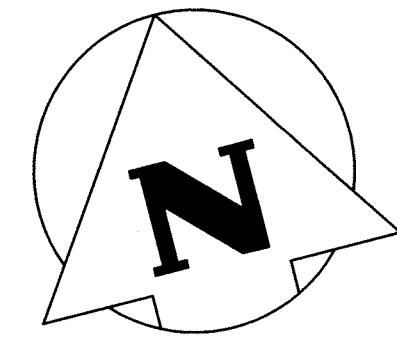


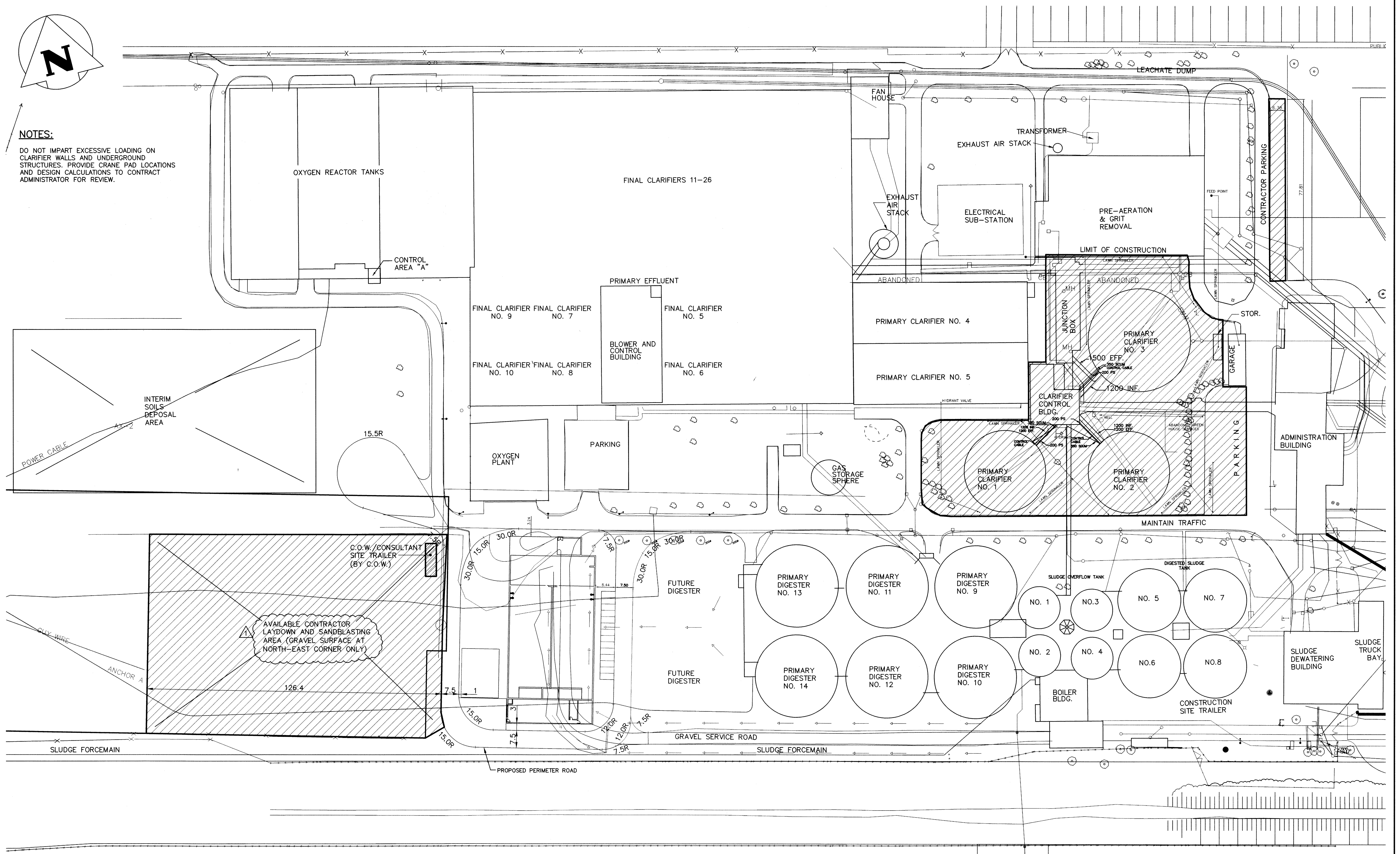
Appendix J

Circular Primary Clarifier Record Drawings



NOTES:

DO NOT IMPART EXCESSIVE LOADING ON CLARIFIER WALLS AND UNDERGROUND STRUCTURES. PROVIDE CRANE PAD LOCATIONS AND DESIGN CALCULATIONS TO CONTRACT ADMINISTRATOR FOR REVIEW.



COWLEND

AS-CONSTRUCTED

AS-CONSTRUCTED DRAWING REVISIONS ARE BASED SOLELY ON DRAWING MARKUPS OR OTHER FIELD DOCUMENTATION PROVIDED BY THE OWNER. THESE CHANGES HAVE NOT BEEN VERIFIED IN THE FIELD BY KGS GROUP.

NO.	REVISIONS	DATE	BY
2	ISSUED AS CONSTRUCTED	06/04/10	RJL
1	ISSUED FOR ADDENDUM	05/03/08	RJL
0	ISSUED FOR TENDER	13/02/08	RJL

KGS GROUP
CONSULTING ENGINEERS
& PROJECT MANAGERS

DESIGNED BY	RJL
DRAWN BY	MB
HOR. SCALE:	1:750
VERTICAL:	-
DATE	-/12/07



CHECKED BY	RJL
APPROVED BY	
RELEASED FOR CONSTRUCTION:	
DATE	

ENGINEER'S SEAL

THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED R.J. LONG, P.ENG. 13/02/08

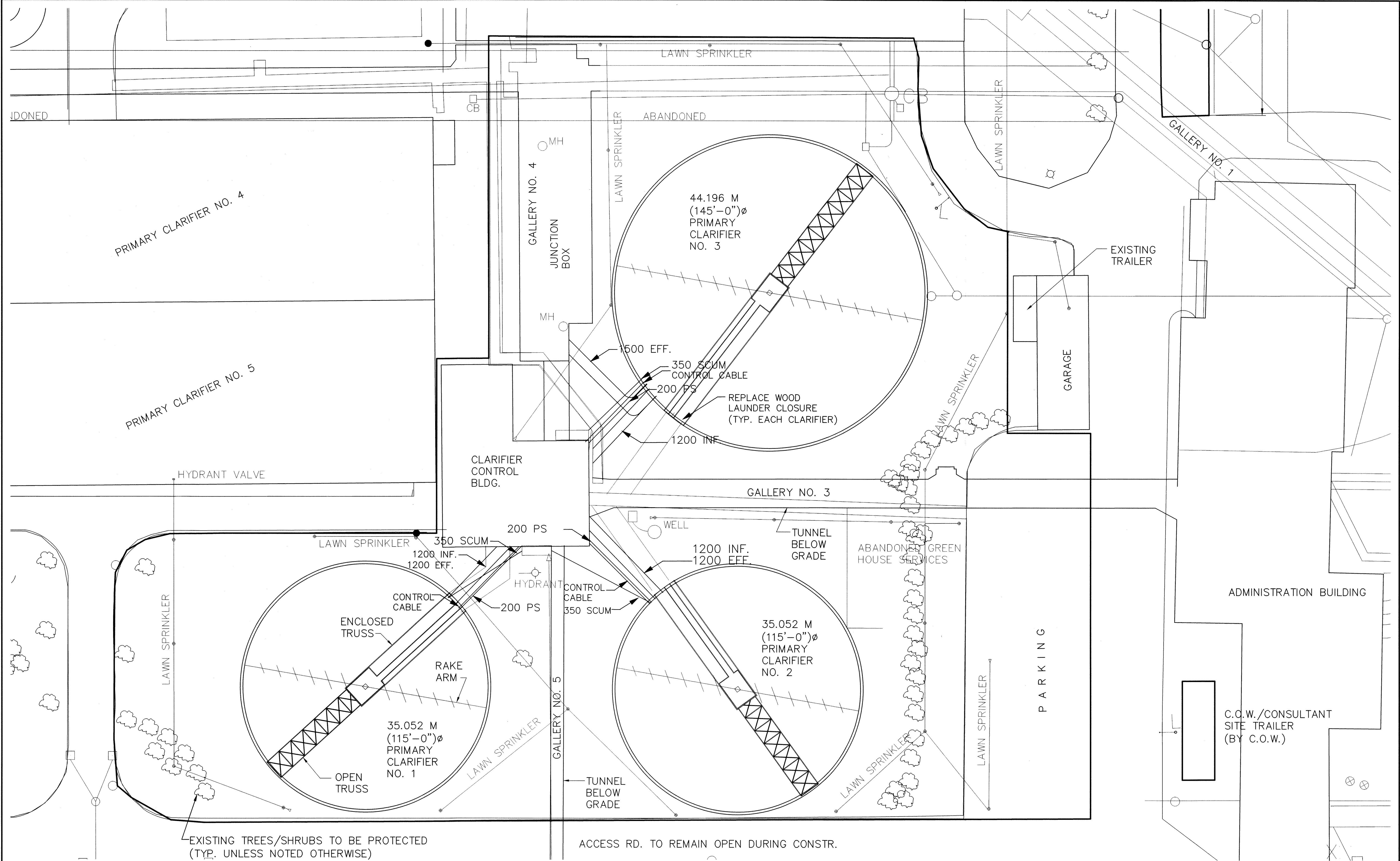
CONSULTANT DRAWING NO.
1-0101P-C0001-001



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PROJECT TITLE
NORTH END WATER POLLUTION CONTROL CENTRE
PARTIAL SITE PLAN

SHEET	01	OF	01
KGS JOB NUMBER	06-0107-03		
CITY DRAWING NUMBER	1-0101P-C0001-001		



NOTES:

- DO NOT IMPART EXCESSIVE LOADING ON CLARIFIER WALLS AND UNDERGROUND STRUCTURES. PROVIDE CRANE PAD LOCATIONS AND DESIGN CALCULATIONS TO CONTRACT ADMINISTRATOR FOR REVIEW 2 WEEKS PRIOR TO POSITIONING CRANE.
- RESTORE SOD, ASPHALT, TREES, SHRUBS, SPRINKLER SYSTEM, ETC. TO EXISTING CONDITION SUBSEQUENT TO THE COMPLETION OF CONSTRUCTION.
- PROVIDE 100 MM HOUSEKEEPING PADS FOR NEW EXHAUST FANS - REF. MECHANICAL DRAWINGS M0001 AND M0002.
- REFERENCE MECHANICAL DRAWING M0004 FOR NEW ROOF TOP AIR CONDITIONING UNIT. RESIZE ROOF OPENING TO SUIT.
- IF ANY CLARIFIER IS EMPTY BETWEEN NOV.1 AND MARCH 30, THE CLARIFIER SHALL BE HOARDED AND HEATED TO MAINTAIN A TEMPERATURE WITHIN THE CLARIFIER OF NOT LESS THAN 10° C.

AS-CONSTRUCTED

AS-CONSTRUCTED DRAWING REVISIONS ARE BASED SOLELY ON DRAWING MARKUPS OR OTHER FIELD DOCUMENTATION PROVIDED BY THE OWNER. THESE CHANGES HAVE NOT BEEN VERIFIED IN THE FIELD BY KGS GROUP.

B.M.		ELEV.	
1	ISSUED AS CONSTRUCTED	06/04/10	RJL
2	ISSUED FOR TENDER	13/02/08	RJL
NO.	REVISIONS	DATE	BY

KGS GROUP
CONSULTING ENGINEERS & PROJECT MANAGERS

DESIGNED BY: RJL
DRAWN BY: MB

HOR. SCALE: 1:250
VERTICAL: -

DATE: -/12/07

CH2MHILL

CHECKED BY:
APPROVED BY:
RELEASED FOR CONSTRUCTION:
DATE:

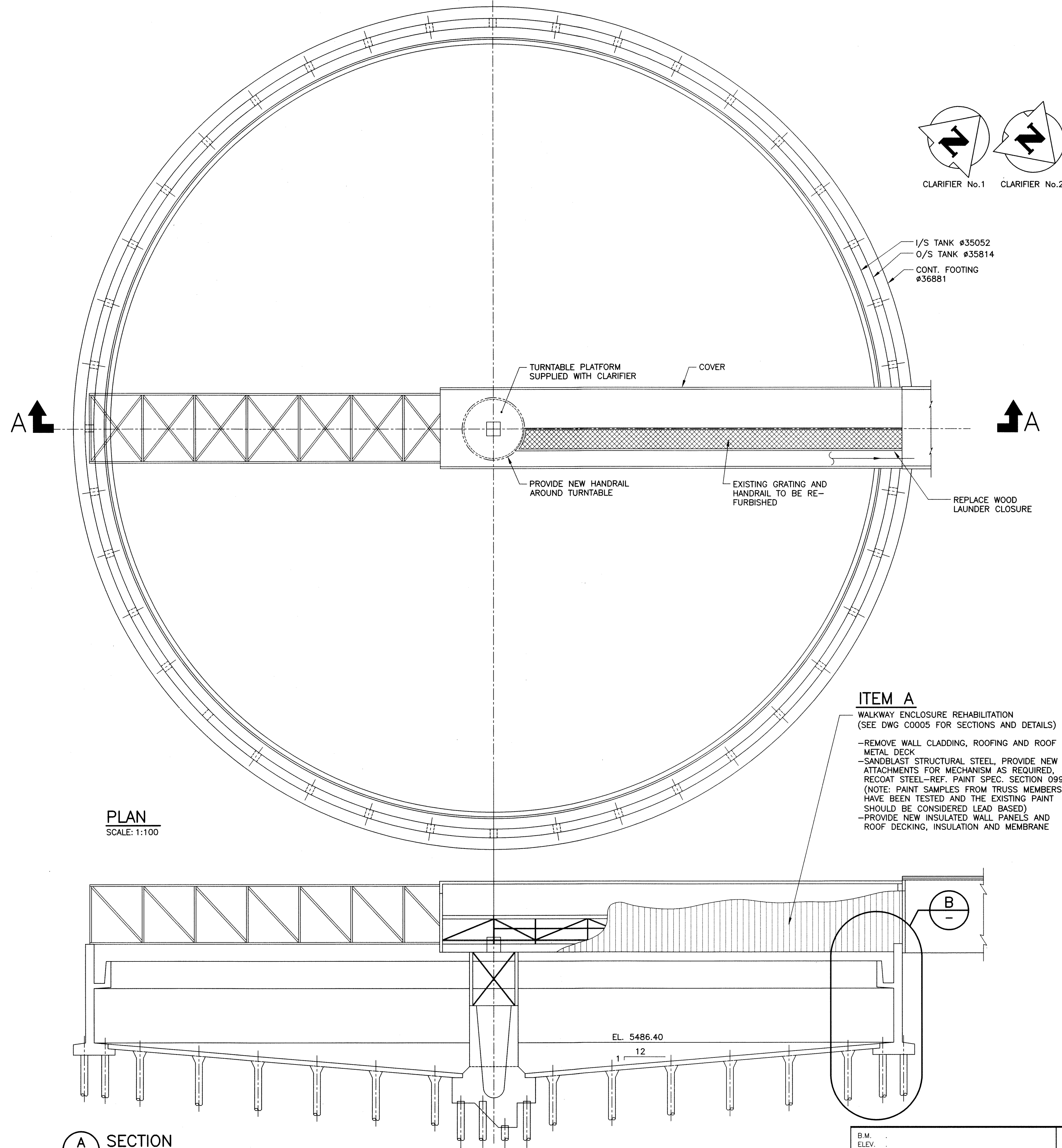
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THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED R.J. LONG, P.ENG. 13/02/08
CONSULTANT DRAWING NO. 1-0101P-C0002-001

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

Winnipeg

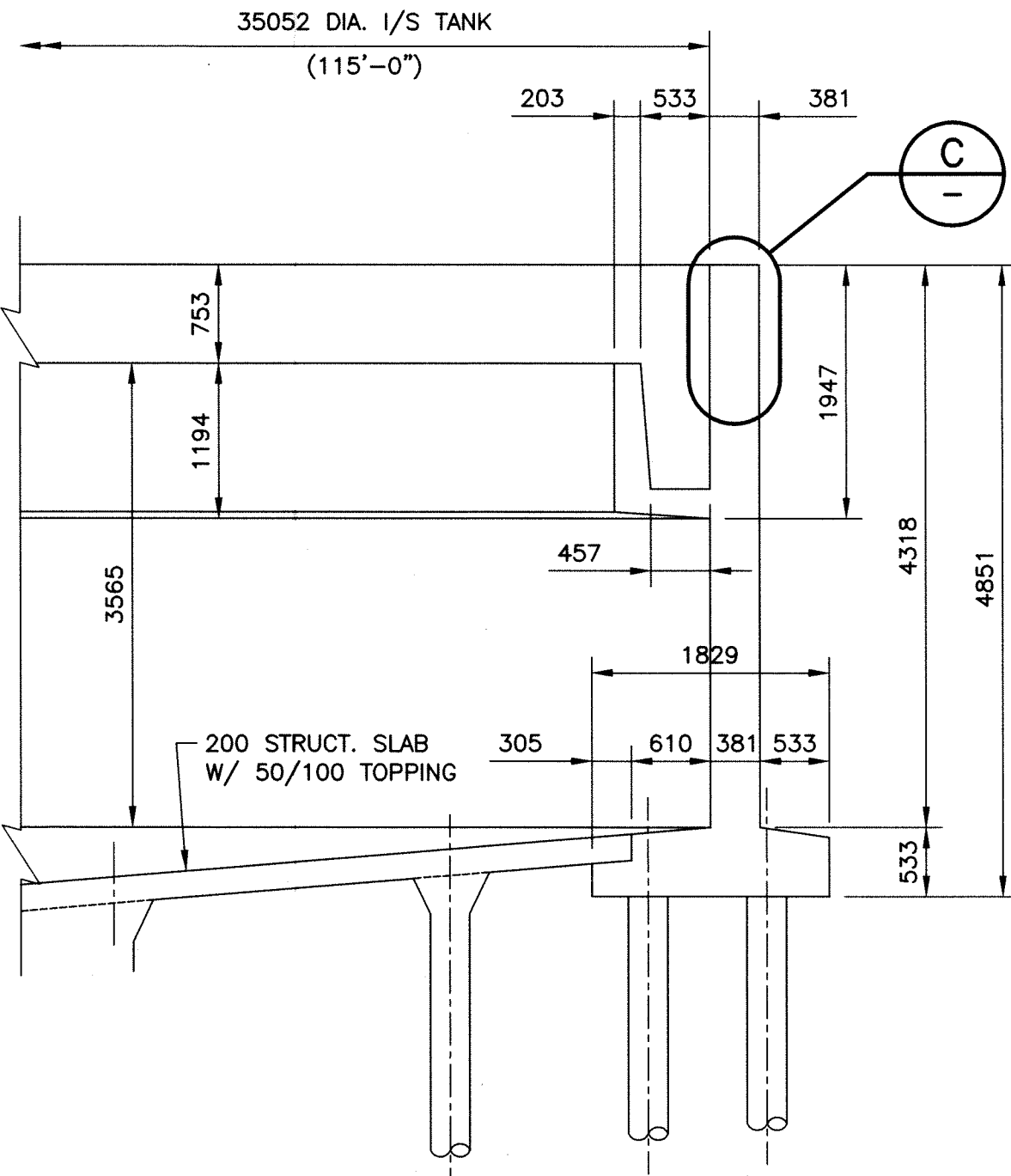
PROJECT TITLE: NORTH END WATER POLLUTION CONTROL CENTRE PRIMARY CLARIFIERS SITE PLAN

SHEET 01 OF 01
KGS JOB NUMBER 06-0107-03
CITY DRAWING NUMBER 1-0101P-C0002-001

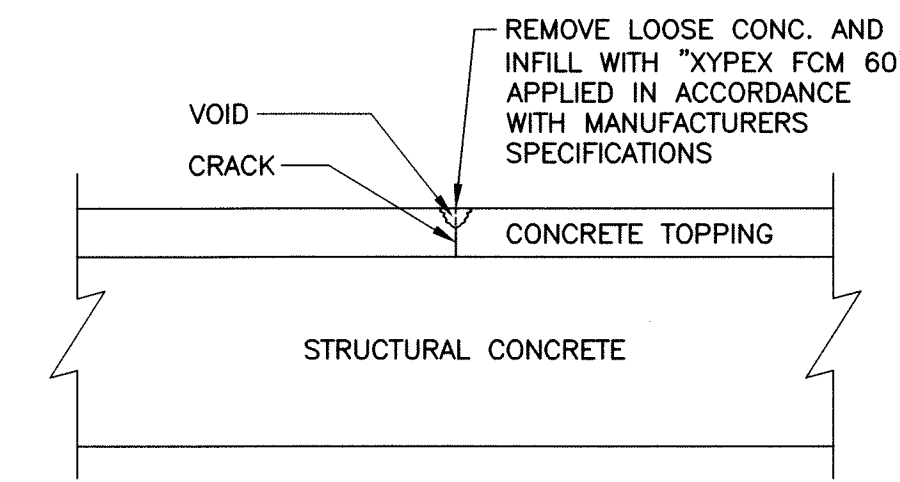


SCOPE OF REMEDIAL WORK:

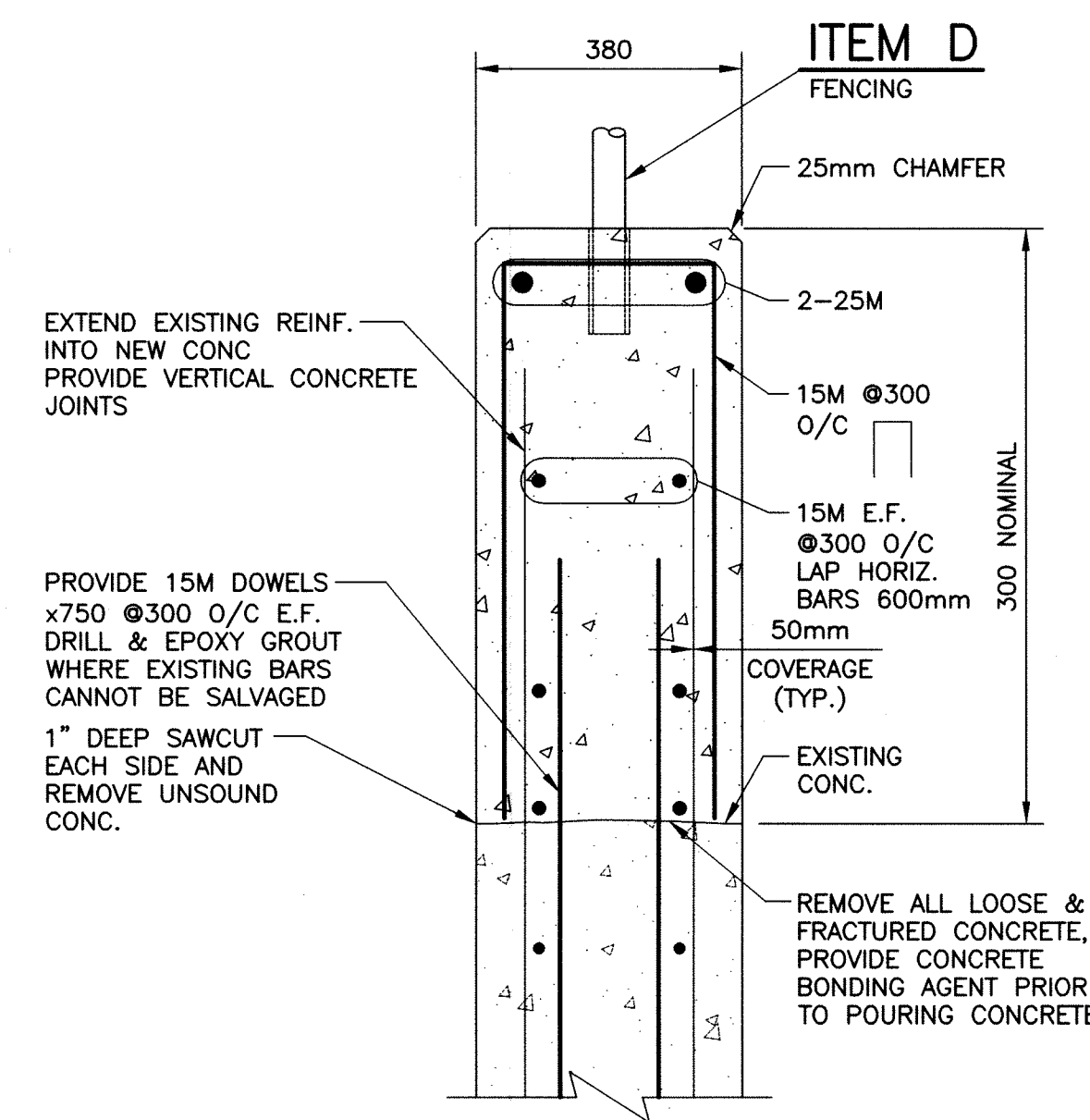
- A. WALKWAY ENCLOSURE REHABILITATION
- B. TOP OF WALL CONCRETE REPAIR
- C. FLOOR CRACK REPAIR
- D. SUPPLY AND INSTALL NEW CLARIFIER FENCING.



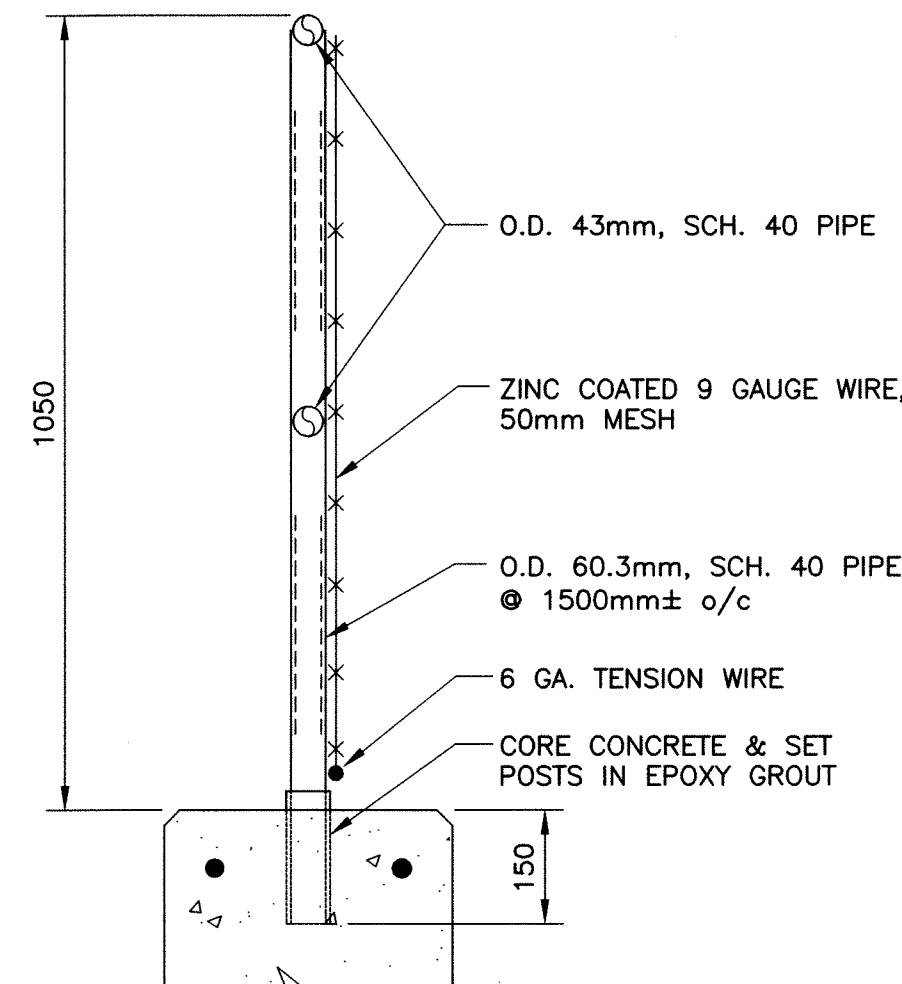
B DETAIL
SCALE: 1:50



D ITEM C
FLOOR CRACK REPAIR DETAIL
SCALE: 1:10

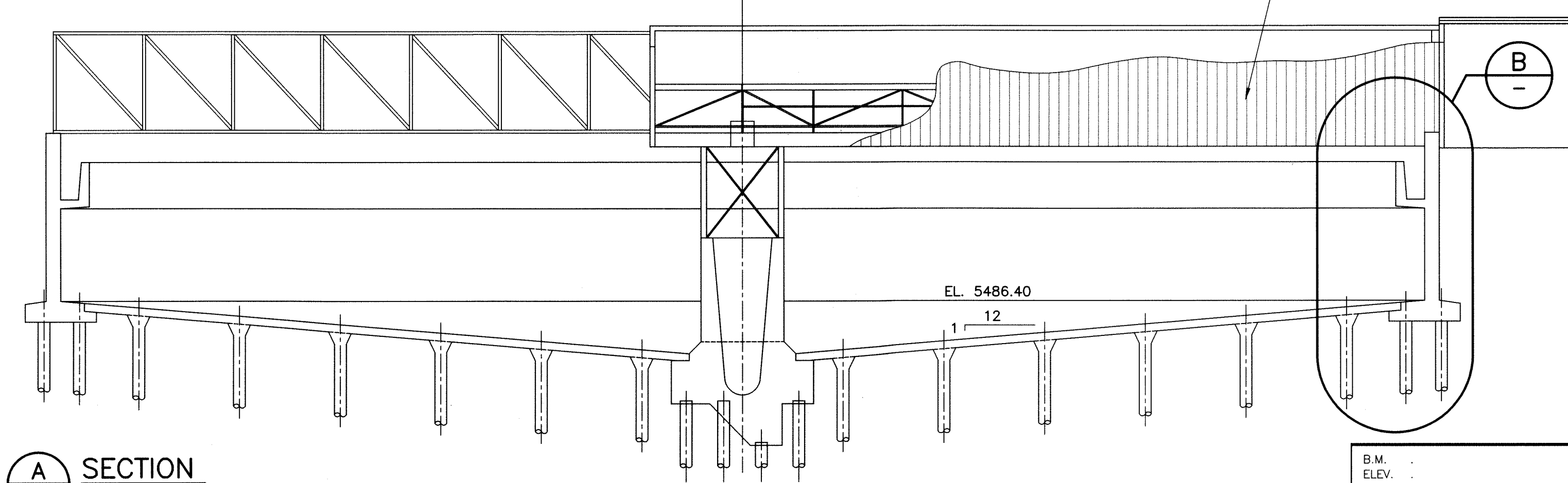


C ITEM B. CONC. REPAIR DETAIL
SCALE: 1:10



ITEM D
FENCING

PLAN
SCALE: 1:100



A SECTION
SCALE: 1:100

AS-CONSTRUCTED

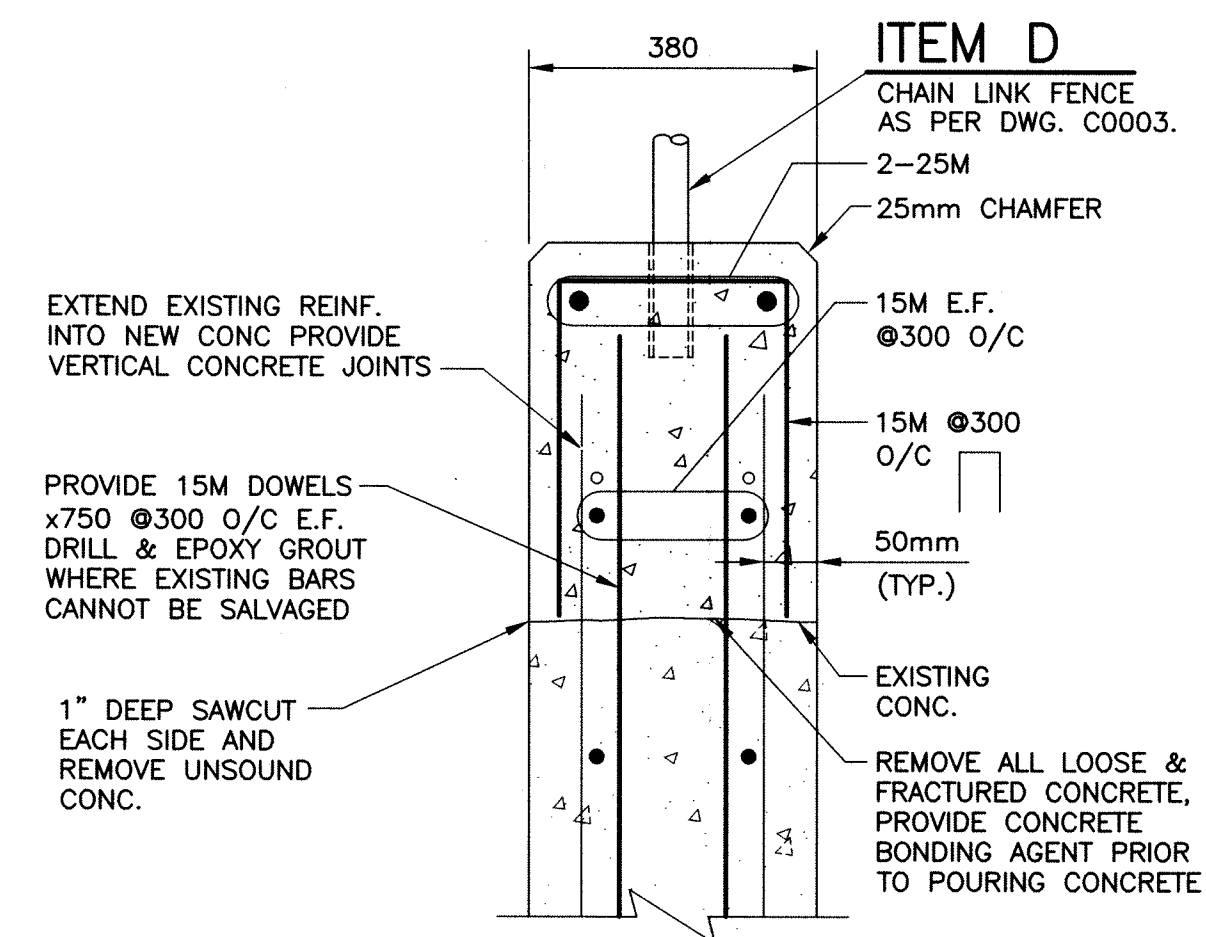
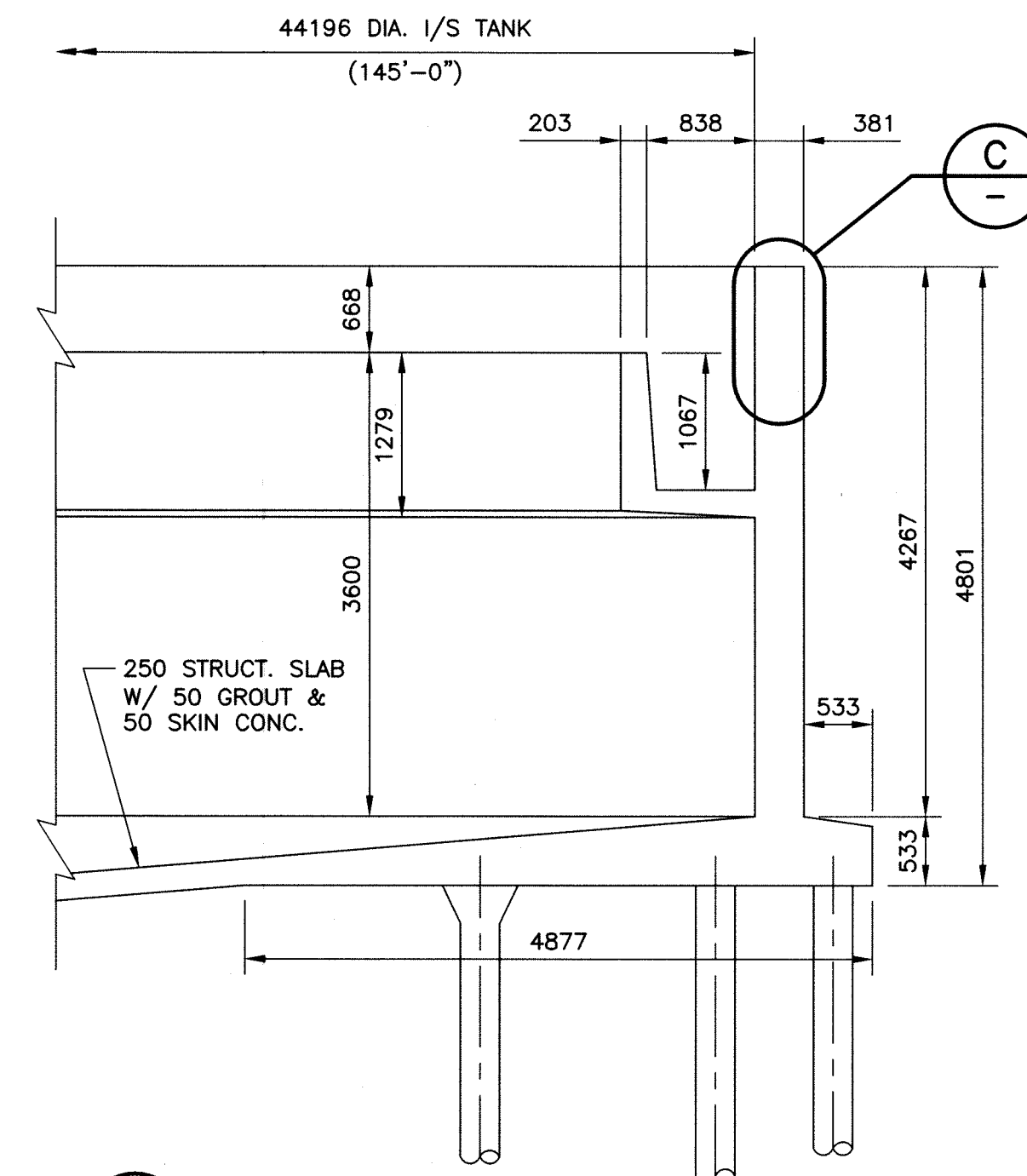
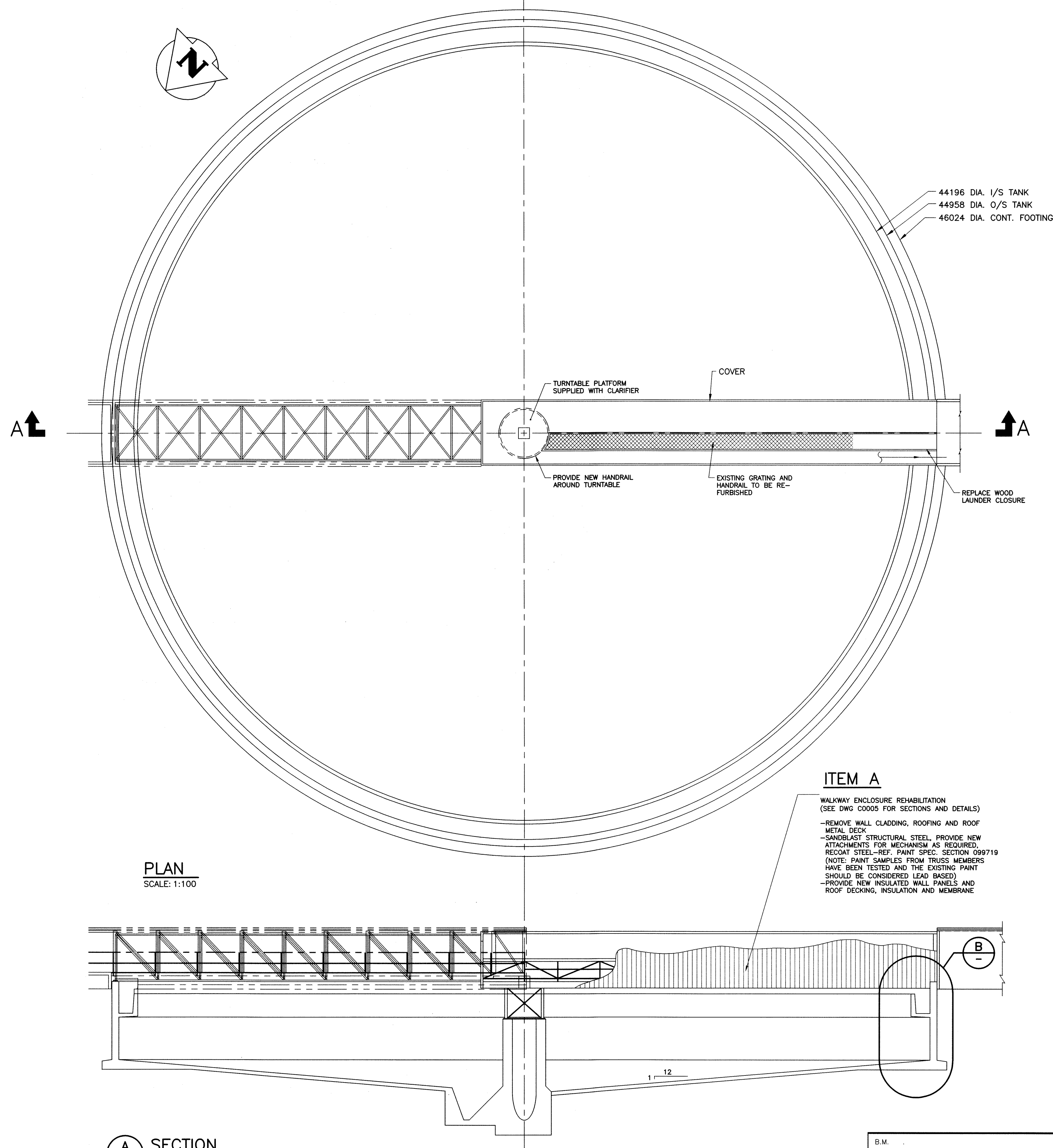
AS-CONSTRUCTED DRAWING REVISIONS ARE BASED SOLELY ON DRAWING MARKUPS OR OTHER FIELD DOCUMENTATION PROVIDED BY THE OWNER. THESE CHANGES HAVE NOT BEEN VERIFIED IN THE FIELD BY KGS GROUP.

NO.	REVISIONS	DATE	BY
1	ISSUED AS CONSTRUCTED	06/04/10	RJL
2	ISSUED FOR TENDER	13/02/08	RJL

DESIGNED BY	RJL	CHECKED BY	RJL
DRAWN BY	JG/MB	APPROVED BY	
HOR. SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION:	
VERTICAL:		DATE	08/06

ENGINEER'S SEAL
THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED R.J. LONG, P.ENG. 13/02/08
CONSULTANT DRAWING NO.
1-0101P-C0003-001

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	SHEET 01 OF 01
PROJECT TITLE NORTH END WATER POLLUTION CONTROL CENTRE PRIMARY CLARIFIERS 1 & 2 CONCRETE & WALKWAY ENCLOSURE REMEDIAL WORK	KGS JOB NUMBER 06-0107-03
	CITY DRAWING NUMBER 1-0101P-C0003-001



ITEM B. CONC. REPAIR DETAIL
SCALE: 1:10

SCOPE OF REMEDIAL WORK:
A. WALKWAY ENCLOSURE REHABILITATION.
B. TOP OF WALL CONCRETE REPAIR
C. SUPPLY AND INSTALL NEW CLARIFIER FENCING

COWLEGGEND

AS-CONSTRUCTED

AS-CONSTRUCTED DRAWING
REVISIONS ARE BASED SOLELY ON
DRAWING MARKUPS OR OTHER FIELD
DOCUMENTATION PROVIDED BY THE
OWNER. THESE CHANGES HAVE NOT
BEEN VERIFIED IN THE FIELD BY
KGS GROUP.

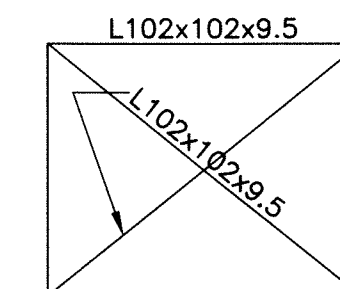
NO.	REVISIONS	DATE	BY
1	ISSUED AS CONSTRUCTED	06/04/10	RJL
0	ISSUED FOR TENDER	13/02/08	RJL

DESIGNED BY	RJL
DRAWN BY	JG/MB
HOR. SCALE:	AS SHOWN
VERTICAL:	
DATE	05/06

CHECKED BY	RJL
APPROVED BY	
RELEASED FOR CONSTRUCTION:	
DATE	

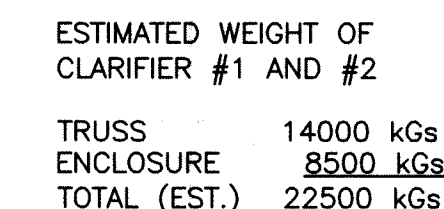
ENGINEER'S SEAL	
THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED R.J. LONG, P.ENG. 13/02/08	
CONSULTANT DRAWING NO.	1-0101P-C0004-001

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	SHEET 01 OF 01
PROJECT TITLE NORTH END WATER POLLUTION CONTROL CENTRE PRIMARY CLARIFIER 3 CONCRETE & WALKWAY ENCLOSURE REMEDIAL WORK	KGS JOB NUMBER 06-0107-03
	CITY DRAWING NUMBER 1-0101P-C0004-001



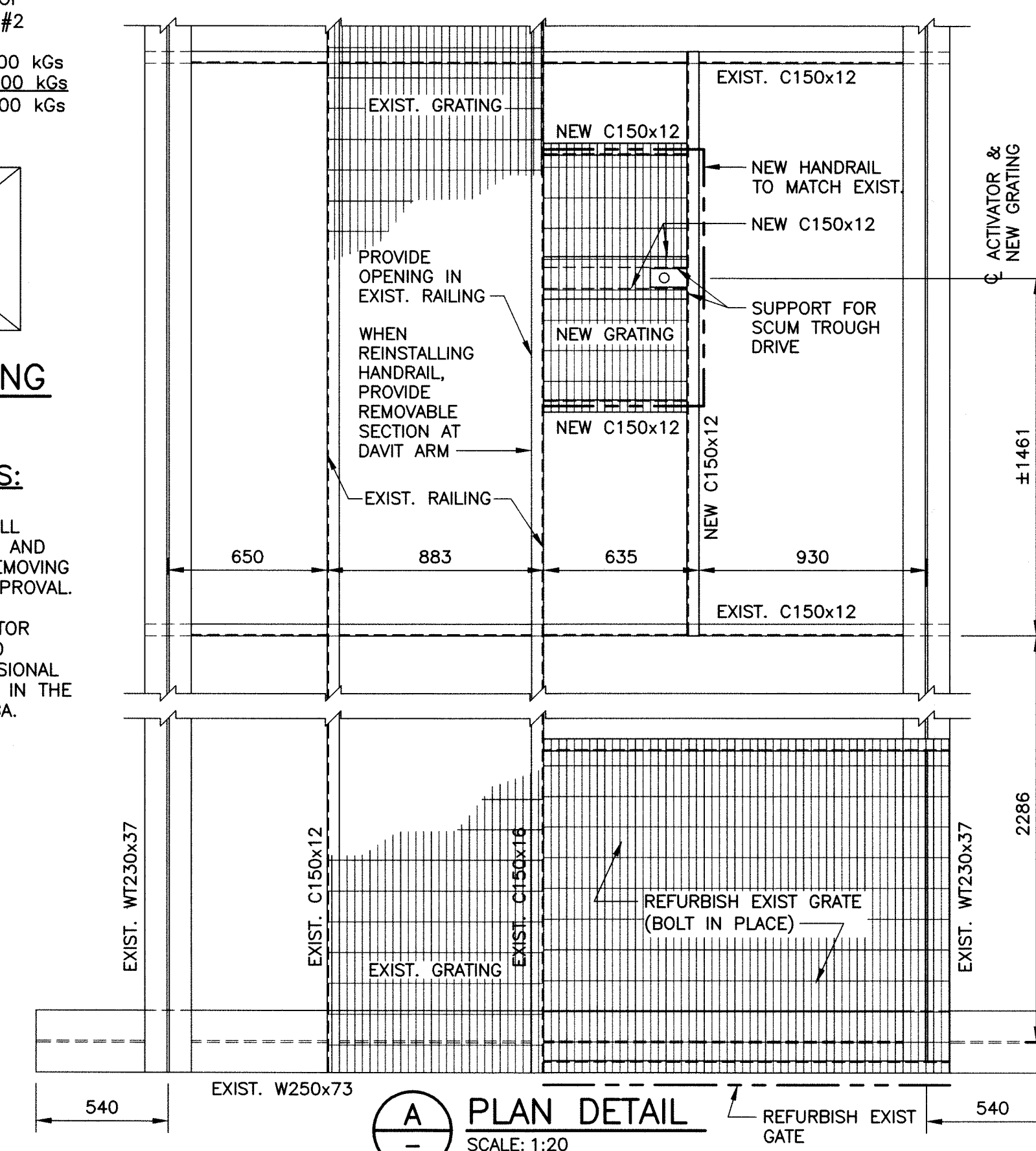
SWAY BRACING

1. REMOVE AND DISPOSE OF ROOF MEMBRANE, INSULATION AND DECKING AND WALL CLADDING
2. REMOVE, SANDBLAST, GALVANIZE AND REINSTALL EXISTING WALKWAY GRATING. PROVIDE TEMPORARY OPENING CLOSURE WHEN WALKWAY IS REMOVED.
3. PROVIDE CONTINUOUS 100x6mm KICKPLATE ALL ALONG HANDRAIL
4. PROVIDE NEW HANDRAIL AROUND CENTRE TURN TABLE
5. SANDBLAST AND PAINT ALL TRUSS FRAMING
6. INSTALL SUPPORT FRAMING FOR SCUM TROUGH AND GUIDE ARMS
7. SUPPLY AND INSTALL NEW BEARING PADS AT TRUSS SUPPORT POINTS
8. SUPPLY AND INSTALL NEW ROOF AND WALL SYSTEM FOR TRUSS ENCLOSURE
9. SUPPLY AND INSTALL FRAMING FOR SCUM TROUGH DRIVE
10. SUPPLY AND INSTALL MONORAIL BEAM, SUPPORT ANGLES AND STOPS. SUPPLY AND INSTALL TROLLEY AND 250 kg CHAIN HOIST. HOIST CAPACITY SHALL BE DESIGNATED ON THE MONORAIL BEAM WITH AN EMBOSSED PLATE ATTACHED TO THE WEB OF THE BEAM.

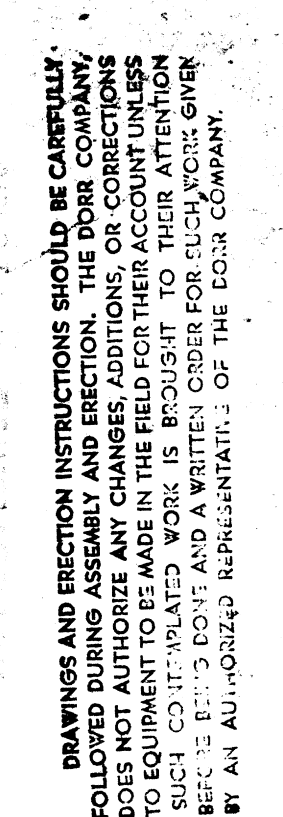


SCALE: 1:75

1. THE CONTRACTOR SHALL
SUBMIT A PROCEDURE AND
METHODOLOGY FOR REMOVING
THE TRUSSES FOR APPROVAL.
SUBMITTALS TO THE
CONTRACT ADMINISTRATOR
SHALL BE SIGNED AND
SEALED BY A PROFESSIONAL
ENGINEER REGISTERED IN THE
PROVINCE OF MANITOBA.



AS-CONSTRUCTED	B.M. _____ ELEV. _____		KGS GROUP CONSULTING ENGINEERS & PROJECT MANAGERS	CH2MHILL	ENGINEER'S SEAL	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	PROJECT TITLE NORTH END WATER POLLUTION CONTROL CENTRE PRIMARY CLARIFIERS 1 & 2 WALKWAY FRAMING & ENCLOSURE	SHEET OF 01 01	
					THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED R.J.J. LONG, P.ENG. 13/02/08				
					DESIGNED BY RJL				CHECKED BY RJL
					DRAWN BY MB				APPROVED BY
					HOR. SCALE: AS SHOWN VERTICAL: .				RELEASED FOR CONSTRUCTION:
		DATE -/01/08	DATE	CONSULTANT DRAWING NO. 1-0101P-C0005-001		KGS JOB NUMBER 06-0107-03 S3	CITY DRAWING NUMBER 1-0101P-C0005-001		
		NO. REVISIONS	DATE	BY					
		2 ISSUED AS CONSTRUCTED	06/04/10						
		1 ISSUED FOR ADDENDUM	05/03/08	RJL					
		0 ISSUED FOR TENDER	13/02/08	RJL					



4

11

7

2.

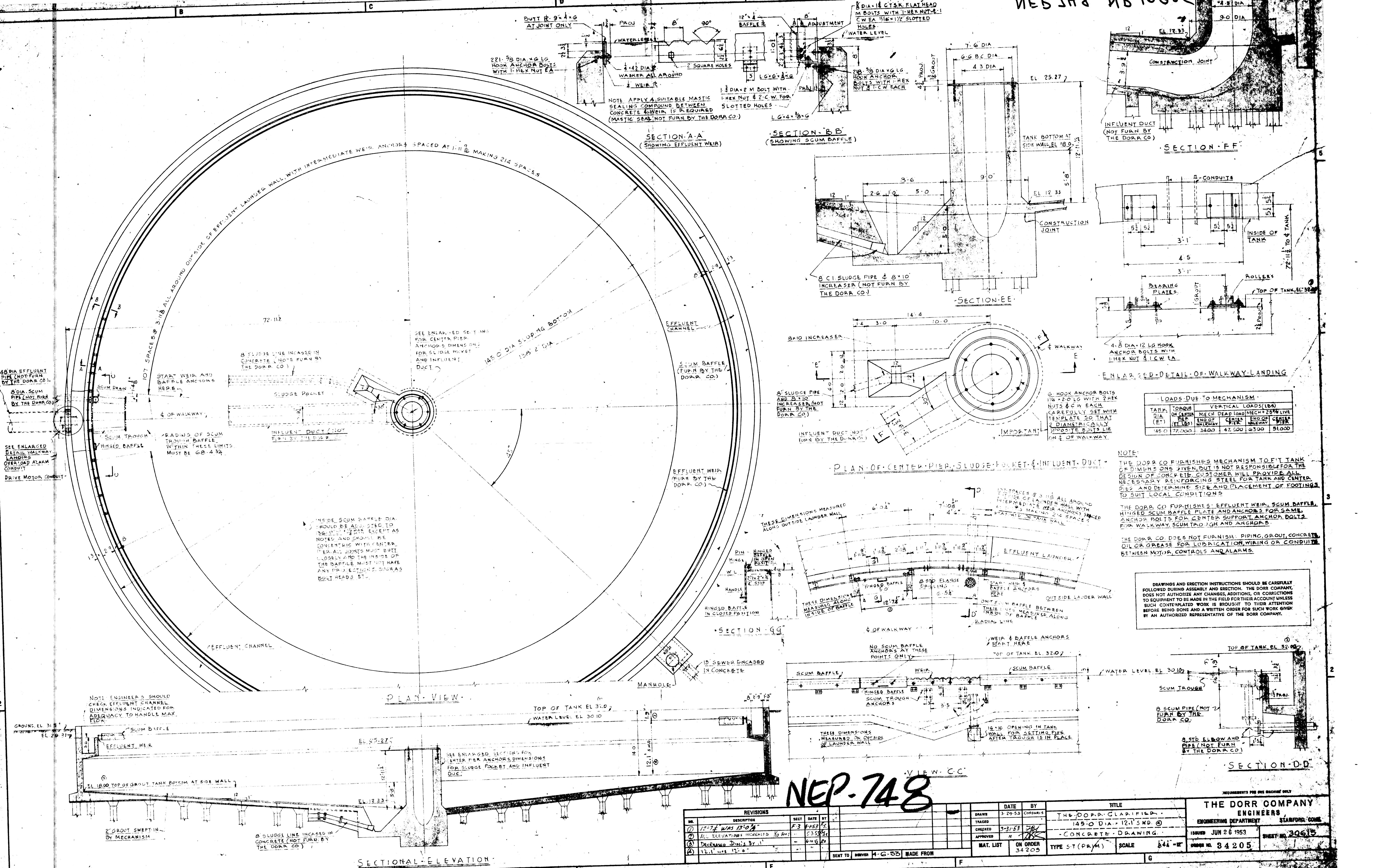
1 "A"

K

NR REQD	PART	MARK
27	WEIR	(1)
1	WEIR	(2)
24	SCUM BAFFLE	(3)
1	SCUM BAFFLE	(4)
1	SCUM BAFFLE	(5)
1	HINGED BAFFLE	(6)
2	HINGE PIN	(7)
24	BUTT. STRAP	(8)
109	BAFFLE SUPPORT	(9)
109	BAFFLE SUPPORT	(10)
221	R. WASHER	(11)
28	BUTT. R.	(12)
109	3/4" LG. M. BOLTS WITH 1 HEX. NUT & 2 W. EA.	
208	3/4" FLAT HD. M. BOLTS WITH 1 HEX. NUT & 1 W. EA.	
100	3/4" LG. FLAT HD. M. BOLTS WITH 1 HEX. NUT & 1 W. EA.	

~~REFERENCE 216~~
~~WEAP. CONTROL OFFICE~~
~~61-206236~~

NEP 748 1810392



LOADS DUE TO MECHANISM:

TANK DIA (FT)	TORQUE ON CENTER PIER (FT LBS)	MECH DEAD LOAD (LBS)	MECH + 25% LIVE (LBS)	GENERAL PIER
145.0	72,000	3400	47,500	6300

NOTE:
THE DORR CO. FURNISHES MECHANISM TO FIT TANK OF DIMENSIONS GIVEN, BUT IS NOT RESPONSIBLE FOR THE DESIGN OF CONCRETE. CUSTOMER WILL PROVIDE ALL NECESSARY REINFORCING STEEL FOR TANK AND CENTER PIER AND DETERMINE SIZE AND PLACEMENT OF FOOTINGS TO SUIT LOCAL CONDITIONS.
THE DORR CO. FURNISHES EFFLUENT WEIR, SCUM BAFFLE, HINGED SCUM BAFFLE PLATE AND ANCHORS FOR SAME, ANCHOR BOLTS FOR CENTER SUPPORT, ANCHOR BOLTS FOR WALKWAY, SCUM TROUGH AND ANCHORS.
THE DORR CO. DOES NOT FURNISH: PIPING, GROUT, CONCRETE, OIL OR GREASE FOR LUBRICATION, WIRING OR CONDUITS BETWEEN MOTOR, CONTROLS AND ALARMS.

DRAWINGS AND ERECTION INSTRUCTIONS SHOULD BE CAREFULLY FOLLOWED DURING ASSEMBLY AND ERECTION. THE DORR COMPANY, DOES NOT AUTHORIZE ANY CHANGES, ADDITIONS, OR CORRECTIONS TO EQUIPMENT TO BE MADE IN THE FIELD FOR THEIR ACCOUNT UNLESS SUCH CONTEMPLATED WORK IS BROUGHT TO THEIR ATTENTION BEFORE BEING DONE AND A WRITTEN ORDER FOR SUCH WORK GIVEN BY AN AUTHORIZED REPRESENTATIVE OF THE DORR COMPANY.

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	12-7-54 WAS 13-0-54	12-7-54	...
2	ALL ELEVATIONS INCREASED 1/2 FT.	12-7-54	...
3	DECREASED DIM'S BY 1"	12-7-54	...
4	12-1-54 WAS 12-0-54	12-1-54	...

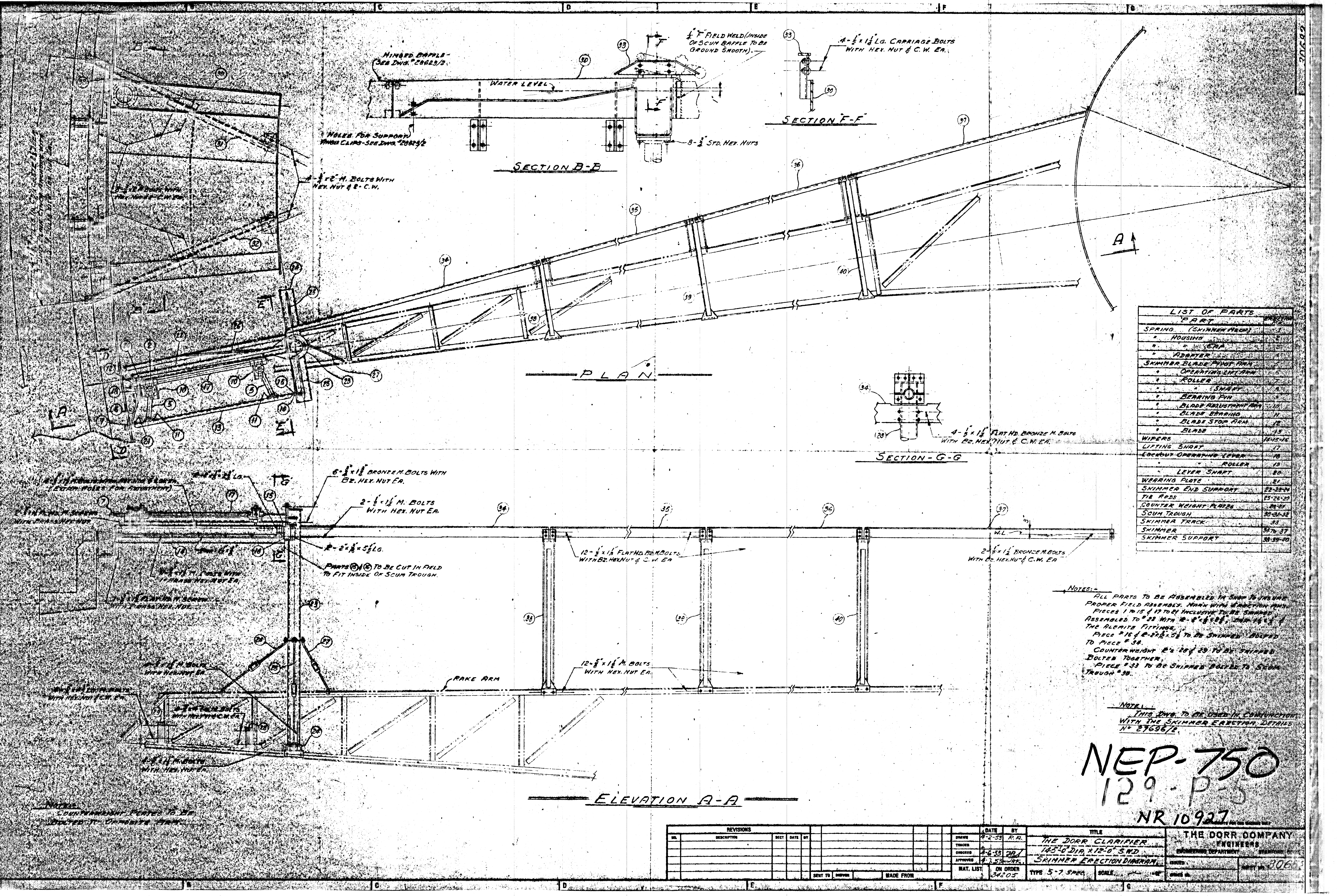
SENT TO: DRIVER 4-6-55 MADE FROM: ...

DATE	BY	TITLE
3-29-52	CORDARI	THE DORR COMPANY ENGINEERS
3-31-53	...	145.0 DIA. 12.1 SWD. @
...	...	CONCRETE DRAWING

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

NEP-748

THE DORR COMPANY ENGINEERS
ENGINEERING DEPARTMENT
ISSUED JUN 26 1953
ORDER NO. 84205
SHEET NO. 30615



LIST OF PARTS

PART	QUANTITY
SPRING (SKINNER TYPE)	1
HOUSING	1
ADAPTER	1
SKIMMER BLADE PIVOT ARM	1
OPERATING LEVER ARM	1
ROLLER	1
SWAY	1
BEARING PIN	1
BLADE ADJUSTMENT PIN	1
BLADE BEARING	1
BLADE STOP ARM	1
BLADE	1
WIPERS	1
LIFTING SHAFT	1
LOCKOUT-OPERATING LEVER	1
ROLLER	1
LEVER SHAFT	1
WEARING PLATE	1
SKIMMER END SUPPORT	22-25-26
TIE RODS	25-26-27
COUNTER WEIGHT PLATES	28-29
SCUM TROUGH	30-31-32
SKIMMER TRACK	33
SKIMMER	34-35-37
SKIMMER SUPPORT	38-39-40

NOTES:

ALL PARTS TO BE ASSEMBLED IN SHOP TO INSURE PROPER FIELD ASSEMBLY. MARK WITH IDENTIFICATION MARKS 1 IN 15' (1 IN 12' TO 1 IN 18') INCLUDING TO BE SHIPPED ASSEMBLED TO #33 WITH 2-1/2 x 1 1/2 LG. CARRIAGE BOLTS & THE ALUMINUM FITTINGS.

PIECE #16 & 2-1/2 x 1 1/2 LG. CARRIAGE BOLTS TO BE SHIPPED BOLTED TO PIECE #34.

COUNTER WEIGHT #28 & 29 TO BE SHIPPED BOLTED TOGETHER.

PIECE #33 TO BE SHIPPED BOLTED TO SCUM TROUGH #39.

NOTE:

THIS DWG. TO BE USED IN CONJUNCTION WITH THE SKIMMER ERECTION DETAILS N° 27696/2.

NEP-750
129-P-5
NR 10927

REVISIONS					DATE		BY		TITLE		THE DORR COMPANY	
NO.	DESCRIPTION	DATE	BY		DATE	BY					ENGINEERING DEPARTMENT	
					1-2-53	R.A.			THE DORR CLARIFIER			
					1-6-53	RA			145" DIA X 12'-0" SMD			
					1-1-53	RE			SKINNER ERECTION DIAGRAM			
					MAT. LIST		ON ORDER		TYPE 5-7 SPEC.		SCALE	
					34205						1" = 10'	
SENT TO					ENGINEER		MADE FROM					

