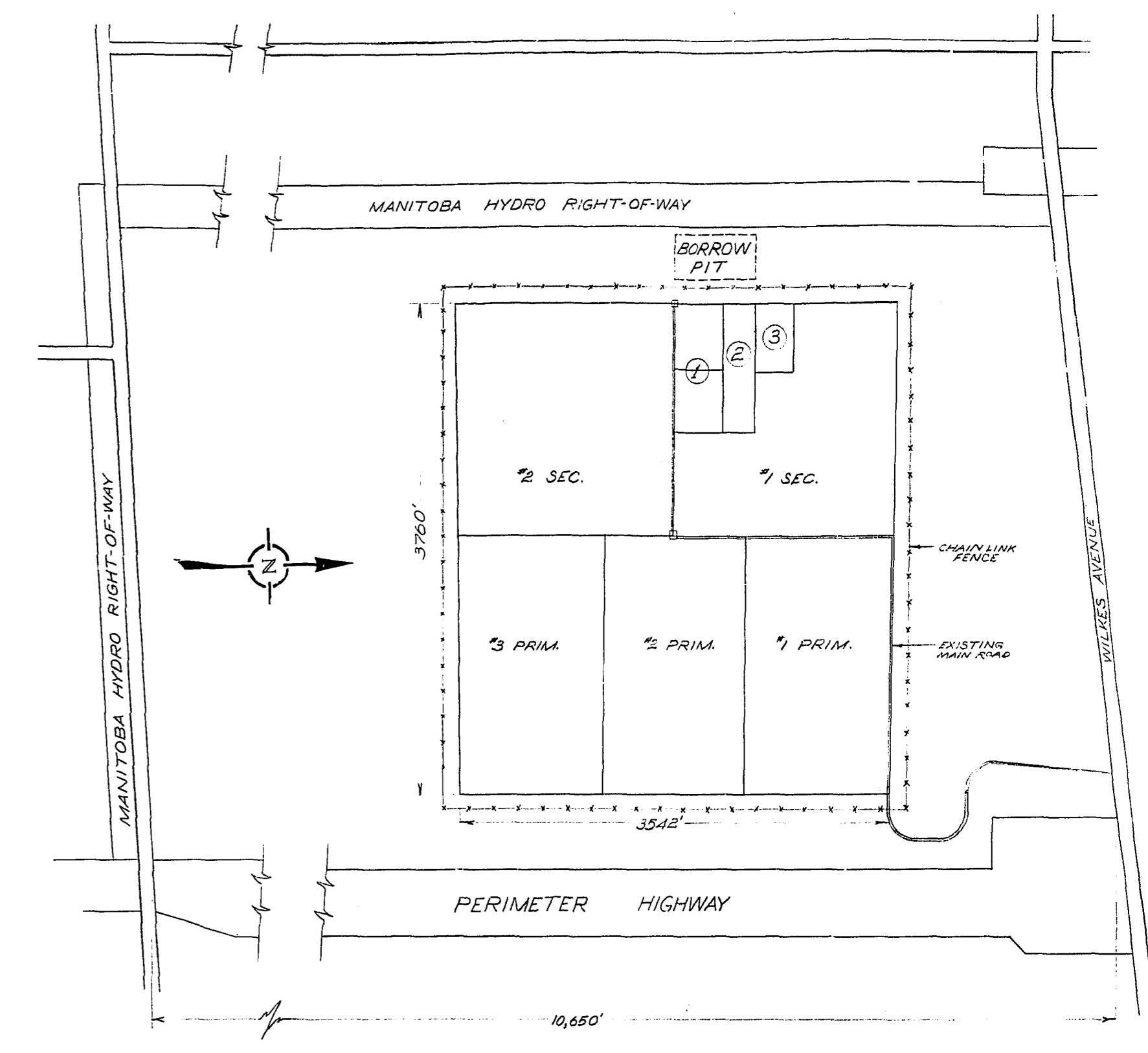
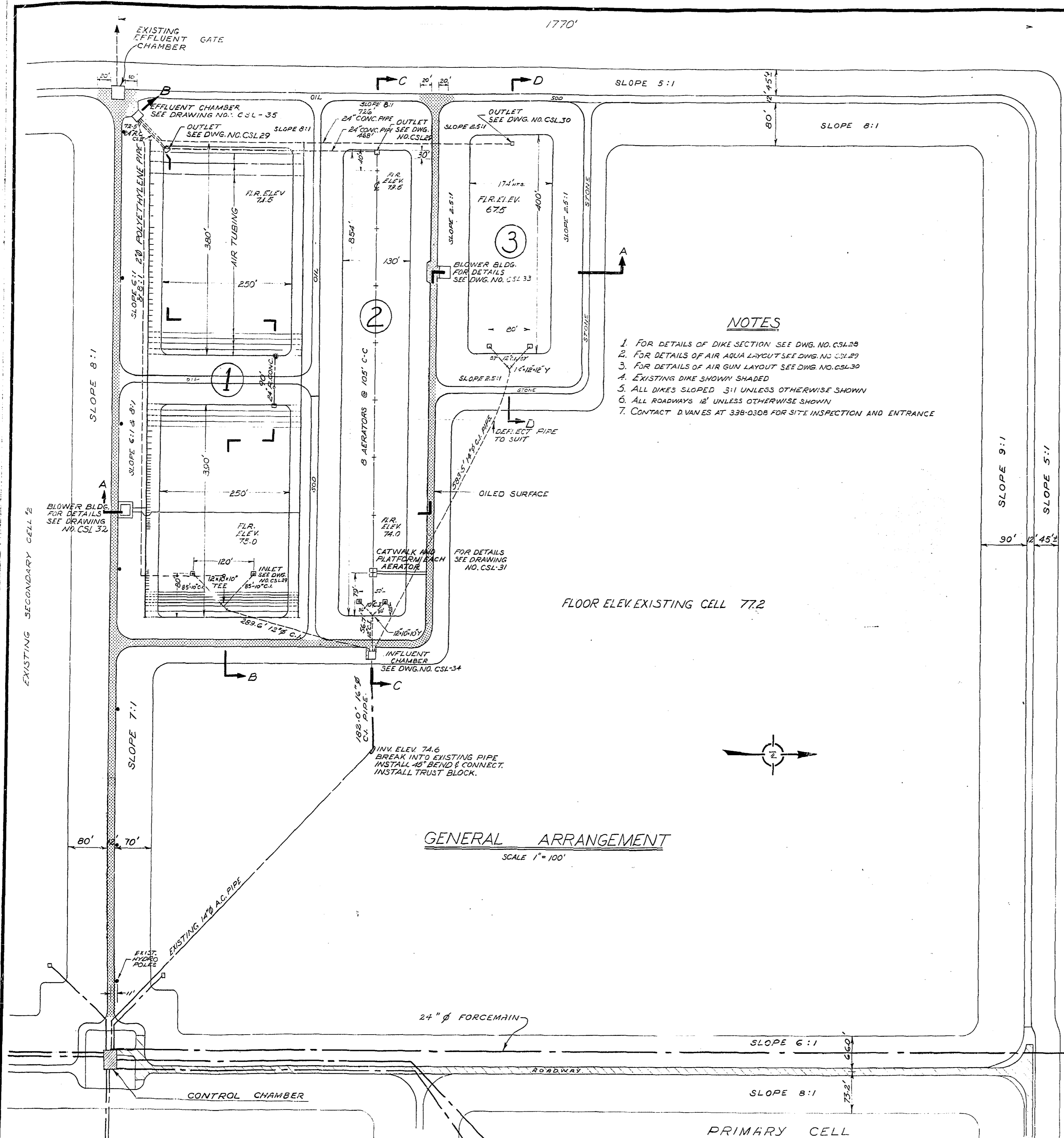
NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	98/07/02	TWS
0	ISSUED FOR TENDER	98/03/02	GDL
A	ISSUED FOR REVIEW	98/02/02	GDL

Reid Crowther
Reid Crowther and Partners Limited
Consulting Engineering Worldwide
DESIGNED BY: KGM
DRAWN BY: GDL
HOR. SCALE: AS SHOWN
VERTICAL: AS SHOWN
DATE: 98/01/30

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ORIGINAL SIGNED AND SEALED
K & G MILLER
REGISTERED PROFESSIONAL ENGINEER
DATED 26/02/98
CONSULTANT DRAWING NO. 60910-06-01

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
WEST END WATER POLLUTION CONTROL CENTRE LAGOON MODIFICATIONS
OVERFLOW AND INTERCONNECTION PIPE LOCATION PLAN AND TYPICAL DETAILS
CITY DRAWING NUMBER WEP-688
SHEET 1 OF 2

DETAILS AERATED LAGOONS
SITE PLAN



CELL DESCRIPTION

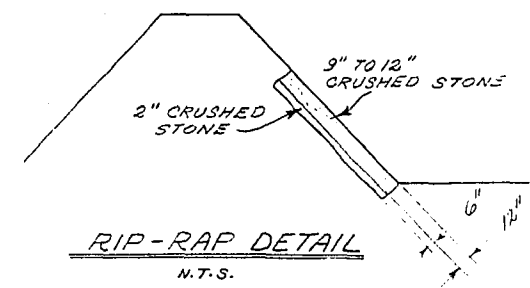
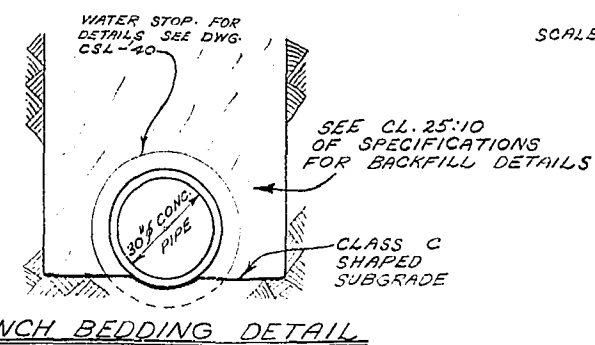
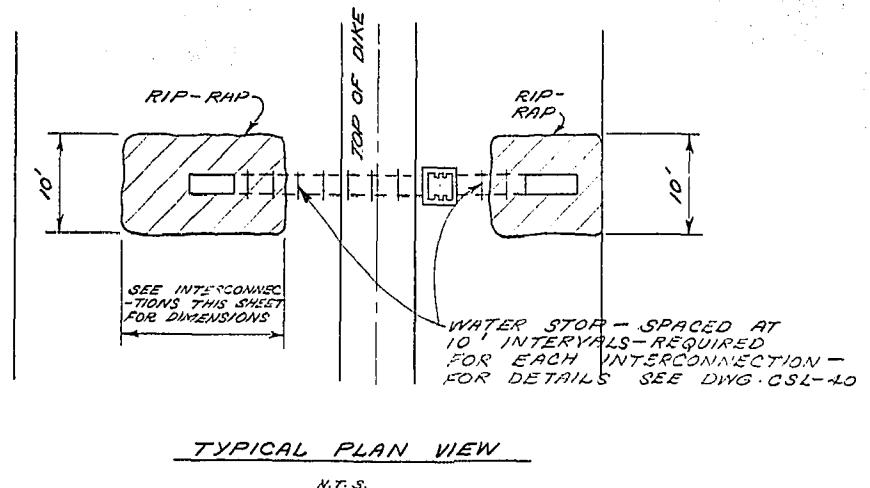
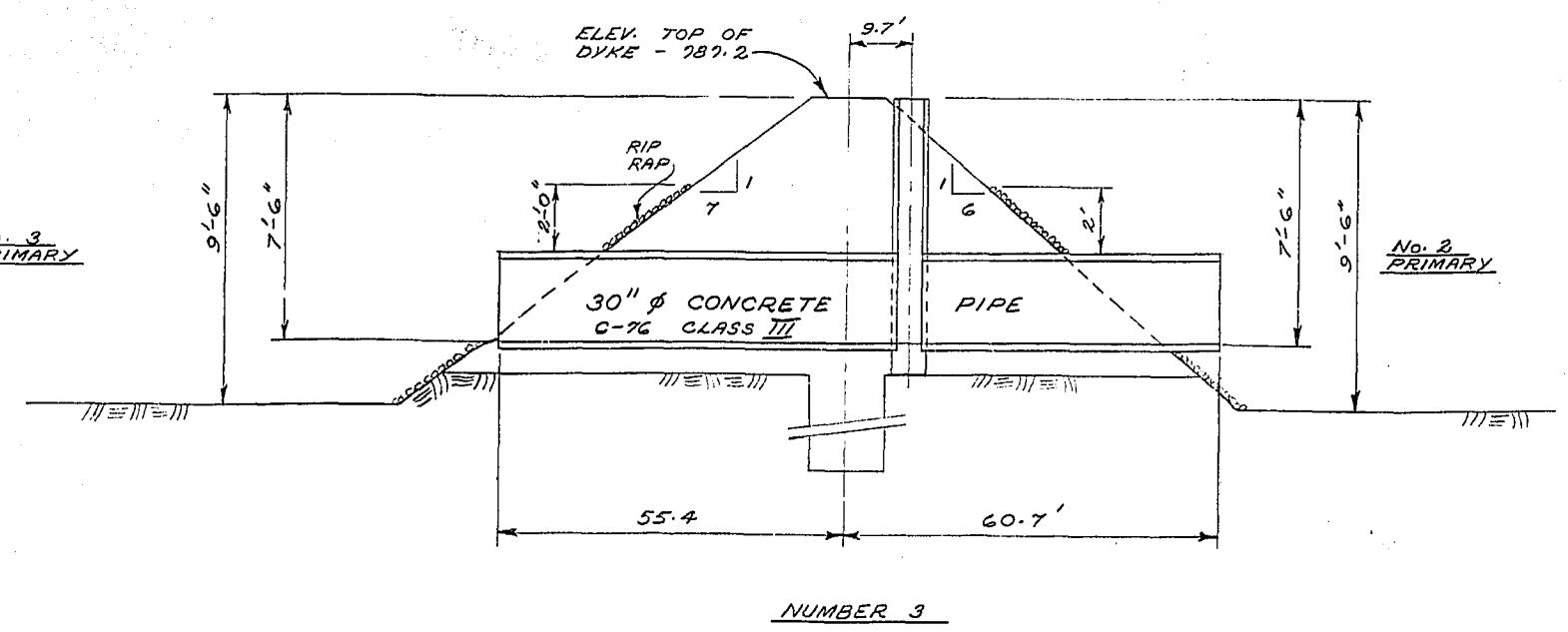
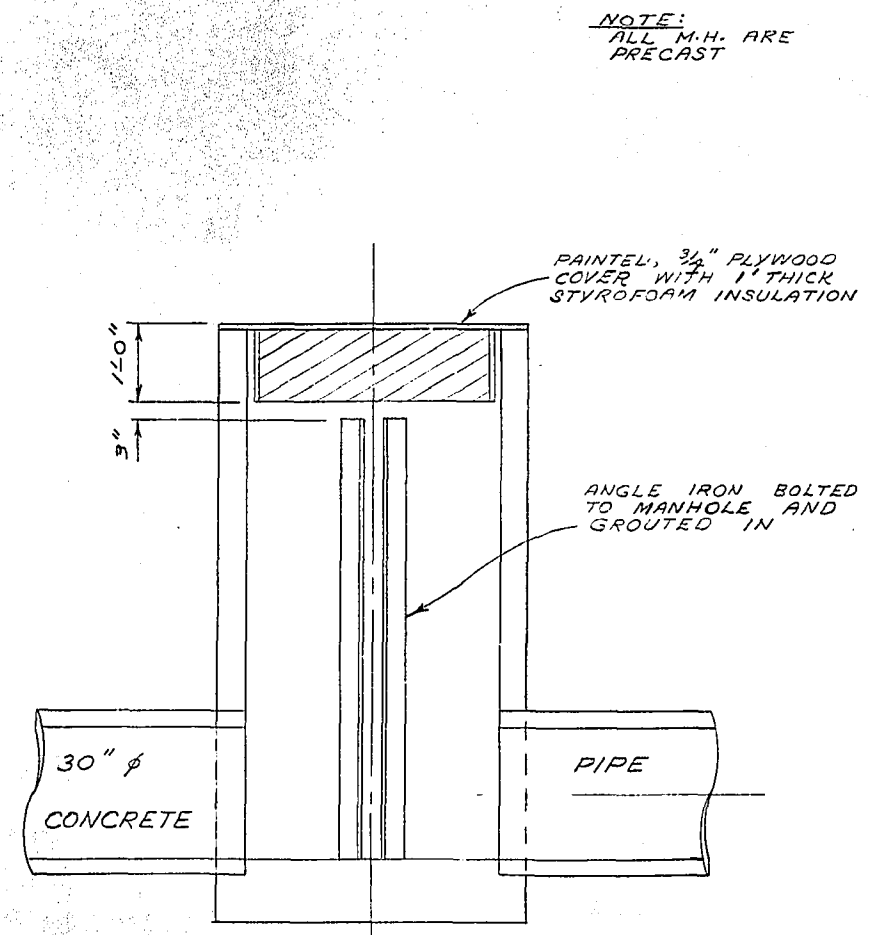
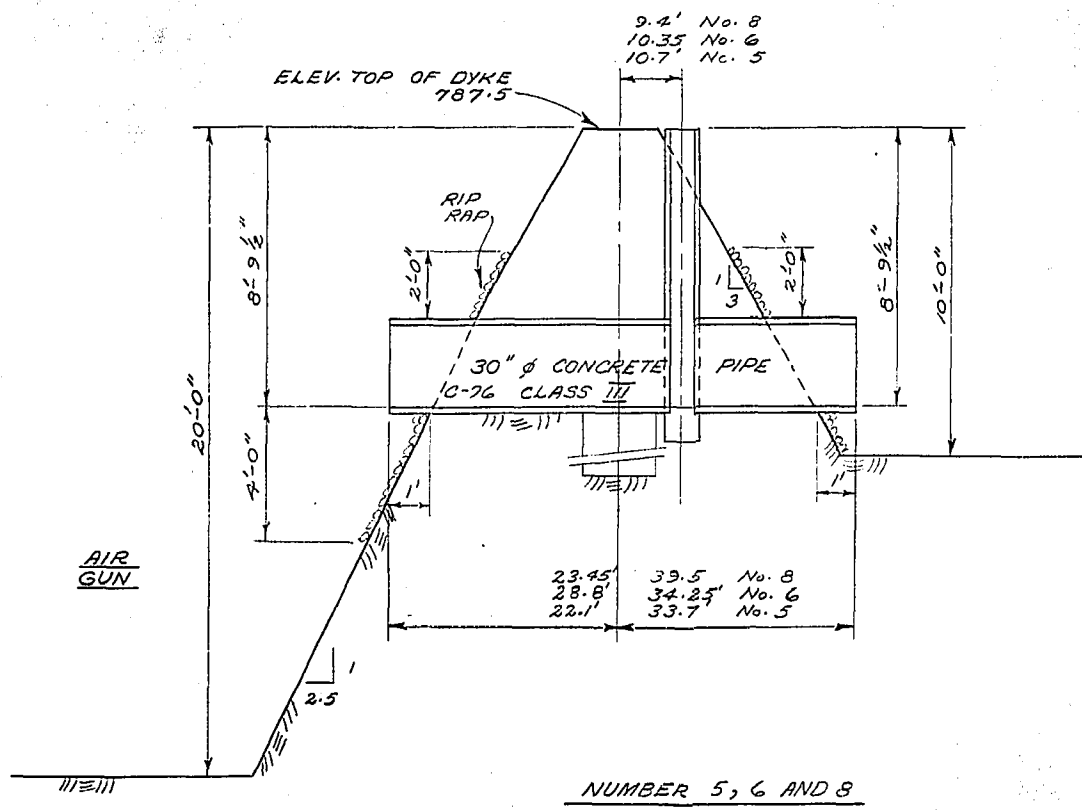
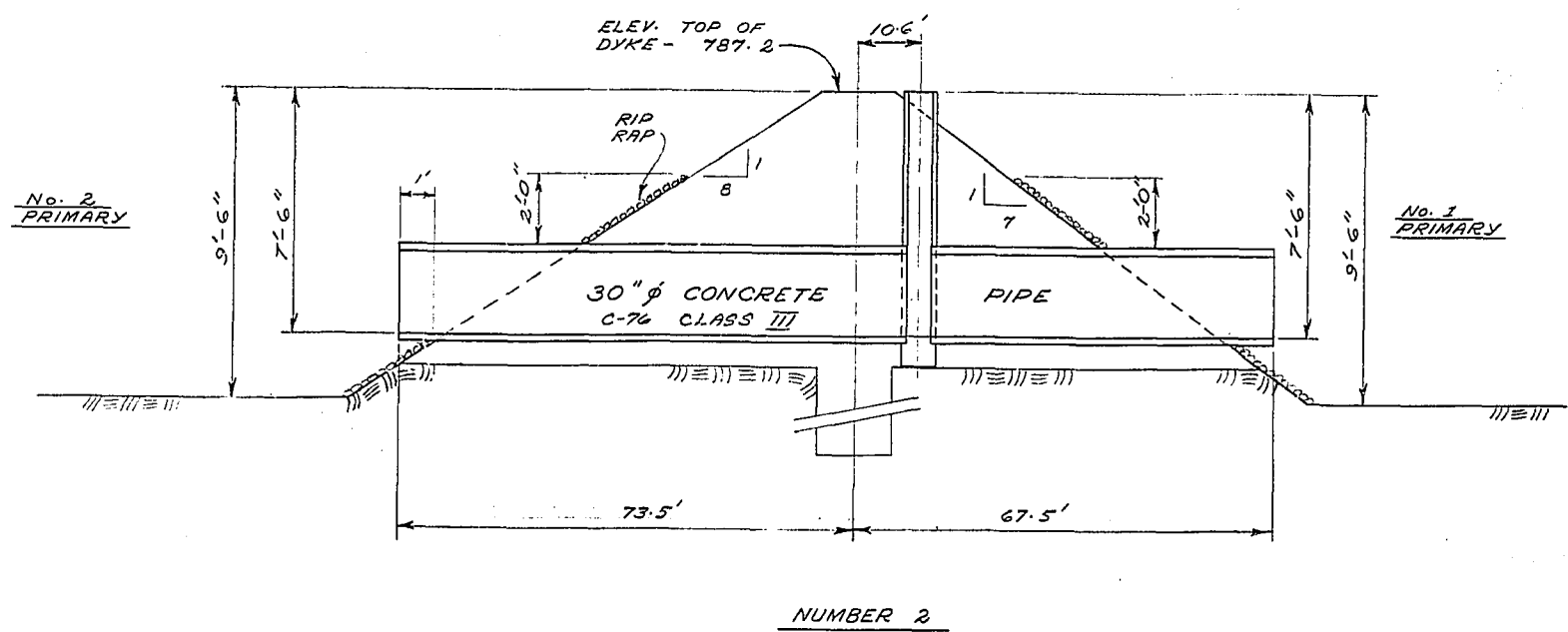
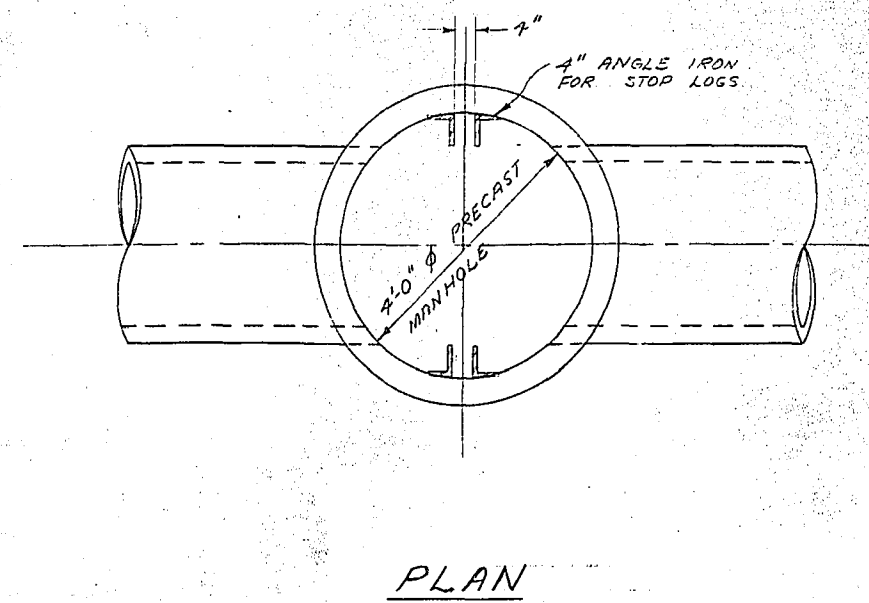
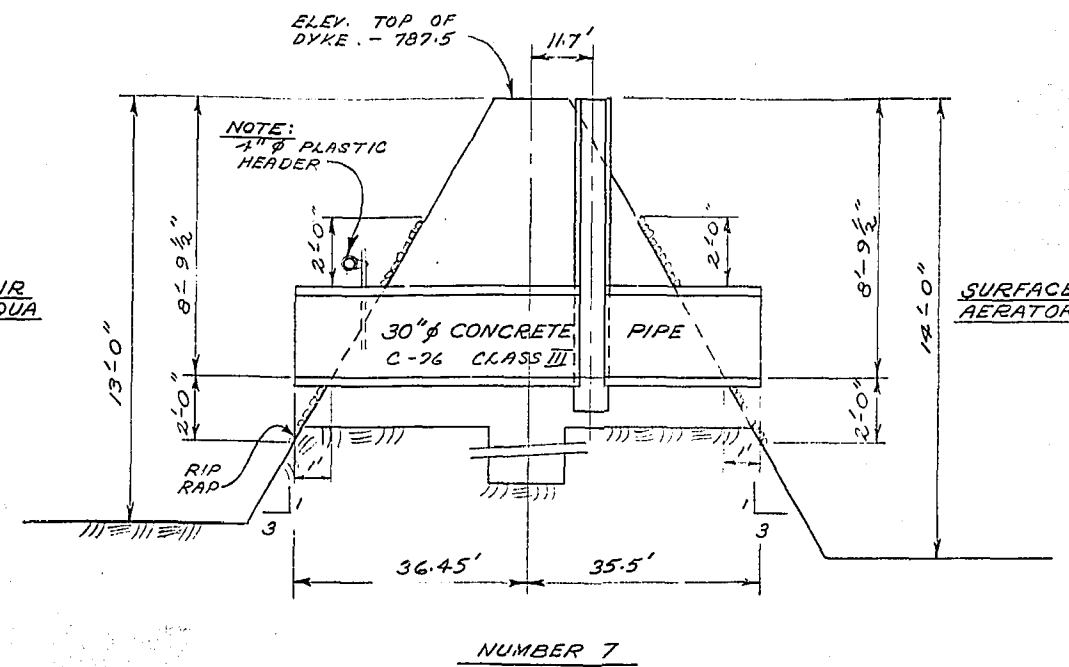
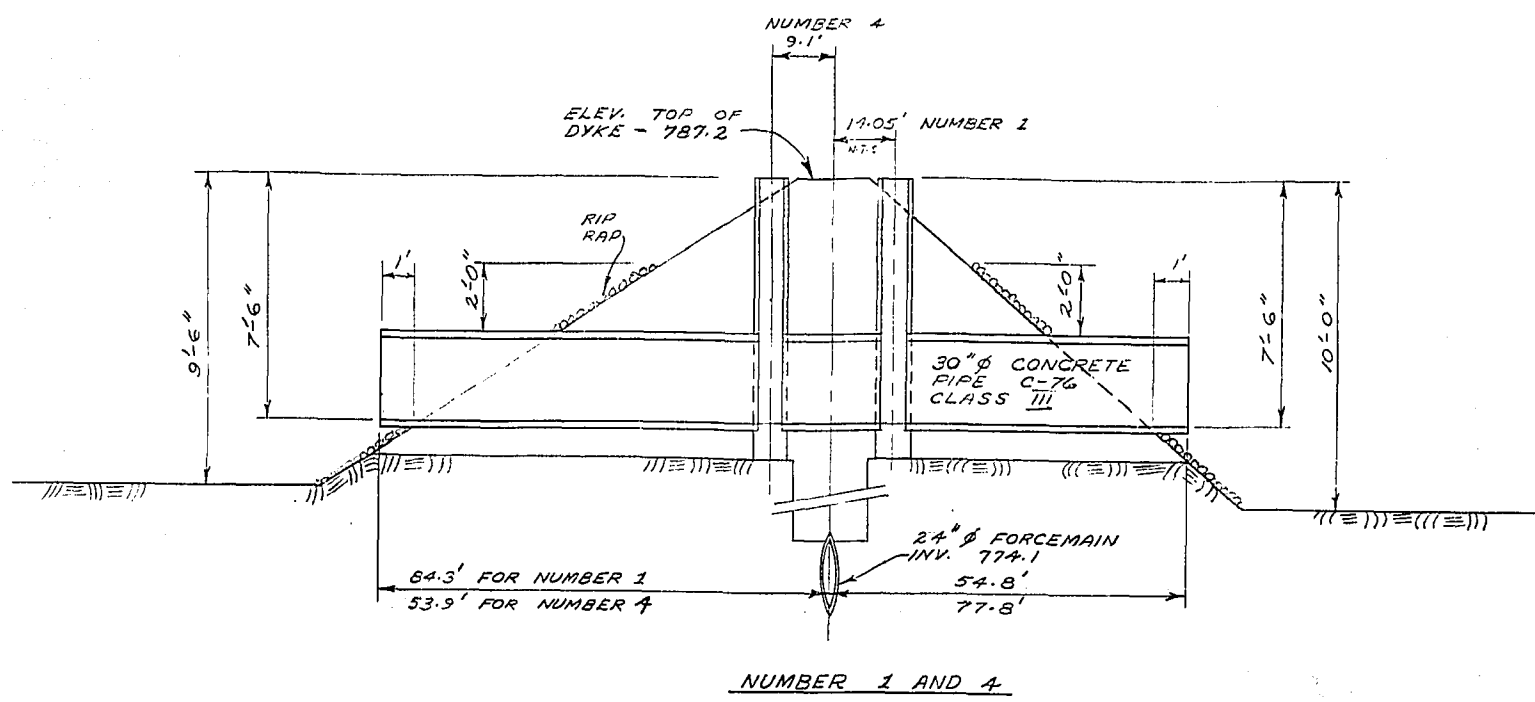
- ① AIR AQUA
- ② SURFACE AERATOR
- ③ AIR GUN

SITE PLAN
SCALE 1" = 800'

AS CONSTRUCTED AUG 15/68 V.D.
[Signature]



THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS & WASTE DISPOSAL DIVISION A. PENMAN - DIRECTOR	SEWAGE DISPOSAL DEPT.	DES. <i>[Signature]</i> CHK'D. <i>[Signature]</i>	SCALED AS SHOWN
	AERATED LAGOONS CHARLESWOOD	DRN. E.R. DATE June 30/67	DRAWING NO.
	SITE PLAN AND GENERAL ARRANGEMENT	ENG. DES. <i>[Signature]</i>	CSL-27
		APP'D. <i>[Signature]</i>	



INTERCONNECTION DETAILS

SCALE: HOR. - 1" = 20'
VERT. - 1" = 4'

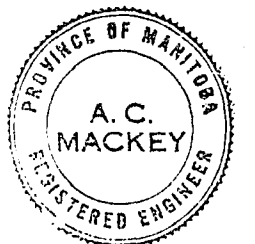
SURVEYED & PLAN CHECKED
BY: [Signature]
APPROVED AS SHOWN
MAY 72

THE METROPOLITAN CORPORATION
OF GREATER WINNIPEG
**WATERWORKS & WASTE
DISPOSAL DIVISION**
A. PENMAN - DIRECTOR

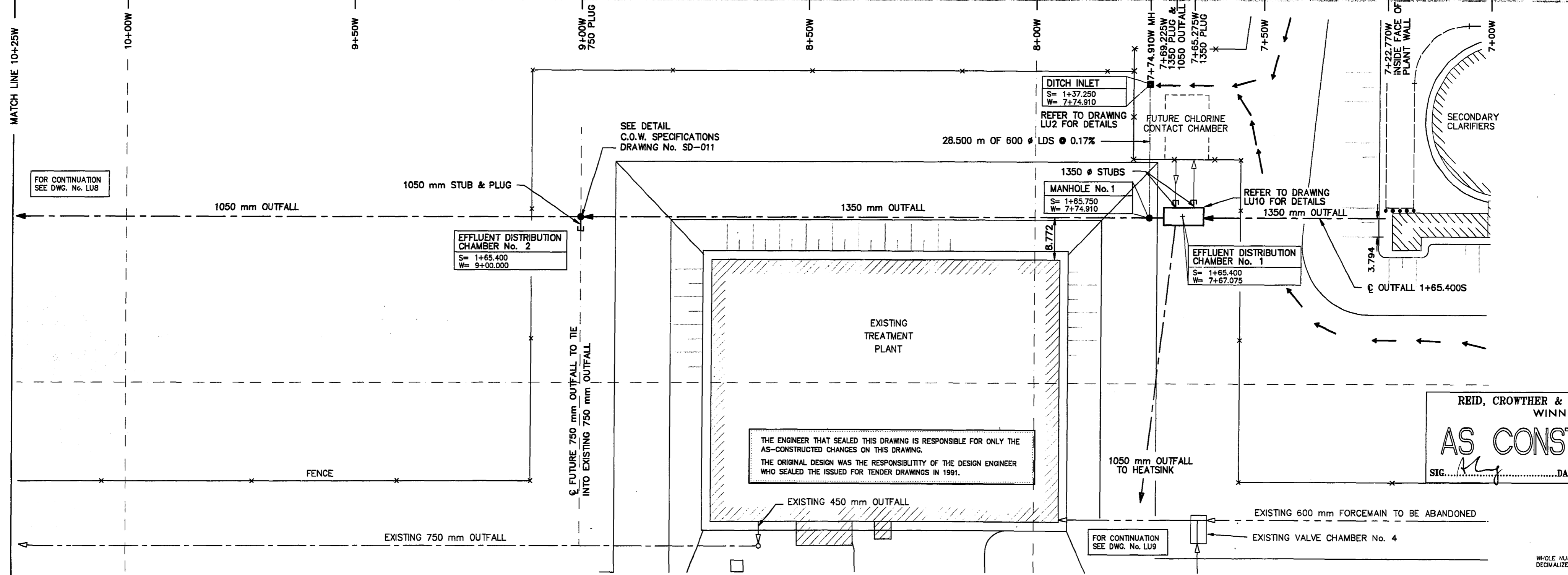
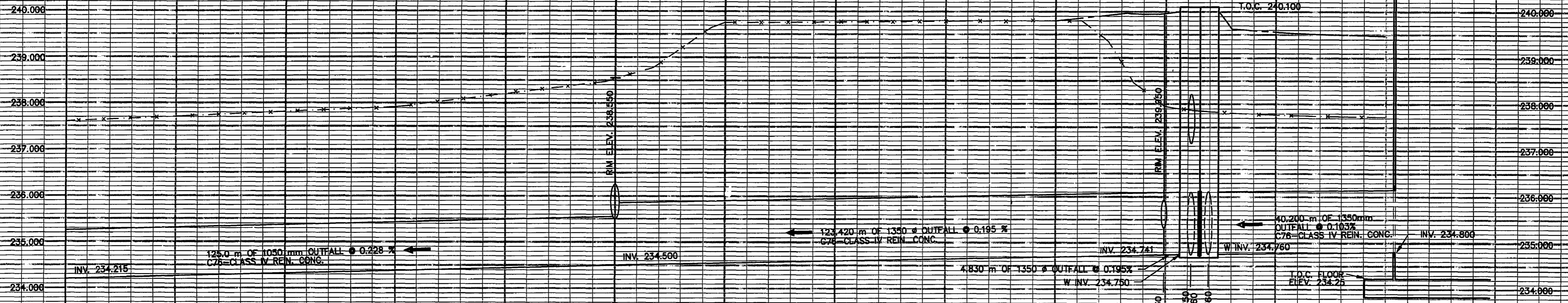
SEWAGE DISPOSAL
CHARLESWOOD
SEWAGE LAGOONS
**INTERCONNECTION
DETAILS**

DES. [Signature] CH'KD. [Signature]
DATE: JUNE 12/72
ENG. DES. [Signature]
APPROVED [Signature]

SCALE: AS SHOWN
DRAWING NO. **CSL-39**



APR 12 1979



THE ENGINEER THAT SEALED THIS DRAWING IS RESPONSIBLE FOR ONLY THE AS-CONSTRUCTED CHANGES ON THIS DRAWING.
 THE ORIGINAL DESIGN WAS THE RESPONSIBILITY OF THE DESIGN ENGINEER WHO SEALED THE ISSUED FOR TENDER DRAWINGS IN 1991.

REID, CROWTHER & PARTNERS LIMITED
 WINNIPEG
AS CONSTRUCTED
 SIG. *[Signature]* DATE: Nov. 29, 1994

MEWPC-A1
 PUT-LP3
 94-10-31

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
	WATERMAIN			HYDRO			WATERMAIN	
	LAND DRAINAGE SEWER			CONCRETE			LAND DRAINAGE SEWER	
	WASTEWATER SEWER			ASPHALT			WASTE WATER SEWER	
	MANHOLE			PROPERTY LINE			FORCEMAIN	
	CATCH BASIN			ELEVATION	(32.750)		OUTFALL	
	CURB INLET			TREE			OUTFALL	
	JUNCTIONS			FORCEMAIN	900 mm FM		OUTFALL	
	CULVERT			OUTFALL	1050 mm OF		OUTFALL	
	GAS			FENCE			OUTFALL	

B.M.	69-006		
ELEV.	237.636 m		
NO.	1	AS CONSTRUCTED	94.09.28 DJT
	0	ISSUED FOR TENDER	91.06.17 PAL
NO.	REVISIONS	DATE	BY

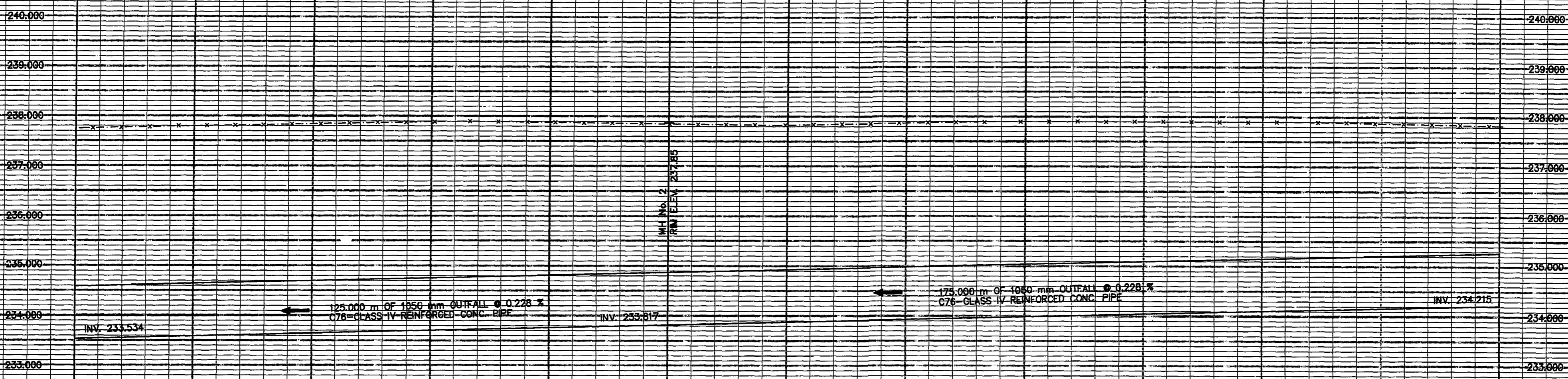
Reid Crowther	
DESIGNED BY	WMM
CHECKED BY	
DRAWN BY	SC
APPROVED BY	
RELEASER FOR CONSTRUCTION	
HOR. SCALE:	1:500
VERTICAL:	1:50
DATE	94-10-23

ENGINEER'S SEAL

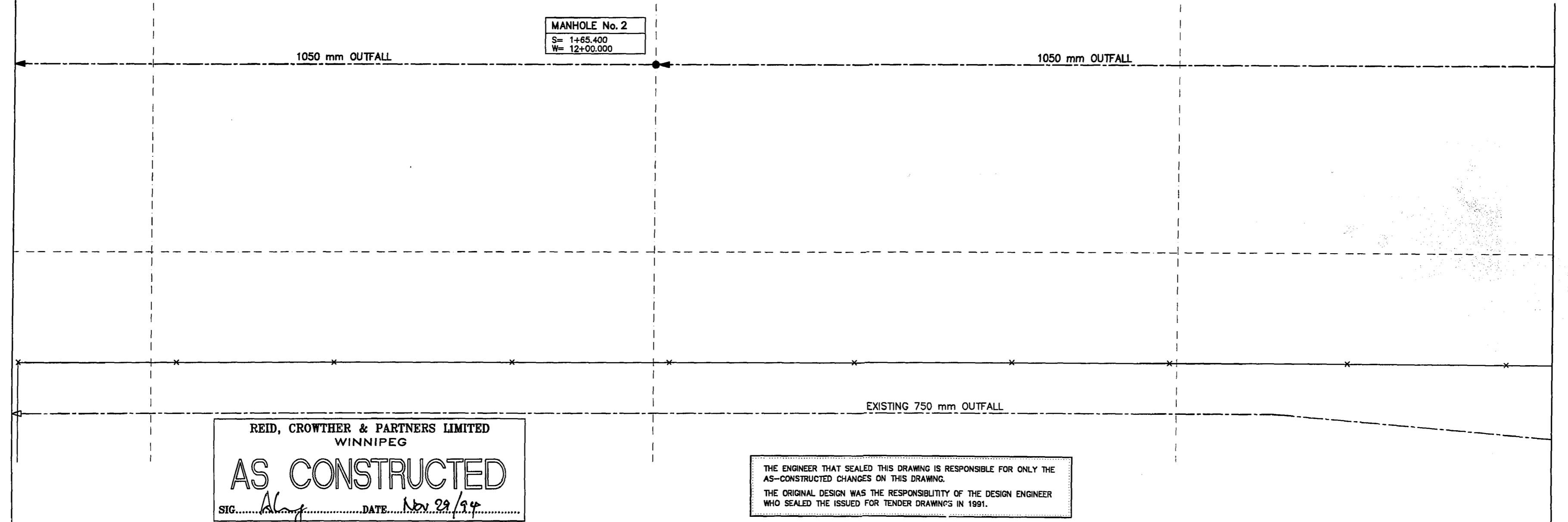
 CONSULTANT DRAWING NO. 60910-LU7

THE CITY OF WINNIPEG
 WORKS AND OPERATIONS DIVISION
 WATERWORKS WASTE AND DISPOSAL DEPT.
 WEST END WATER POLLUTION CONTROL CENTRE
 AREA L - GENERAL AND SITWORKS
 CITY DRAWING NUMBER SHEET OF
 OUTFALL - PLAN PROFILE
 SHEET No. 1
 WEP-46

File # WS10094



MATCH LINE 13+25W 13+00W 12+50W 12+00W MH No. 2 11+50W 11+00W 10+50W MATCH LINE 10+25W



FOR CONTINUATION SEE DRAWING No. LU9

FOR CONTINUATION SEE DRAWING No. LU7

REID, CROWTHER & PARTNERS LIMITED
WINNIPEG
AS CONSTRUCTED
SIG. *Along* DATE *Nov. 29, 1994*

THE ENGINEER THAT SEALED THIS DRAWING IS RESPONSIBLE FOR ONLY THE AS-CONSTRUCTED CHANGES ON THIS DRAWING.
THE ORIGINAL DESIGN WAS THE RESPONSIBILITY OF THE DESIGN ENGINEER WHO SEALED THE ISSUED FOR TENDER DRAWINGS IN 1991.

METRIC
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METERS

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
	WATERMAIN			HYDRO			WATERMAIN	
	LAND DRAINAGE SEWER			CONCRETE			LAND DRAINAGE SEWER	
	WASTEWATER SEWER			ASPHALT			WASTE WATER SEWER	
	MANHOLE			PROPERTY LINE			FORCEMAIN	
	CATCH BASIN			SURVEY BAR			OUTFALL	
	CURB INLET			ELEVATION			Q. PROFILE	
	JUNCTIONS			TREE				
	CULVERT			FORCEMAIN				
	GAS			OUTFALL				
	FENCE			FENCE				

B.M. 69-006	ELEV. 237.636 m		
1	AS CONSTRUCTED	94.09.28	DJT
0	ISSUED FOR TENDER	91.06.17	PAL
NO.	REVISIONS	DATE	BY

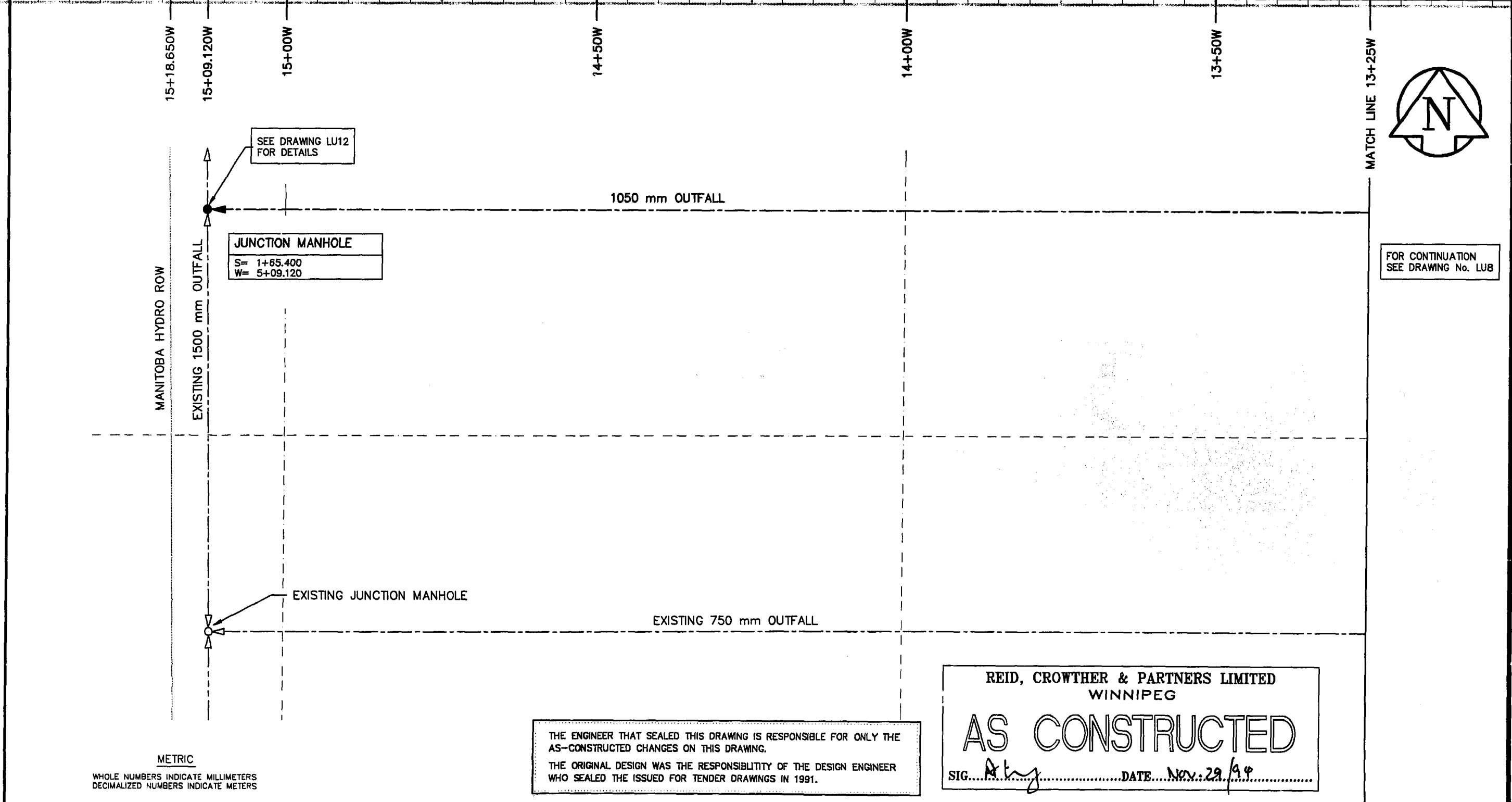
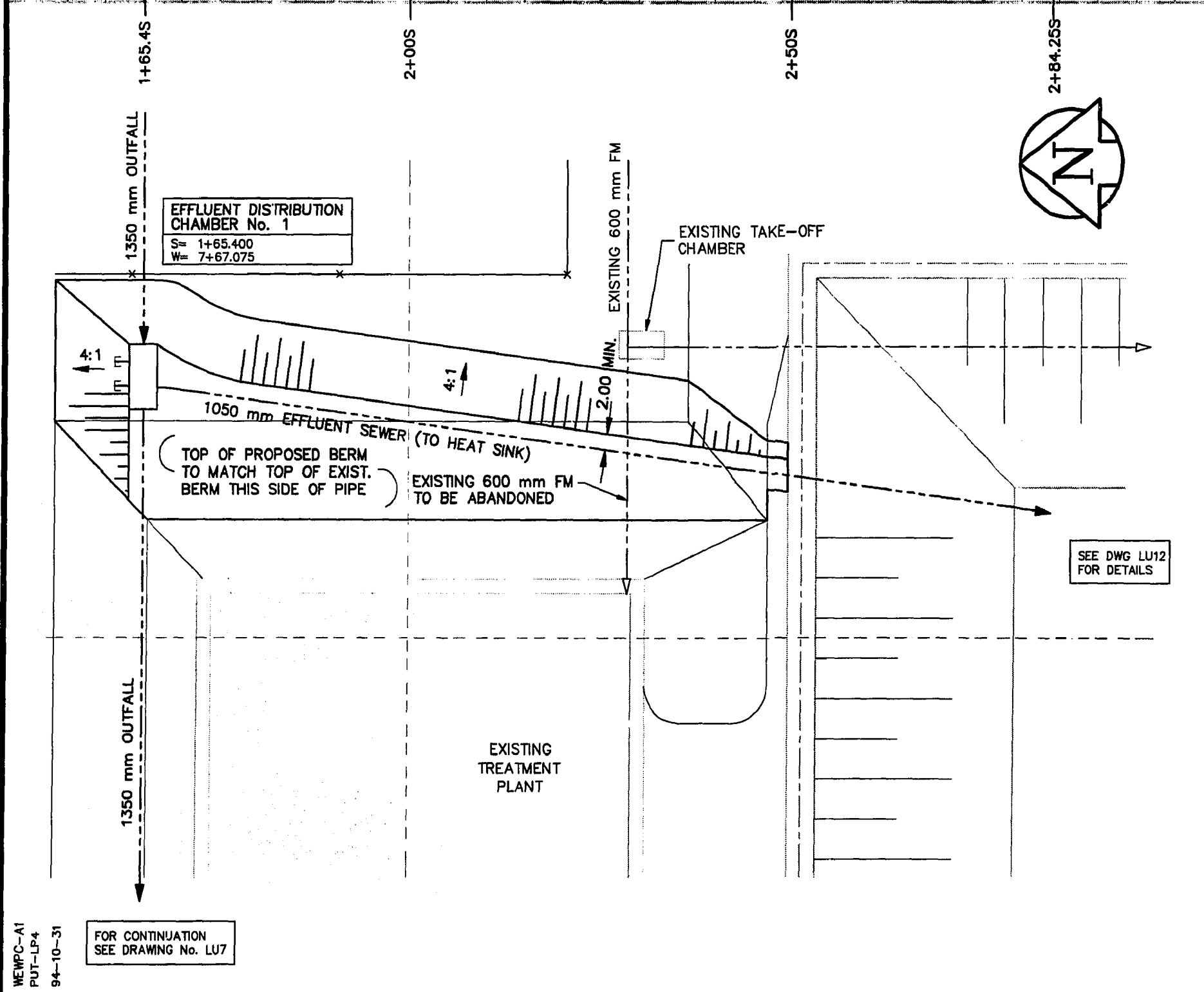
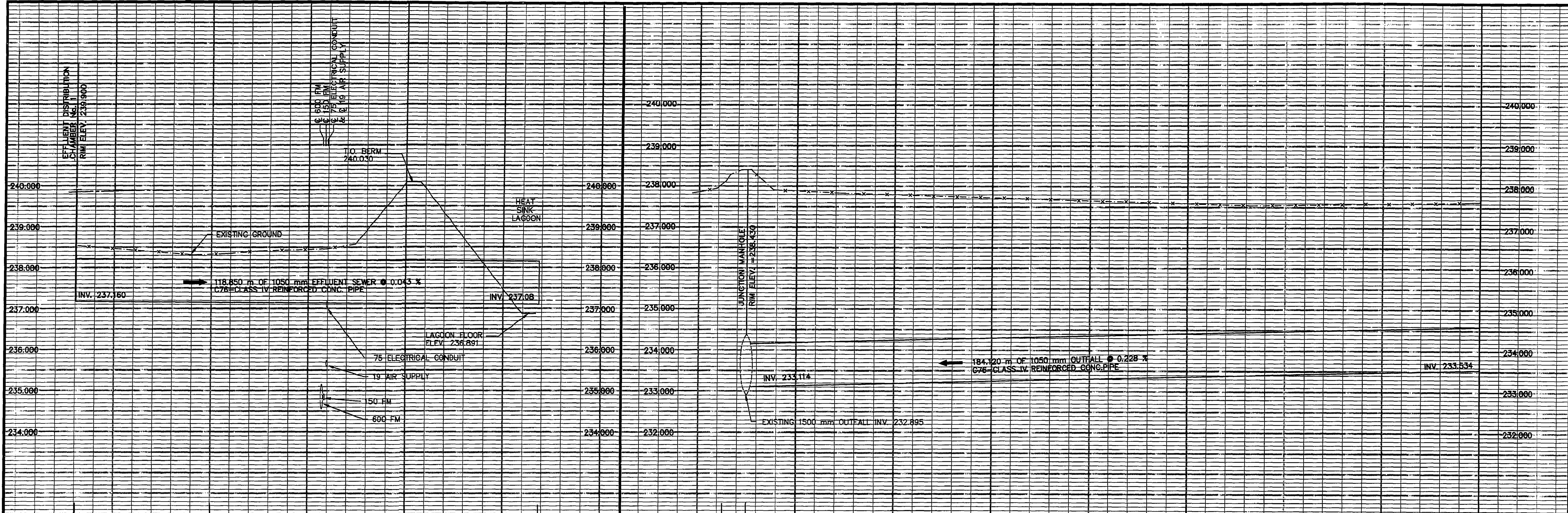
Reid Crowther	
DESIGNED BY	WMM
DRAWN BY	SC
HOR. SCALE:	1:500
VERTICAL:	1:50
DATE	94-10-22

ENGINEER'S SEAL

CONSULTANT DRAWING NO. 60910-LUB

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS WASTE AND DISPOSAL DEPT.
WEST END WATER POLLUTION CONTROL CENTRE
AREA L - GENERAL AND SITEWORKS
CITY DRAWING NUMBER SHEET OF
OUTFALL - PLAN PROFILE
SHEET No. 2
WEP-47

File # WS10095



EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	M.T.S.	150 mm W.M.	WATERMAIN	HYDRANT	
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	CONCRETE	ASPHALT	300mm L.D.S.	LAND DRAINAGE SEWER	VALVE	
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	PROPERTY LINE	SURVEY BAR	250mm W.W.S.	WASTE WATER SEWER	FORCEMAIN	
	MANHOLE		ELEVATION	(32.750)		OUTFALL	1050 mm OF	
	CATCH BASIN		TREE			OUTFALL	1050 mm OF	
	CURB INLET		FORCEMAIN	900 mm FM		OUTFALL	1050 mm OF	
	JUNCTIONS		OUTFALL	1050 mm OF		FENCE		
	CULVERT							
	GAS							

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV.	69-006	237.636 m
NO.	REVISIONS	DATE BY
1	AS CONSTRUCTED	94,09,26 DJT
0	ISSUED FOR TENDER	91,06,17 PAL

Reid Crowther

DESIGNED BY: WMM
DRAWN BY: SC

CHECKED BY:
APPROVED BY:

HOR. SCALE: 1:500
VERTICAL: 1:50

RELEASED FOR CONSTRUCTION: DATE

ENGINEER'S SEAL

Mr. G. LEONG
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. 60910-LU9

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS WASTE AND DISPOSAL DEPT.

WEST END WATER POLLUTION CONTROL CENTRE
AREA L - GENERAL AND SITEWORKS

CITY DRAWING NUMBER SHEET OF

OUTFALL - PLAN PROFILE
SHEET No. 3

WEP-48

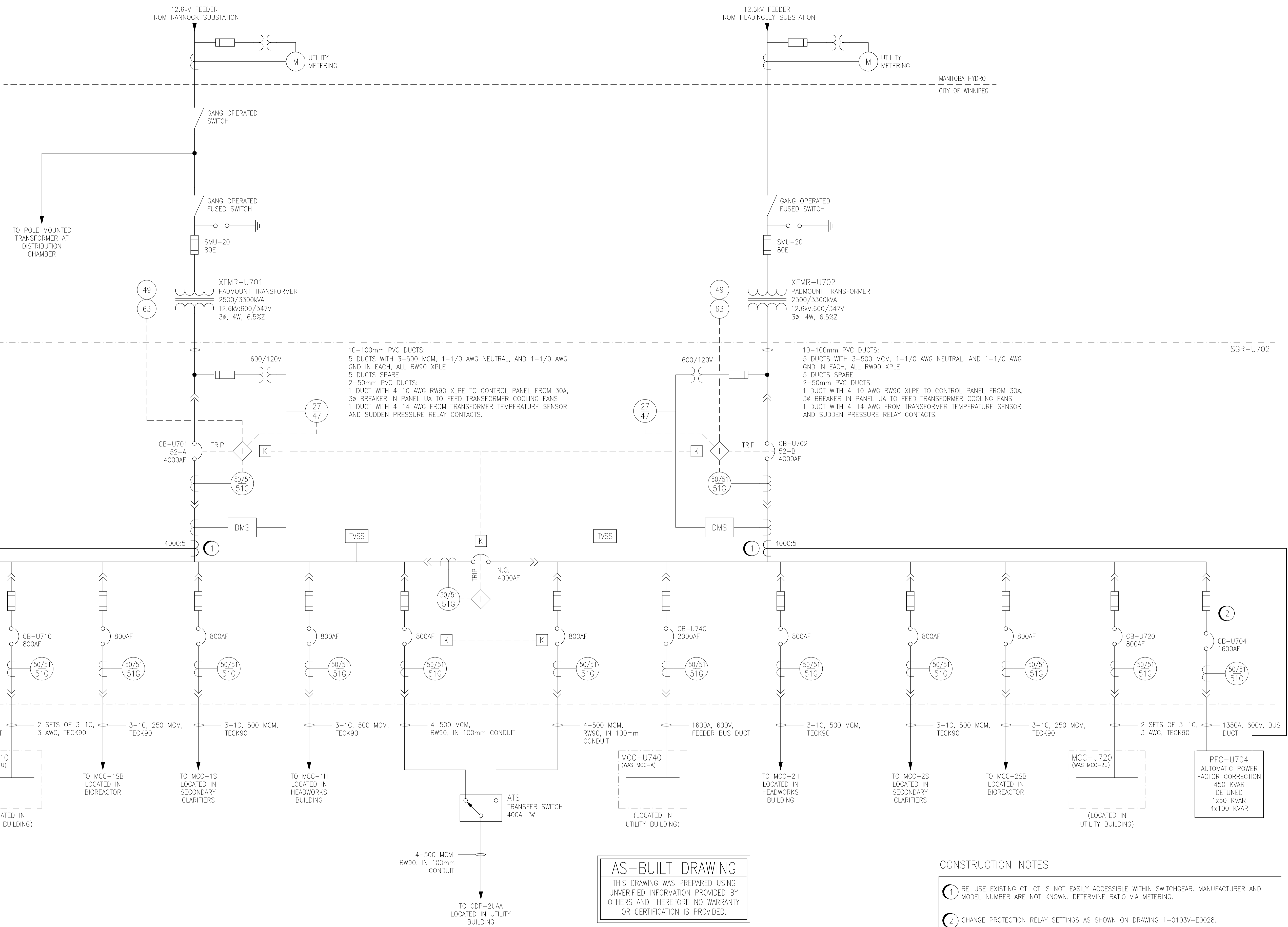
THE ENGINEER THAT SEALED THIS DRAWING IS RESPONSIBLE FOR ONLY THE AS-CONSTRUCTED CHANGES ON THIS DRAWING.
THE ORIGINAL DESIGN WAS THE RESPONSIBILITY OF THE DESIGN ENGINEER WHO SEALED THE ISSUED FOR TENDER DRAWINGS IN 1991.

REID, CROWTHER & PARTNERS LIMITED
WINNIPEG

AS CONSTRUCTED

SIG. *Atty* DATE *Nov. 29 94*

File # WS 10096



AS-BUILT DRAWING
 THIS DRAWING WAS PREPARED USING UNVERIFIED INFORMATION PROVIDED BY OTHERS AND THEREFORE NO WARRANTY OR CERTIFICATION IS PROVIDED.

- CONSTRUCTION NOTES**
- ① RE-USE EXISTING CT. CT IS NOT EASILY ACCESSIBLE WITHIN SWITCHGEAR. MANUFACTURER AND MODEL NUMBER ARE NOT KNOWN. DETERMINE RATIO VIA METERING.
 - ② CHANGE PROTECTION RELAY SETTINGS AS SHOWN ON DRAWING 1-0103V-E0028.

NOTES:
 1. THIS DRAWING IS BASED ON 1-0103A-E0003-002. ACTUAL CONFIGURATION MAY NOT BE EXACTLY AS SHOWN.



NO.	REVISIONS	DATE	DESIGN	CHECK
01	AS-BUILT. BID OP. 419-2013	2014/06/06	TMC	
00	ISSUED FOR TENDER (BID OP. 419-2013)	2013/06/26	TMC	CJR

<p>SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8090</p>		ENGINEER'S SEAL ORIGINAL DRAWING SEALED BY: T. M. CHURCH SNC-Lavalin MEMBER # 32682 2013/06/26 REV. 00
DESIGNED BY: T. CHURCH DRAWN BY: S. FUNK SCALE: NTS	CHECKED BY: C. REIMER APPROVED BY: C. REIMER RELEASED FOR CONSTRUCTION BY: M. PAETKAU DATE: 2013/06/26	DATE: 2013/01/08 CONSULTANT NO.:

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

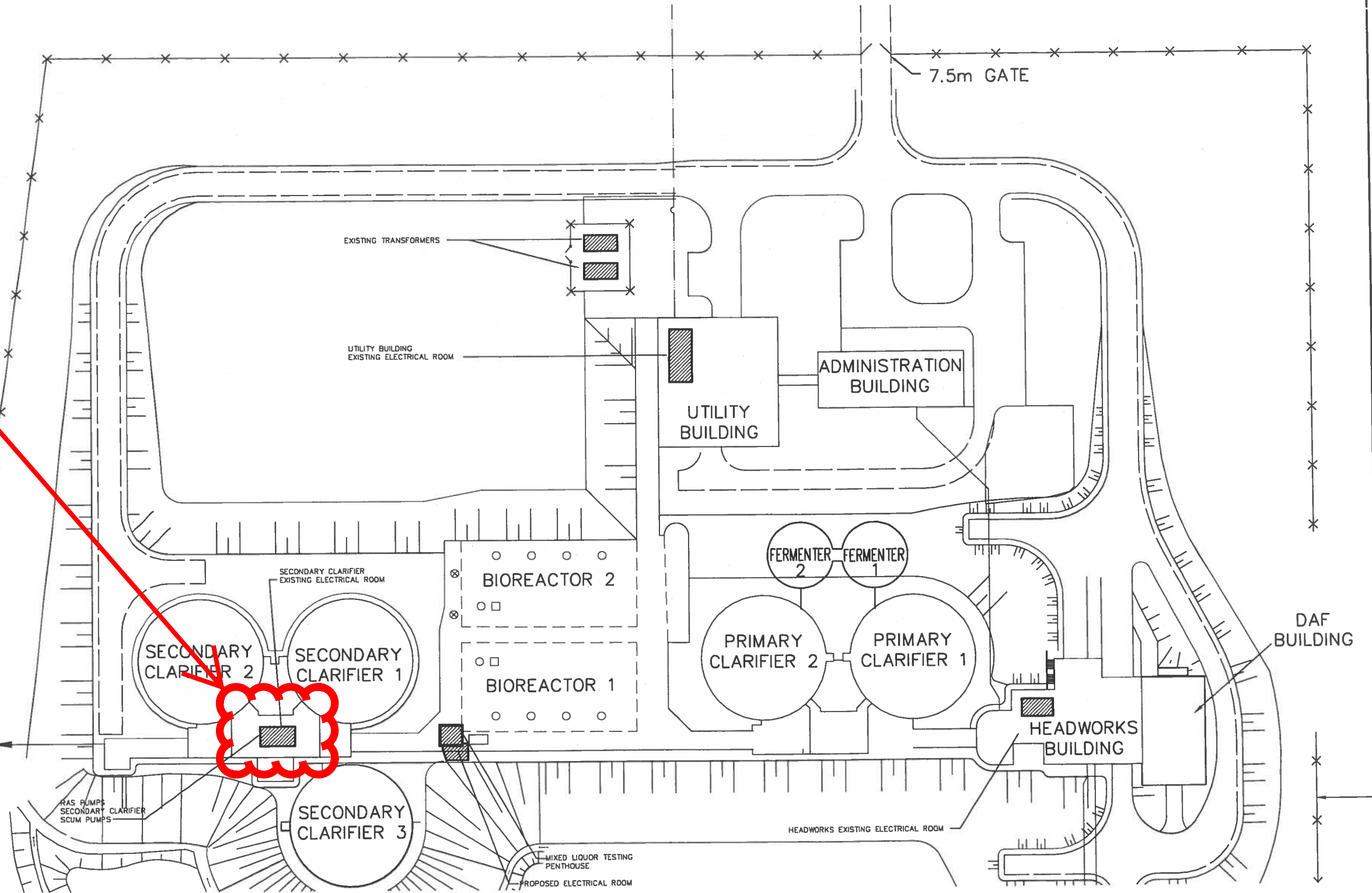
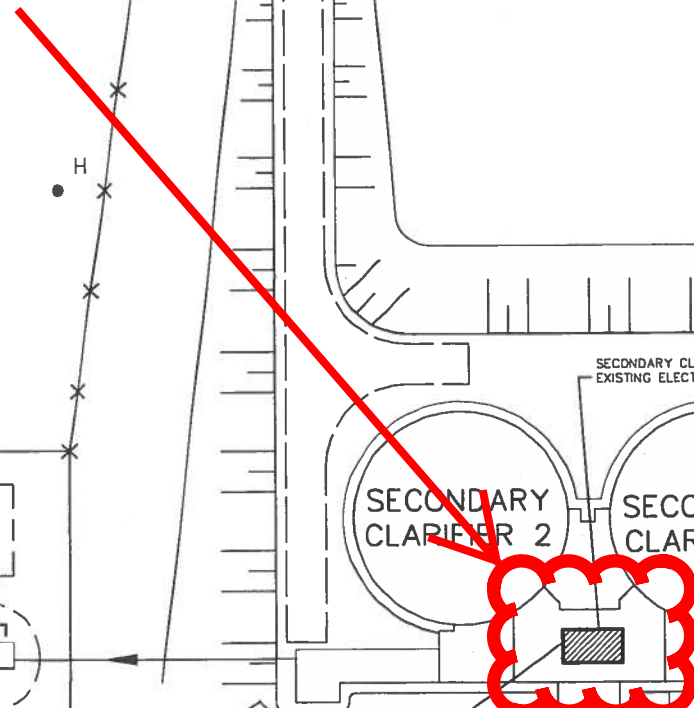
WEST END WATER POLLUTION CONTROL CENTRE
 POWER FACTOR CORRECTION
 SINGLE LINE DIAGRAM
 SWITCHGEAR SGR-U701 AND SGR-U702

CITY DRAWING NUMBER: 1-0103V-E0027
 SHEET: 001
 REV: 01
 SIZE: A1

1-0103V-E0028	SGR-U701 AND SGR-U702 PROTECTION SETTINGS
DRAWING NUMBER	REFERENCE DRAWINGS



Approximate location of Control Room 2



B.M. ELEV.		EarthTech A Tyco International Ltd. Company		ENGINEER'S SEAL PRELIMINARY NOT FOR CONSTRUCTION		THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION	
DESIGNED BY PS CHECKED BY PS		DRAWN BY CPG APPROVED BY		CONSULTANT DRAWING NO. L-ED1P		WEWPC BIOLOGICAL NUTRIENT REMOVAL UPGRADE CONTRACT No. 3	
B ISSUED FOR FINAL FDR 05/12/06 CLG A ISSUED FOR DRAFT FDR 05/07/15 C.T.		HOR. SCALE: 1:1000 VERTICAL SCALE:		RELEASED FOR CONSTRUCTION BY:		CITY FILE NUMBER SHEET OF	
NO. REVISIONS DATE BY		DATE 2005/06/30 DATE		ELECTRICAL BNR UPGRADE SITE BUILDING LAYOUT		CITY DRAWING NUMBER	

PRELIMINARY NOT FOR CONSTRUCTION